

## PROFILE



**Name** : **Dr. Ponnusamy Munusamy Anbarasan**

**Designation** : **Professor-cum-Facilitator, Amrita Group of Institutions, ATIs, ATAL Innovation Mission (AIM), National Institution for Transforming India (NITI Aayog), Govt. of India. Professor-cum-Director (Rtd.) Centre for New and Renewable Energy Studies (CNRES) Department of Physics, Periyar University, Salem – 636 011, TN**

**Date of Birth** : **29<sup>th</sup> May, 1964; Age: 61 Years**

**Contact Details** : **Mobile: +91 9443659435, 6369427139 & [anbarasanpm@gmail.com](mailto:anbarasanpm@gmail.com) [anbarasanpm@periyaruniversity.ac.in](mailto:anbarasanpm@periyaruniversity.ac.in), [profmanbarasan@gmail.com](mailto:profmanbarasan@gmail.com)**

**Qualifications** : **M.Sc., M.Phil., Ph.D., D.Sc., M.A (Pub. Admn.), F.OSI., F.SESI., F. MRSI., Dip.in Hindi, Cert. in STEM Skills.,**

**Experience** : **36½ Years of Teaching, Research & Administration**

<b>Degree</b>	<b>Ph.D</b>	<b>M.Phil</b>	<b>M.Sc</b>	<b>M.Tech</b>
<b>Guided</b>	<b>33 (Solo Guidance) + 8 (Co-Guidance) = 41</b>	<b>62</b>	<b>73</b>	<b>1</b>
<b>Guiding</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>-</b>

**Area of Research:** **STEM Skills, Laser & Spectroscopy, Nano-Optics, Solar Cells, Materials Science, Photocatalysis, Renewable Energy & Quantum Chemical Calculations, Energy Storage Devices, etc.**

### Research Keywords Tagged Information:

**STEM Fields, Specialized Skills like Coding, Data Analysis & Laboratory Techniques (Robotics & Drone-based 3D Printing)**

**Antibacterial Activity, Azimuthally Polarized Beam, Complex Phase Mask, Crystal Growth, Density Functional Theory, Driving Force, Drug Designing, Environmental Pollutant Degradation, Green Synthesis, Dye Sensitizer, Electronic Structure, High NA Lens, Reduced Graphene Oxide decorated microstructure for Photocatalytic Application, Optoelectronic applications (Solar Cells, Laser based NLO Studies, etc.), Hydrogen Generation (Water Splitting Applications), Light Harvesting Efficiency, Supercapattery and Spectroscopic Studies & Computer-Human Interaction (CHI).**

**Fellowship/ Scholarship Awarded** : **Indo-Hungarian Educational Exchange Programme**

**Countries visited** : **Italy, France, Germany, Hungary, Poland & Romania**

**List of Publications** : **249**

<b>Books/Edited/Materials</b>	<b>Books/ Edited - 3</b>	<b>Study Materials – 6</b>
<b>International Journals</b>	<b>Published - 229</b>	<b>Submitted – 10</b>
<b>National Journals</b>	<b>Published - 17</b>	<b>Submitted – 6</b>

Number of Conference/ Seminar/Lecture

Organized, Attended & paper presented : Organized: 15 & Paper Presented: 332

### Educational Qualifications:

<b>Examinations &amp; Year</b>	<b>Subject</b>	<b>School/College attended</b>	<b>Name of the Board/ University</b>
S.S.L.C (1979)	Maths, Science, History and Geography.	K.S.O High School, Mangainallur	Madras Board
H.S.C (1981)	Maths, Physics, Chemistry & Biology	National H.S.S Mayiladuturai	Madras Board
B.Sc (1984)	Physics	A.V.C College Mannampandal	Madras Univ.
M.Sc (1986)	Physics (Electronics)	Govt. Arts College Kumbakonam	Bharathidasan Trichy
M.Phil (1987)	Physics (X-ray Crystallography)	College of Engg. Guindy, Chennai	Anna University
M.Tech (1987)	Opto-Electronics & Optical Communication	Indian Institute of Technology, Delhi	IIT, Hauz Khas, New Delhi
Dip. in Hindi (1991)	Diploma in Hindi	Directorate of Hindi Education	MHRD, New Delhi
M.A (1993)	Public Administration	Distance Education	Madras University
Ph.D** (2001)	Laser Physics/ Micro-Optics	Raman School of Physics	Pondicherry Central University
D.Sc (2022)	Tight Focusing Properties and Quantum Chemical Calculations for Optoelectronics Applications	Department of Physics School of Physical Science	Periyar University
Cert. in STEM Skills (2025)	STEM fields, Specialized Skills like Coding, Data Analysis & Laboratory Techniques	ATLs, Amrita Group of Institutions (TN & Pondy)	AMMACHI Labs, Amrita Viswa Vidyapeetham, Amrita Uni., Kerala

**\*GATE'87 Passed and Studied M.Tech (Opto-Electronics and Optical Communication), IIT, Delhi but finally given up the course to join the UPSC Selected (Open Merit with All India 2<sup>nd</sup> Position) Lecturership Post at Govt. of Pondicherry (Pondicherry University).**

**Ph. D Supervisor: Prof. Dr. S. Mohan, Ph.D., D.Sc., Professor and Head, Raman School of Physics, Pondicherry University, Puducherry – 608 014 & Former Vice Chancellor, PRIST University, Tamil Nadu.**

**\*\*Title: Theoretical Analysis of Technologically Important Planar Microlens and Some Characteristics of Semiconductor Lasers – 17<sup>th</sup> August - 2001 (28.06.2002)**

**M.Phil Dissertation: Intensity Data Collection for Canonphyllol (C<sub>30</sub>H<sub>50</sub>O<sub>2</sub>) Crystal - November - 1988 (23.2.1990) – First Rank in the admission selection merit list.**

**Supervisor: Prof. Dr. K. Subramanian, Professor of Physics, College of Engineering, Anna University, Guindy, Chennai - 600 025 & Former Member Secretary AICTE, New Delhi.**

**M.Sc Project: Construction of Astatic Magnetometer for Age Determination of Archaeological Rock Samples - April - 1986 (05.11.1986)**

**Guide: Prof. V. Krishnamurthy, Govt. Arts College for Men, Kumbakonam.**

**Teaching experience at Universities/ Centres/Colleges of Higher Education**

<b>Name of the Institution</b>	<b>University</b>	<b>Designation</b>	<b>Scale of Pay</b>	<b>Classes taught Under Graduate/ Post-Graduate/Research</b>	<b>Period (Give dates)</b>	<b>Length of experience (Years/ Months)</b>
Govt. of Pondicherry (P.G. Centre)	Pondicherry University*	Lecturer & Reader	2200-75-2800	U.G, P.G and Research	28-11-1988 to 16-03-2005	16 years & 3 Months
Periyar University Salem, TN	Periyar University Salem, TN	Reader in Physics	12000-18300	P.G and Research	17-03-2005 to 31-12-2005	9 Months
Periyar University Salem, TN	Periyar University Salem, TN	Associate Professor in Physics	37400-67000	P.G and Research	01-01-2006 to 31-12-2008	3 Years

Periyar University Salem, TN	Periyar University Salem, TN	Professor of Physics	144200 - 218200	P.G and Research	01-01-2009 To 31.05.2024	15 Years & 5 months
ATLs (TN & Pondy), NITI Aayog	AIM, Amrita University, Kerala	Professor-cum-Facilitator	As per the norms of Govt. of India	Innovative Research, AMMACHI Labs	03.06.2024 to Till Date	One Year
<b>Total Experience</b>						<b>36 Years &amp; 10 Months</b>

**\* Kanchi Mamunivar Government Institute for Post graduate Studies and Research (KMGIPSR), Puducherry**

**Membership in the Professional Bodies :**

1. Fellow & Life Member, Optical Society of India (OSI), Membership No. L424 (2004)
2. Life Member, Indian Spectro-Physics Association (ISPA) - Membership No. 103/98/1999 (28.07.1999)
3. Member, Indian Laser Association (ILA)
4. Life Member, Indian Association for Crystal Growth (IACG)
5. Fellow & Life Member, Atti della Fondazione Giorgio Ronchi (Microoptica), Italy
6. Fellow & Life Member, Solar Energy Society of India (SESI) - Membership No. LM/1680/2011
7. Fellow & Life Member, Materials Research Society of India (MRSI) - Membership No. LMB 2580/2015 (01.07.2015)
8. Member, Raman International Optronics Society (RIOS), ID: RIOS/0615/2023/Dt. 07.11.2023
9. Facilitator, AMMACHI Labs, Amrita Group of Institutions, ATLs, ATAL Innovation Mission (AIM), National Institution for Transforming India (NITI Aayog), Govt. of India (ID: SF.TN.IT/0006)

**ORCID** : <https://orcid.org/0000-0002-2210-448X>

**ResearcherID** : AAH-7624-2019 (Publons & Web of Science (WoS) & ResearcherID)

**Scopus Author ID** : 12778504200

**Google Scholar ID** : <http://scholar.google.co.in/citations?user=azJvAqMAAAAJ&hl=en>

**Vidwan-ID** : 43227

**Microsoft Academic ID** : 2668165974

**Google Scholar Citation** : Greater than 4061

**h-index** : 34

**i10-index** : 99

**Cumulative Impact Factor** : Greater than 500

**Skype Name** : [live:.cid.7409b67c305d789e](skype:live:.cid.7409b67c305d789e)

**ULektzcampus** : [ulektzconnect/in/504314](http://ulektzconnect/in/504314)

**Linkedin** : [linkedin.com/in/p-m-anbarasan-36b3aa254](https://www.linkedin.com/in/p-m-anbarasan-36b3aa254)

**Indian Research Information Network System (IRINS):**

<https://periyaruniversity.irins.org/profile/43227>

**Link to Profile Web of Science:** AAH-7624-2019, ABD-9698-2021, CBQ-4062-2022

**INSA JRD-TATA Fellowship:**

**Awarded by Prof. N. Sathyamurthy**, Honorary Director, Centre for Co-operation in Science & Technology among Developing Society (CCSTDS), Govt. of India.

**Awarded to Dr. Oluwaseun Adedokun**, Ladoke Akintola University of Technology, Nigeria **Under the Mentorship of Prof. P. M. Anbarasan** at Periyar University, Salem – 636 011, Tamilnadu, India. (Dated: 08 March 2019)

**ISPA LIFE TIME ACHIEVEMENT AWARD:**

On behalf of **Indian SpectroPhysics Association (ISPA)**, I have been received the “ISPA Life Time Achievement Award”. The Award bestowed during the inaugural session of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER – 2023) organised by Department of Physics, Periyar University, Salem, Tamil Nadu, in Association with ISPA held on 14<sup>th</sup> September 2023 in **Commemoration of Remembrance of Prof. Dr. S. Mohan.**

**ISPA Dr. S. GUNASEKARAN AWARD:**

On behalf of **Indian SpectroPhysics Association (ISPA)**, I have been received the “ISPA Dr. S. Gunasekaran Award”. The Award bestowed during the inaugural session of the International Virtual Conference on Light Applications in Science and Engineering Research (LASER – 2021) organised by the ISPA in Association with Sophisticated Analytical Instrumentation Technique (SAIF), St. Peter’s Institute of Higher Education and Research held on 14<sup>th</sup> September 2021 in **Commemoration of Remembrance of Prof. Dr. S. Mohan.**

**Reviewer & Subject Expert to the Following Commissions/Funding Agencies/Universities:**

1. **Reviewer**, SERB, Department of Science and Technology (DST), Govt. of India, New Delhi.
2. **Reviewer** for R&D Proposals of CSIR-HRDG-EMR-II Scheme, **Council of Scientific and Industrial Research (CSIR)**, Govt. of India, New Delhi
3. **Subject Expert**, Union Public Service Commission (UPSC) in various Interviews/Personality Test Boards.
4. **Subject Expert**, Tamil Nadu Public Service Commission (TNPSC) in various Interviews/Personality Test Boards.
5. **Subject Expert**, Faculty Selection Committee, Central & State Universities and Colleges.

6. Subject Expert, Promotion of Teachers under UGC Career Advancement Scheme (CAS) Screening-cum-Evaluation Committee and Selection Committee Meeting held on 23.01.2023 & 09.03.2023, respectively.

7. NAAC, Assessor, Chairperson/Chairman, Peer Team Visit of SHRI SHIVAJI EDUCATION SOCIETY AMRAVATI'S, SCIENCE COLLEGE, NAGPUR UNIVERSITY on 15/05/2025 - 16/05/2025

8.

**Major Research Projects/Travel Grants:**

S. No	Title of Project/ Seminar/ Conference /Exchange Programme	Name of the funding Agency & Amount	Status
1.	Construction of Astatic Magnetometer for Exploration of Minerals and Crude Oils (Patronized by DGM, Cauvery Project, ONGC, Karaikal) 	Oil And Natural Gas Commission (ONGC), Neravy Complex, Karaikal – 609604, India, Project Sanctioned No. 1/1991, Dt. 22.02.1991, Rs. 40,000/-	Principal Investigator - Completed
2.	Design, Optical Study and Light Trapping Scheme of Low Order Aberration Microlens for Micromachined Silicon Solar Cells	UGC Rs. 10,19,800/- F. No. 34-5/2008 (SR) Dt. 02.01.2009	Principal Investigator - Completed
3.	Conversion of Sunlight into Electricity Schemes Through Centre for Nanoscience and Nanotechnology, Periyar University, Salem – 636 011	Tamilnadu Govt. Rs. 1,00,00,000/- G.O. (Ms). No. 307/Dt.14.08.2009	Principal Investigator Completed
4.	Synthesis, properties and Dynamics of Potential Nanostructured Materials applicable to Health and Energy	DST - Nanomission Rs. 14,76,60,848/-	Principal Investigator - Under Review
5.	Exact propagating Soliton Solutions of Some Nonlinear PDEs Governing the Director Dynamics of Nematic Liquid Crystal Medium	NBHM (Ref. No. 2/48(9)/ 2011/-R & D/II/1223 – Rs. 9,66,000/-	Co-Principal Investigator (2012-2015) PI: Prof.L.Kavitha
6.	Joint ICTP-KFAS Workshop on Nanoscience for Solar Energy Conversion (2008) – (27.10.2008 to 29.10.2008)	Ref: ICTP/310/1938/ Dt. 27.08.2008/ Euro: Travel + DA	International Workshop, ICTP, ITALY
7.	Indo-Hungarian Educational Exchange Programme (2009) - Long Term Collaborative Research at the Dept. of Optics & Quantum Electronics, University of Szeged, Hungary (29-09-2009 to 30-10-2009)	D.O. No. F.27-14/2009(IC-II) / Dt.20.07.2009 UGC - Rs. 76,000/- + 118 000 HUF/month+ 800 HUF/month for accommodation.)	Collaborative Research with Prof. Dr. Karoly Osvay, University of Szeged, Hungary

8.	Light at Extreme Intensity- Scientific Opportunities & Technological Issues – LEI 2009, Brasov, Romania (2009) – (16.10.2009 - 21.10.2009)	Ref: S303/Travel for Education/24.09.2009/ Romanian Leu (RON) 8600+Accommodation	International Conference, LEI, 2009, Romania
9.	Provenance Studies and Determination of Iron Concentration in Archaeological Artifacts using NAA to subject the Samples for Archeomagnetic dating	DAE-BRNS – Rs. 20,68,000/- Ref: PU/R/PL&D4/24629/ 2014/Dt.17.12.2014	Co-Principal Investigator (2013-2015) PI: Dr. G. Velraj
10.	Experimental And DFT Study on Reduced Graphene Based Hybrid Nanostructures for Hydrogen Evolution And Energy Storage Applications	DST-SERB/ File No. File No : EEQ/2017/000104 (Ver-1) Rs. 10,93,950 /-	PI Completed 21.02.2018 - 21.02.2021
11.	Academic Exchange Agreement Project between Periyar University and Universidad San Sebastian, SANTIAGO, CHILE  <u>Other Institutions Involved in the Project:</u> Prof. Rashmi Bhardwaj, Guru Gobind Singh Indraprastha University, India. Prof. Lala B. Sukla, Siksha O Anusandhan (SAO) University, Bhubaneswar, Odisha, India. Prof. Jo-Ann Rolle, The City University of New York, USA.	Universidad San Sebastian, SANTIAGO, CHILE	My Student Dr. S. Shanavas went to Chile for his intership at Universidad San Sebastian, SANTIAGO  Postdoctoral Fellow, Khalifa University, Abu Dhabi, UAE.
12.	Carbon Coated Orange-Peel Derived Activated Carbon as an Efficient Electrode for Symmetric Supercapacitor.	Tamilnadu State Council for Science and Technology, (TNSC&ST) DOTE Campus, Chennai - 600025  Student Projects Scheme 2021-2022  <u>Name of Student:</u> Mrs. M. Thooba Anjum	Serial No. 391  Code: PS-066  Amount Rs. Rs.7500/-  On going; March 14 <sup>th</sup> 2022

Merit/Award/others if any : GATE'87 passed and joined M.Tech (Opto-Electronics and Optical Communication, IIT, Delhi) & UPSC (All India) Selected in 2<sup>nd</sup> Position for Lecturership and Joined in Govt. of Pondicherry (Pondicherry University) – 1988 & Best Motivator-cum-Teacher Awards by Three Trustees.

Indian Spectrophysics Association (ISPA) - Dr. S. Gunasekaran Award (2021) for the best Researcher.

Languages known : Tamil, English, Malayalam, Hindi, French & Telugu.

Sports/Tournaments Involved : Volley Ball, Kabaddi, Chess and Running (Sac Race & Three legged Race)

Name of the Book: “Current Research and Development in Chemistry, Vol.1”

Title of the Chapter: “*Surfactant Free Synthesis of Ag+ Additive Added ZnO Nanstructures*”  
Editor: Dr. Sampa Panja, Book Publisher International, London  
ISBN-13(15): 978-93-89816-49-8

Name of the Book: “Current Topics in Medicine and Medical Research, Vol.1”

Title of the Chapter: “*Separation and Identification of Four phenolic Acids from Some Selected Medicinal Plants of South India*”

Editor: Dr. Schin Kumar Jain, Book Publisher International, London  
ISBN-13(15): 978-93-90149-05-6

Title of the chapter - 16: “Current Status of Environmental, Health, and Safety Issues of Functionalized Nanomaterials”

Title of the Book: Functionalized Nanomaterial-Based Electrochemical Sensors.  
<https://doi.org/10.1016/B978-0-12-823788-5.00014-4>, Copyright © 2022 Elsevier Ltd. All rights reserved.

A. Priyadharsan, S. Shanavas, S. Boobas, Tansir Ahamad, R. Acevedo, **P.M. Anbarasan**, and R. Ramesh - ([Functionalized Nanomaterial-Based Electrochemical Sensors](#) - Principles, Fabrication Methods, and Applications - Woodhead Publishing Series in Electronic and Optical Materials, 2022, Pages 357-368) - <https://doi.org/10.1016/B978-0-12-823788-5.00014-4>, ISBN: 978-0-12-823788-5

Books / Study materials written :

1. **NANO-OPTICS – (Near-field & Far-field Microscopy, Optical Recording, Surface Plasmon and Optical Probing) - Text Book (January, 2009) Hema Publications, Chennai - 42**
2. **Micro-Optics (ROE, DOE, HOE & Applications) – Text Book (January, 2008) Hema Publications, Chennai - 42**
3. **Microlenses in Micro-Optics – Text Book (January, 2007) Hema Publications, Chennai - 42**
4. **Advanced Physics - - M.Phil (Physics) - Paper -II - Study Material: Copy Right: Periyar Institute of Distance Education (PRIDE), Periyar University, Salem - 636 011 (June 2005)**

5. **Electromagnetic Theory – M.Sc. (Physics) – Paper – V- Study Material:**  
**Copy Right:** Periyar Institute of Distance Education (PRIDE), Periyar University, Salem - 636 011 (June 2008)
6. **Energy Physics – B.Sc (Physics) – Elective – III - Study Material:**  
**Copy Right:** Periyar Institute of Distance Education (PRIDE), Periyar University, Salem - 636 011 (June 2008)
7. **Computational Physics - B.Sc (Physics) – Elective – B - Study Material:**  
**Copy Right:** Periyar Institute of Distance Education (PRIDE), Periyar University, Salem - 636 011 (June 2010)

**Editor/Associate Editor/Reviewers for the Following National & International Journals:**

1. Journal of Optics and Lasers in Engineering (OLEN) - (Elsevier)
2. Optik - International Journal for Light and Electron Optics - (Elsevier)
3. Acta Physica Polonica (Polish Physical Society)
4. Physics Express - Associate Editor
5. Journal of Spectrochimica Acta Part A (Elsevier) – Manuscripts Reviewed > 33
6. Atti della Fondazione Giorgio Ronchi (Journal of Optics), ITALY, ISSN 0391 2051
7. Recent Research in Science and Technology - Associate Editor
8. European Journal of Chemistry - (WILEY-VCH)
9. Chemical Papers - (Springer)
10. Journal of Spectroscopy and Dynamics - Associate Editor
11. Journal of Chemical Engineering and Materials Science - Editor
12. Molecular Simulation - (Taylor & Francis)
13. Computational and Theoretical Chemistry (COMPTC) - Elsevier
14. Journal of Silicon - Springer
15. Crystal Research Technology - WILEY-VCH
16. Indian Journal of Physics - (Springer)
17. Physica B - (Elsevier)
18. Journal of Scientific & Academic Publisher

19. **Bulletin of Materials Science - (Springer)**
  20. **Nano Science – Nano Technology: An Indian Journal (Trade Science Inc.)**
  21. **Indian Journal of Pure and Applied Physics (NISCAIR)**
  22. **Environmental Science and Pollution Research - (Springer)**
  23. **International Journal of Advanced Science & Engineering - Editor**
  24. **Journal of Materials Science & Technology - (Elsevier)**
  25. **Solar Energy (SE) - (Elsevier)**
  26. **Journal of Materials Chemistry C - (RSC)**
  27. **Chinese Chemical Letters (CCLET) - Elsevier**
  28. **Journal of Materials Science: Materials in Electronics (JMSE)- Springer - Manuscripts Reviewed > 17**
  29. **Applied Surface Science - (Elsevier)**
  30. **Materials Research Innovations - (Maney)**
  31. **Nanotechnology -IOP Journal**
  32. **Journal of Porous Materials – Springer**
  33. **Journal of Materials Science in Semiconductor Processing – (MSSP) - (Elsevier)**
  34. **Scientific Reports/Nature Research**
  35. **Journal of Cluster of Science - (Elsevier)**
  36. **American Journal of Advanced Materials and Engineering Research (AJAMER) – Editor**
  37. **Journal of Physics D: Applied Physics – IOP Journal**
- 
38. **Journal of the American Ceramic Society - Wiley Online Library**
  39. **Computational Biology and Chemistry (CBAC) – Elsevier**
  40. **International Journal of Nanoscience – (INJ) - World Scientific Publishing**
  41. **Journal of Molecular Liquids (MOLLIQ) - Elsevier**
  42. **Journal of Hazardous Materials (HAZMAT) - Elsevier**

43. Zeitschrift für Physikalische Chemie – Germany Journal – Oldenbourg wissenschaftsverlag (**International Journal of Research in Physical Chemistry and Chemical Physics**)
- 
44. Canadian Journal of Physics (CJP)
45. Korean Journal of Chemical Engineering (KJCE) - Springer
46. Materials Science and Engineering B (MSEB) – Elsevier
47. Solid State Materials for Advanced Technology (Elsevier)
48. Chemical Engineering Journal (CEJ) - Elsevier
48. Separation and Purification Technology (SEPPUR) - Elsevier
49. Letters in Organic Chemistry – Bentham Science
50. Chemical Data Collections – Elsevier
51. Vacuum – Elsevier
52. Zeitschrift für physikalische Chemie (**International Journal of Research in Physical Chemistry and Chemical Physics**) – Oldenbourg wissenschaftsverlag
53. Journal of Science: Advanced Materials and Devices - Elsevier
54. Optics and Laser Technology – Elsevier
55. Results in Physics (RINP) – Elsevier
56. Journal of Molecular Structure – Elsevier
57. New Journal of Chemistry – RSC
58. International Journal of Horticulture & Agriculture – Symbiosis Publisher.
59. Mini-Review in Organic Chemistry - Bentham Science
60. Optics and Photonics Journal (OPJ) – Scientific Research Publishing
61. International Journal of Mechanics and Design – Journalspub – Editor
62. Applied Organometallic Chemistry – John Wiley & Sons
63. Ceramic International (CERI) – Elsevier
64. Current Applied Physics (CAP) – Elsevier
65. Ecotoxicology and Environmental Safety (EES) – Elsevier

66. Organic Electronics (ORGELE) – Elsevier
67. Journal of Current Science (JCS) – Indian Academy of Sciences (IAS)
68. International Journal of Modern Physics C (IJMPC) -  
(Computational Physics and Physical Computation) - World Scientific Publishing
69. International Journal of Electro Mechanics and Mechanical Behaviour – JournalsPub -  
Editor
70. Organic Electronics (ORGELE) – Elsevier
71. Journal of Physics: Materials (*Jphys Materials*) – IOP Journal
72. Bulletin of the Korean Chemical Society – Web of Science Group
73. Journal of Photochemistry & Photobiology, B: Biology – Elsevier
74. Journal of Radiation Research and Applied Sciences – Taylor & Francis Group
75. Science Letter Journal – Editor
76. Journal of Engineering Research and Reports (JERR)– (ISSN: 2582-2926)
77. Asian Journal of Chemical Sciences (AJCS) - (ISSN: 2456-7795)
78. Journal of Radiation Physics and Chemistry (JRPC)– Elsevier
79. International Journal of Biochemistry Research & Review - (ISSN: 2231-086X)
80. Journal of Environmental Chemical Engineering (JECE) – Elsevier
81. Applied Surface Science (APSUSC) – Elsevier
82. Sensors and Actuators B: Chemical (SABC) – Elsevier
83. Biocatalysis and Agricultural Biotechnology (BAB) – Elsevier
84. Environmental Progress & Sustainable Energy (JEPSE)- John Wiley & Sons, Inc.
85. Molecular Simulation/Journal of Experimental Nanoscience - Taylor & Francis
86. Diamond & Related Materials – Elsevier
87. Measurement - Journal of the International Measurement Confederation (IMEKO) –  
Elsevier
88. Material Research Express – (IOP)

89. Journal of Environmental Chemical Engineering – Elsevier
90. Molecular diversity – Elsevier
91. Materials Today Communications - Elsevier
92. Optical and Quantum Electronics - Springer Nature
93. Inorganic Chemistry Communications – Elsevier
94. Journal of the Indian Chemical Society
95. Medicinal Chemistry Research (MCRE)
96. Journal of Physics and Chemistry of Solids – Elsevier
97. Environmental Science and Pollution Research – Springer Nature
98. Dyes and Pigments - Elsevier
99. Journal of Bioresources and Bioproducts - Elsevier
100. Nano-Structures & Nano-Objects – Elsevier – Editor - Prof. Sabu Thomas
101. Journal of Computational Biophysics and Chemistry - World Sci. Pub. Co Pte Ltd
102. International Journal of Nanoscience (IJN) - World Scientific Journals
103. Medicinal Chemistry Research – Springer Nature
104. Journal of Rare Earths - Elsevier
105. Advanced Powder Technology - Elsevier
106. Environmental Technology & Innovation - Elsevier
107. Zeitschrift für Physikalische Chemie
108. Solid State Communications - Elsevier
109. Surfaces and Interfaces - Elsevier

**The following Professors/Scientists/Technologists/Experts are given talk/visit in our Department/Centre by our Invitations:**

1. Prof. Dr. J. Kumar, Vice-Chancellor & Former Director, Crystal Growth Centre, Anna University, Chennai – 600 025 Special Lectures on “Visible and Ultraviolet Sources for

**Solid State Lighting and Water Purification”** on 27.01.2009

2. **Prof. Dr. R. Jayavel, Director, Centre for nanotechnology, Anna University, Chennai – 600 025, Special Lectures on “Nanomaterials for Sensor Applications”** on 27.01.2009
3. **Prof. S. Umapathy, Director, IISER, Bhopal, Former IISc, Bangalore - One day Special Lectures on “50 Years of Lasers”** organized by the Centre for Nanoscience and Nanotechnology, Periyar University, Salem, on 15<sup>th</sup> December, 2010 (Director, IISER, Bopal)
4. **Prof. E. S. Sooriyaamoorthy, Madurai Kamaraj University - One day “Energy Conservation – Awareness Programme”** organized by the Centre for Nanoscience and Nanotechnology, Periyar University, Salem, on 20<sup>th</sup> December, 2010.
5. **Dr. V. Saravanan, Energy Consultant, Madurai - One day “Energy Conservation – Awareness Programme”** organized by the Centre for Nanoscience and Nanotechnology, Periyar University, Salem, on 20<sup>th</sup> December, 2010.
6. **Prof. K. Muthuchelian, Former V.C, Periyar University, Salem - One day “Energy Conservation – Awareness Programme”** organized by the Centre for Nanoscience and Nanotechnology, Periyar University, Salem, on 20<sup>th</sup> December, 2010.
7. **Prof. P. Natarajan, National Centre for Ultra Fast Process, Madras University, National Conference on “Advanced Nanomaterials (ANM-2012)”** organized by the Centre for Nanoscience and Nanotechnology, Periyar University, Salem, Tamilnadu, during 6-7, February, 2012.
8. **Prof. R. Ramarajan, Madurai Kamaraj University, National Conference on “Advanced Nanomaterials (ANM-2012)”** organized by the Centre for Nanoscience and Nanotechnology, Periyar University, Salem, Tamilnadu, during 6-7, February, 2012.
9. **Prof. N. Rajesh, BITS, Pilani, Hyderabad Campus, National Conference on “Advanced Nanomaterials (ANM-2012)”** organized by the Centre for Nanoscience and Nanotechnology, Periyar University, Salem, Tamilnadu, during 6-7, February, 2012.
10. **Prof. S. Chandrasekaran, Hindustan Lever Research Professor, JNCASR & IISc, Bangalore– National Science Academies’ Lecture workshop on ‘Modern Trends in Chemistry’** organised by the Centre for Nanoscience and Nanotechnology, Periyar University, Salem, Tamilnadu, during 13-14, August, 2012.
11. **Prof. N. Sathyamurthy, Director, IISER, Mohali – National Science Academies’ Lecture workshop on ‘Modern Trends in Chemistry’** organised by the Centre for Nanoscience and Nanotechnology, Periyar University, Salem, Tamilnadu, during 13-14, August, 2012.
12. **Prof. R. Ramarajan, Madurai Kamaraj University - National Science Academies’ Lecture workshop on ‘Modern Trends in Chemistry’** organised by the Centre for Nanoscience and Nanotechnology, Periyar University, Salem, Tamilnadu, during 13-14,

August, 2012.

13. **Dr. Ramaiah, NIIST, Trivandrum - National Science Academies' Lecture workshop on 'Modern Trends in Chemistry'** organised by the Centre for Nanoscience and Nanotechnology, Periyar University, Salem, Tamilnadu, during 13-14, August, 2012.
14. **Dr. M.L.P. Reddy, NIST, Trivandrum - National Science Academies' Lecture workshop on 'Modern Trends in Chemistry'** organised by the Centre for Nanoscience and Nanotechnology, Periyar University, Salem, Tamilnadu, during 13-14, August, 2012.
15. **Dr. A. P. J. Abdul Kalam, Former President of India - Stone Inscriptions function of Centre for Nanoscience and Nanotechnology and Interaction with student** on 12-01-2013.
16. **Dr. R. Brakaspathy, Secretary & Advisor/Scientist-G, Department of Science & Technology (DST) Govt. of India, New Delhi,** Keynote address and Delivered Lecture "Interaction Programme on DST Schemes for Researchers, organized by the Centre for Nanoscience and Nanotechnology on 12.06.2015
17. **Dr. Renato Toffanin, Managing Director & Science and Technology, Faculty Member, - Advanced Research Centre for Health, Environment and Space (ARCHES), , Via Giuseppe Leuzzi 18, I-70013 Castellana Grotte, Italy,** visited on 10.12.2013 & 12.10.2015
18. **Dr. Thomas Mohr, Department of Energy and Drive Systems, University of Applied Sciences, Ulm, Germany and Collaborative Research Conducted during the month of Dec, 2013** also visited for discussion on 22.06.2013 & 11.07.2016

**Administrative Positions (with Period) Held in Periyar University:**

(Name of the Institution/ Department)	Designation	Nature of post	Nature of assignment	Period (Give dates)		Length of experience
				From	To	
Periyar University Salem, TN	Reader in Physics	Chairman	P.G Board of Examinations	15-5- 2005	14-06-2005	One Month
Periyar University Salem, TN	Reader in Physics	Chairman	P.G Board of Examinations	21-12-2005	20-01-2006	One Month

Periyar University Salem, TN	Associate Professor	Chairman	P.G Board of Examinations	29-05-2006	30-06-2006	One Month
Periyar University Salem, TN	Associate Professor	Library in-charge	Circulating Books to Students	17-03-2005	17-3-2012	7 Years
Periyar University Salem, TN	Associate Professor	Coordinator	Periyar University Examinations & Engg. Exams.	04-05-2008	14-8-2008	3 Months
Periyar University Salem, TN	Professor	Additional Controller of Examinations	Distance Education Examinations	15-4-2009	15-01-2010 Extended upto 30.06.2011	9 Months
Periyar University Salem, TN	Professor	Chairman	P.G Board of Examinations	15-1-2010	15-2-2010	One Month
Periyar University Salem, TN	Professor	Director / Coordinator	Centre for Nanoscience & Nanotechnology (CNNT)	01-07-2011	10-01-2017	Six years
Periyar University Salem, TN	Professor	<u>Chairperson &amp; Convenor</u>	e-Waste Management Committee	05-02-2020	31.05.2024	4 years 3 Months
Periyar University Salem, TN	Professor	<u>Director</u>	Centre for New and Renewable Energy Studies (CNRES)	29-07-2021	31.05.2024	Two Year & 8 Months

ATLs (TN & Pondy), NITI Aayog	AIM, Amrita University, Kerala	<u>Professor-cum-Facilitator</u>	As per the norms of Govt. of India	Innovative Research, AMMAC HI Labs	03.06.2024 to Till Date	One Year
-------------------------------	--------------------------------	----------------------------------	------------------------------------	------------------------------------	-------------------------	----------

### Orientation and Refresher Courses

1	Academic Staff College Pondicherry University Pondicherry	4-2-1992 to 2-3-1992 (28 days)	Orientation Course
2	Academic Staff College Pondicherry University Pondicherry	18-10-'96 to 7-11-1996 (21 days)	Refresher Course
3	Academic Staff College Pondicherry University Pondicherry	11-12-2001 to 31-12-2001 (21 days)	Refresher Course
4	Academic Staff College Madras University Chennai-25	25-1-2002 to 14-2-2002 (21 days)	Refresher Course

### MEMORANDUM OF UNDERSTANDINGs (MOUs)

1. Memorandum Of Understanding (MOU) between Periyar University, Salem, and ARCHES, Italy, has been signed to facilitate staff exchange and collaborative research exchange of scientific information and publications.

**Dr. Vincent Aroulmoji from ARCHES – Italy and Dr. P. M. Anbarasan, Professor from Periyar University, Salem, had been appointed as contact officers. This MOU would be in force for a period of three years. It would help the development of the research activities. Training: This understanding would include various activities such as exchange of research staff, training of researchers, collaborative research exchange of scientific information and publications and industry and academic collaboration. The agreement was signed in front of Vice Chancellor and others.- (27.6.2011) - Periyar University gets Access rights to “Web of Science”.**

2. Memorandum of Understanding (MOU) between Periyar University, India– Silicon Ventures, UK, for industry collaboration setting-up technical excellence centre and R&D facility on Microelectronics at Periyar University, Salem - 636 011, Tamilnadu, India. **Mr.Gopal Dharmaraj from UK and Prof. P. M. Anbarasan from Periyar University had been appointed as Contact Officers.**

Mr. Gopal Dharmaraj, Management at Silicon Capital, Greater Cambridge Area, UK (2015)

**Activities are Planned at the site: 1. To scale up operation from present 10 students to 140**

students and growing as per the business plan to complete the R&D to prove the concept and start industrialization of the IP development process, run silicon verification shuttles before going to market and deliver profitability. 2. To provide access to PERIYAR UNIVERSITY Faculty, Research Scholars and M.Sc Students specializing in microelectronics as extended high-end research facility. 3. Give exposure to the Students live project environment including interacting with our European clients. 4. Joint R & D activity between our Specialist and experts with PERIYAR UNIVERSITY faculty.

### Outside India - Foreign M.Sc/PhD Dissertation/Thesis Evaluations:

1. The Papua New Guinea, University of Technology, M.Sc Dissertation entitled, “**Indoor Radiation Levels and Dose Assessment to the City of Lae in Papua New Guinea**” Name of Candidate: Mr. Philip Victor Epemu (SID 17800136), Name of Supervisor: Prof. Panakal John Jojo, Professor of Applied Physics, The paupa New Guinea University of technology, Lae, PNG

### Review Article:

1. **P. M. Anbarasan**, C. Indira Priyadarshini, R. Sathiyapriya, V. Hariharan, K. Prabakaran, V. Aroulmoji, “**Development of TiO<sub>2</sub> Nanomaterials and Dyes Selection (using DFT) for DSSC Applications – A Stepwise Review** – <https://doi.org/10.29294/IJASE.6.2.2019.1326-1350>, *Int. J. Adv. Sci. Eng. Vol. 6, No. 2, 1326-1350 (14 Dec 2019), ISSN 2349 5359 Impact Factor: 3.55*

2. M. Sumathi, P. Rekha, M. Mohan, A. Prakasam, **P. M. Anbarasan**, V. Aroulmoji, “**Review on the Recent Applications of Nanomaterials in Energy, Environmental and Health Care**”, *Int. J. Adv. Sci. Eng. Vol. 10, No. 3, 3482-3488 , 1326-1350 (14 Dec 2019), ISSN 2349 5359, Impact Factor: 3.55*

### I. LIST OF PUBLICATIONS: (REFEREED INTERNATIONAL & NATIONAL JOURNALS): (Total number of Citations: > 2581

**Top 20 Articles, since its Publication (2010)\* & (2012)\* Respectively.**

\*Rajesh KB, Jaroszewicz Z, **Anbarasan PM**: Improvement of Lens Axicon's Performance for Longitudinally Polarized Beam Generation by Adding a Dedicated Phase Transmittance. *Opt Express*; 2010 Dec 20; 18(26): 26799-805

\*Lalithambigai K, Suresh P, Ravi V, Prabakaran K, Jaroszewicz Z, Rajesh KB, **Anbarasan PM**, Pillai TVS., “Generation of Sub Wavelength Super-Long Dark Channel Using High NA Lens Axicon” *Opt. Lett*; 2012 Mar 15; 37(6): 999-1001.

### BOOK CHAPTERS

1. Title of the Book: Functionalized Nanomaterial-Based Electrochemical Sensors. <https://doi.org/10.1016/B978-0-12-823788-5.00014-4>, Copyright © 2022 Elsevier Ltd. All rights reserved.

Title of the chapter: “16 - Current Status of Environmental, Health, and Safety Issues of Functionalized Nanomaterials”

A. Priyadharsan, S. Shanavas, S. Boobas, Tansir Ahamad, R. Acevedo, **P.M. Anbarasan**, and R. Ramesh - ([Functionalized Nanomaterial-Based Electrochemical Sensors - Principles, Fabrication Methods, and Applications - Woodhead Publishing Series in Electronic and Optical Materials, 2022, Pages 357-368](#)) - <https://doi.org/10.1016/B978-0-12-823788-5.00014-4>, ISBN: 978-0-12-823788-5

## 2. EMERGING MXENES MATERIALS FOR EFFICIENT SUPERCAPACITOR APPLICATIONS: CURRENT TRENDS AND FUTURE PERSPECTIVES

**Book Name:** Futuristic Trends in Chemical Material Sciences & Nano Technology Vol. 3, Book 1

**Authors:** S. Arun Kumar, Prabhu Sengodan, Venkadeshkumar Ramar, R. Ramesh, P. M. Anbarasan

**Keywords:** Two-Dimensional Material, MXene, Supercapacitor.

**Area/Stream:** Chemical Science, Material Science & Nano Technology / Physical Chemistry / Others, **Published in:** IIP Series

**Volume:** 3, **Month:** May, **Year:** 2024, **Page No.:** 257-265, **e-ISBN:** 978-93-5747-867-0

**DOI/Link:** <https://www.doi.org/10.58532/V3BDCS1CH17>

<https://www.iipseries.org/viewpaper.php?pid=4008&pt=emerging-mxenes-materials-for-efficient-supercapacitor-applications-current-trends-and-future-perspectives>

### 2025

1. S. Arun Kumar, I. Sarasamreen, A. Vinnarasi, A. Gowdhaman, C. Balaji, S. Prabhu, R. Ramesh, **P. M. Anbarasan\***, “Achieving Superior Performance in Aqueous Supercapatteries and Ni-Zn Batteries by Employing 3D-NiO Flowers/NF Electrode” **Electrochimica Acta**, Volume 513, 10 February 2025, 145582, <https://doi.org/10.1016/j.electacta.2024.145582>, **Impact Factor: 5.5**
2. A. Arunkumar\*, **P. M. Anbarasan**, Mohd. Shkir, S. Rajkumar and M. A. Sayed, “Multi-role of  $K_3V_2(PO_4)_3/C$  Nanocomposite as High-Potential Cathode Materials for Potassium Ion Battery with, Antibacterial Agent and Visible-Light-Driven Photocatalyst” **Diamond Related Materials**, 153, 2025, 112074, DOI: [10.1016/j.diamond.2025.112074](https://doi.org/10.1016/j.diamond.2025.112074), 3 February, 2025, **Impact Factor: 4.3**
3. K. Lalithambigai\*, **P. M. Anbarasan**, Mohd. Shkir, “Single Long Linear Flat-Top, Double and Triple Optical Beams Formation by an Azimuthally Polarized Laser Light using a Seven-Zone BPPF System” **Micron**, Volume 191, April 2025, 103788, <https://doi.org/10.1016/j.micron.2025.103788>, <https://www.sciencedirect.com/science/article/abs/pii/S096843282500006X>, **Impact Factor: 2.5**

### 2024

4. Joseph Iruthayaraj Ragavan, **Ponnusamy Munusamy Anbarasan\***, Ammasi Arunkumar\*, Nasir A. Siddiqui and Aslam Khan, “Design, Synthesis, Spectroscopic, Electronic, Biological and MTT Evaluations of Flavone Compound using Density Functional Theory” **Journal of Computational Biophysics and Chemistry**, ISSN (print): 2737-4165 | ISSN (online): 2737-4173, Formerly known as **Journal of Theoretical and Computational Chemistry**, DOI: [10.1142/S2737416524500741](https://doi.org/10.1142/S2737416524500741), (2024) xx (x), pg. 1-18, **Impact Factor: 2.05**

5. I. Sarasamreen, S. Arun Kumar, S. Shanavas, R. Ramesh, **P.M. Anbarasan\***, A. Arunkumar, Mohd. Shkir, P. Sivakumar, **Investigation of the Electrochemical Properties of SnS/r-GO Nanocomposite for Aqueous Supercapacitor Applications”** **Surfaces and Interfaces**, Volume 54, November 2024, 105215, <https://www.sciencedirect.com/science/article/abs/pii/S2468023024013713>, ISSN: 2468-0230, <https://doi.org/10.1016/j.surfin.2024.105215>, **Impact Factor: 5.7**
6. S. Anithamani, M.K. Subramanian\*, I. Ragavan, **Ponnusamy M. Anbarasan**, Nasir A. Siddiqui, Aslam Khan, **“Synthesis, Structural Mechanisms, RDG, Biological and Pharmaceutical Significance of Anticancer Agent 9H-carbazole Attached 4-chlorobenzaldehyde using DFT Reckonings”** **Journal of the Indian Chemical Society**, Volume 101, Issue 11, November 2024, 101343, <https://doi.org/10.1016/j.jics.2024.101343>, <https://www.sciencedirect.com/science/article/abs/pii/S0019452224002231>, **Impact Factor: 3.2**
7. Irudayaraj Ragavan, Ammasi Arunkumar\*, **PonnusamyMunusamy Anbarasan\***, Vellingiri Balasubramani, Hamad Al-lohedan, Dhaifallah M. Al-dhayan, Vasudeva Reddy Minnam Reddy, Woo Kyoung Kim, **“Efficient Photocatalytic Hydrogen Production of Ni-Co Layered Double Hydroxides (Ni-Co LDHs) Anchored with Reduced Graphene Oxide (rGO) Hybrid Composite”** **Colloids and Surfaces A: Physicochemical and Engineering Aspects**, 20 August, 2024, Vol. 695, 134213, ISSN - 0927-7757, <https://doi.org/10.1016/j.colsurfa.2024.134213>, **Impact Factor: 5.2**
8. R. Sridevi, A. Prakasam\*, **P. M. Anbarasan**, Rajneesh Kumar, M. Karthik, K. Deepakvijay, **“Facile Construction of MoS<sub>2</sub> Decorated CdS Hybrid Heterojunction with Enhanced Hydrogen Generation Performance”**, **Chemical Physics Impact**, Available online 26<sup>th</sup> March 2024, Vol. 8, pg. 100584, Online ISSN: 2667-0224, <https://doi.org/10.1016/j.chphi.2024.100584>, **Impact Factor: 2.2**
9. Sarasamreen I, Shanavas S, Arun Kumar S, Ramesh R & **Anbarasan P. M\***, **“Electrochemical Performance of NiS/r-GO Composite based Electrode Material for Electrochemical Energy Storage Application”** **Journal of Materials Science: Materials in Electronics (JMSE) - JMSE-D-24-00157R1** - Volume-35, Article number: 691, 2<sup>nd</sup> April, 2024, ISSN: 1573-482X, **Impact Factor: 2.8**
10. S. Arun Kumar\*, A. Gowdhaman, C. Balaji, R. Ramesh, **P. M. Anbarasan**, **“Investigating the Synergistic Potential of Urchin-like CuCo<sub>2</sub>O<sub>4</sub> flowers and BiVO<sub>4</sub> Sheets in Supercapattery Framework Designs for Effective Energy Storage Applications”** **ALCOM\_173896**, **Journal of Alloys and Compounds**, Vol. 984, Pg. 173896, 15<sup>th</sup> May 2024, Available online from 16<sup>th</sup> February 2024, <https://doi.org/10.1016/j.jallcom.2024.173896>, ISSN: 1873-4669, **Impact Factor: 6.2**
11. A. Arunkumar, **P. M. Anbarasan\*** and Xue-Hai Ju **“Acceptor Tuned Effect on the D- $\pi$ -A-based Organic Efficient Sensitizers for Optoelectronic Properties Using Quantum Chemical Study”**, **Optical and Quantum Electronics**, Optical and Quantum Electronics

(2024) 56:520, <https://doi.org/10.1007/s11082-023-06196-4>, 30 January, 2024, **Electronic ISSN: 1572-817X, Print ISSN: 0306-8919, Impact Factor : 3.0**

12. S. Arun Kumar, A. Gowdhaman, C. Balaji, R. Ramesh, **P.M. Anbarasan\***, “**Exploring the Potential of Two-Dimensional NiCo<sub>2</sub>O<sub>4</sub> Sheets//BiPO<sub>4</sub> Flakes as a Hybrid Supercapacitor Device for Energy Storage Application**” **Colloids and Surfaces A: Physicochemical and Engineering Aspects**, Volume 685, 20 March 2024, 133247, Available online 17 January 2024, ISSN - 0927-7757, <https://doi.org/10.1016/j.colsurfa.2024.133247>, **Impact Factor: 5.2**  
**2023**
13. K. Guna, P. Sakthivel\*, I. Ragavan, A. Arunkumar, **P.M. Anbarasan**, Mohd Shkir, “**An Experimental and Computational Analysis on 2,6-diamine-7H-purine Ligand with Spectroscopic, AIM, NLO and Biological Activity**” on January, 2024, Vol. 168, Page:109872, **Optics and Laser Technology**, <https://doi.org/10.1016/j.optlastec.2023.109872>, ISSN: 1879-2545 - **Impact Factor: 5.0**
14. Arunkumar Ammasi, Ragavan Iruthayaraj, **Anbarasan Ponnusamy Munusamy\***, Mohd Shkir, Balasubramani Vellingiri, Vasudeva Reddy Minnam Reddy, Woo Kyoung Kim, “**Molecular Screening of Different  $\pi$ -Linker-Based Organic Dyes for Optoelectronic Applications: Quantum Chemical Study**” **Journal of Electronic Materials** (2023) 52: ISSN: 3774–3785, <https://doi.org/10.1007/s11664-023-10338-5>, **Impact Factor: 2.1**
15. K. Deepakvijay, A. Prakasam\*, R. Arivazhagan, **P.M. Anbarasan** “**Insights into the Structural, Electronic, Quantum Chemical Properties and Molecular Docking Studies on Novel NAMPT Inhibitor Molecule**” **Journal Chemical Physics Impact**, Available online 22 November 2023, Vol. 7, pg. 100395, <https://doi.org/10.1016/j.chphi.2023.100395>, Online ISSN: 2667-0224, Online ISSN: 2667-0224, **Impact Factor: 2.2**
16. Arunkumar Ammasi\*, **Anbarasan Ponnusamy Munusamy\***, Mohd Shkir, Balasubramani Vellingiri, Vasudeva Reddy Minnam Reddy\*, and Woo Kyoung Kim, “**Design and Fabrication of BaSnO<sub>3</sub>/RGO as Efficient Pt-Free Counter Electrode for Dye-Sensitized Solar Cells**”, **J Mater Sci: Mater Electron**, (2023) vol. 34: pg. 2168, <https://doi.org/10.1007/s10854-023-11540-1>, ISSN: 1573-482X, **Impact Factor: 2.401**
17. C. Vidya, I. Ragavan, A. Arunkumar, **P. M. Anbarasan\*** and Mohd Shkir, “**Synthesis, crystal Structures, Spectroscopy and Quantum Chemical Studies on the 4-dimethylaminopyridinium-2,4-dinitrophenolate: An Organic NLO Material for Optoelectronics**”, **Journal of Molecular Modeling**, Vol. 29, pg. 388 (2023) <https://doi.org/10.1007/s00894-023-05785-0>, Electronic ISSN: 0948-5023, Print ISSN: 1610-2940, **Impact Factor: 2.2**
18. A. Arunkumar\*, and **P. M. Anbarasan**, “**Computational Study on D- $\pi$ -A-Based Electron Donating and Withdrawing Effect of Metal-Free Organic Dye Sensitizers for Efficient Dye-Sensitized Solar Cells**” **Journal of Computational Biophysics and Chemistry**, Vol. 22, No. 08, pp. 1115-1124 (2023), DOI: [10.1142/S2737416523420139](https://doi.org/10.1142/S2737416523420139), ISSN (print): 2737-4165 | ISSN (online): 2737-4173, Special Issue: Computational Studies of Solar Energy Materials, Guest Editor: Javed Iqbal, **Impact Factor: 2.05**

19. S. Arun Kumar, I. Sarasamreen, C. Balaji, A. Gowdhaman, R. Ramesh, **P.M. Anbarasan\***, “Elevates the Electrochemical Stability Performance of Hydrothermally Synthesized  $\text{Co}_3\text{O}_4$  Nanowires/NF for Hybrid Supercapacitors” **Inorganic Chemistry Communications**, 158 (2023) 111506, <https://doi.org/10.1016/j.inoche.2023.111506>, ISSN: 1387-7003, **Impact Factor: 3.8**
20. I. Sarasamreen, Shanavas Shajahan, S. Arun Kumar, Mohammad Abu Haija, R. Ramesh, **P.M. Anbarasan\***, “Synthesis and Electrochemical Properties of  $\text{CuS/C-Dots}$  Microflower for High-Performance Supercapacitor” **Diamond & Related Materials**, 140 (A) (2023) 110453, DOI: [10.1016/j.diamond.2023.110453](https://doi.org/10.1016/j.diamond.2023.110453), ISSN: 0925-9635, Pub. Date : 2023-09-27, **Impact Factor: 4.1**
21. Arunkumar Ammasi, **Anbarasan Ponnusamy Munusamy\***, Mohd Shkir, F. Maiz, Balasubramani Vellingiri, Vasudeva Reddy Minnam Reddy, Woo Kyoung Kim, “Synthesis and Electrochemical Performance of  $\text{CoWO}_4$  and  $\text{CoWO}_4/\text{MWCNT}$  Nanocomposites for Highly Efficient Supercapacitor Applications” **Diamond & Related Materials**, 139 (2023) 110352, <https://doi.org/10.1016/j.diamond.2023.110352>, ISSN: 0925-9635, **Impact Factor: 4.1**
22. Arunkumar Ammasi\*, Ragavan Iruthayaraj, **Anbarasan Ponnusamy Munusamy** and Mohd Shkir, “Enhancement of Highly Efficient Flavone-Based Organic Dyes with Different Anchoring Groups Effect in Dye Sensitized Solar Cells Using Experimental and TD-DFT Study” **Journal of Materials Science: Materials in Electronics**, (2023) 34:1331, pg. 1-18, <https://doi.org/10.1007/s10854-023-10736-9>, ISSN: 1573-482X, **Impact Factor: 2.401**
23. S. Arun Kumar, C. Balaji, A. Gowdhaman, R. Ramesh, **P.M. Anbarasan\***, “Achieving High Energy Density in Supercapattery by Employing  $\text{CuFe}_2\text{O}_4$  Microsheets and  $\text{Bi}_2\text{O}_4$  Microspheres” **Colloids and Surfaces A: Physicochemical and Engineering Aspects**, Volume 674, 5 October 2023, 131856, <https://doi.org/10.1016/j.colsurfa.2023.131856>, ISSN: 1873-4359, **Impact Factor: 5.518**
24. S. Arun Kumar, V. Sindhuja, A. Gowdhaman, C. Balaji, R. Ramesh, **P. M. Anbarasan\***, “Construction of Vertically Aligned  $\text{MnCo}_2\text{O}_4$  Needles and  $\text{Bi}_2\text{WO}_6$  Globules as Optimal Electrode Materials for Hybrid Supercapacitor” **Electrochimica Acta**, 459 (2023) 142545, <https://doi.org/10.1016/j.electacta.2023.142545>, ISSN: 0013-4686, **Impact Factor: 7.336**
25. Kamalanathan Guna, Ponnusamy Sakthivel\*, Joseph I. Ragavan, **Ponnusamy M. Anbarasan**, Chinnaian Vidya, Ammasi Arunkumar, “Structural, Spectroscopic, Electronic, Hirshfeld, QTAIM and Biological Predications of a Hybrid 2,6-dichloropurine Compound: A Detailed Density Functional Theoretical Study” **Journal of the Indian Chemical Society**, 100 (2023) 100984, <https://doi.org/10.1016/j.jics.2023.100984>, ISSN: 2667-2847, **Impact Factor: 0.243**

26. K. Periyasamy\*, P. Sakthivel, I. Ragavan, **P. M. Anbarasan**, A. Arunkumar, Mohd Shkir, C. Vidya, V. Balasubramani, Vasudeva Reddy Minnan Reddy & Woo Kyoung Kim, “**Design, Synthesis, and Optical and Electrochemical Properties of D- $\pi$ -A Type Organic Dyes with Carbazole-Based Donor Units for Efficient Dye-Sensitized Solar Cells: Experimental and Theoretical Studies**” **Journal of Electronic Materials** <https://doi.org/10.1007/s11664-023-10210-6>, 52, pg. 2525-2543 (2023), ISSN: 0361-5235, **Impact Factor: 2.047**
27. S. Aadheeswari, , **P. M. Anbarasan\***, A. Arunkumar and Shakir Mohd “**Computational Study on D- $\pi$ -A-based Metal-Free Donor-Tuned Molecules for Efficient Organic Dye-Sensitized Solar Cells**”, **Journal of Computational Biophysics and Chemistry**, ISSN (print): 2737-4165 | ISSN (online): 2737-4173, Formerly known as **Journal of Theoretical and Computational Chemistry**, <https://doi.org/10.1142/S2737416523500151>, (2023) 22 (2), pg. 231-241, **Impact Factor: 2.05**
28. Arunkumar Ammasi, Ragavan Iruthayaraj, **Anbarasan Ponnusamy Munusamy\*** & Mohd Shkir, “**Molecular Engineering on D- $\pi$ -A Organic Dyes with Flavonebased Different Acceptors for Highly Efficient Dye Sensitized Solar Cells Using Experimental and Computational Study**” **Journal of Molecular Modeling** - (2023) 29 (2) :45 pg. 1-14, <https://doi.org/10.1007/s00894-023-05445-3> - ISSN: 1610-2940, **Impact Factor: 1.984**
29. A. Arunkumar\*, **P. M. Anbarasan**, Mohd Shkir and V. Balasubramani, “**Computational Screening of D- $\pi$ -A Structured with Acceptor-Tuned Metal-Free Organic Dye Molecules for DSSCs**” **Journal of Computational Biophysics and Chemistry**, Vol. 22, No. 02, pp. 219-229 (2023), <https://doi.org/10.1142/S2737416523500138>, ISSN (print): 2737-4165 | ISSN (online): 2737-4173, Formerly known as **Journal of Theoretical and Computational Chemistry**, **Impact Factor: 2.05**  
**2022**
30. C. Vidya, I. Ragavan, J. Jayaprakash, S. Arun Kumar and **P.M. Anbarasan\***, “**Synthesis, Spectral Analysis and Characterization on First Order Hyperpolarizability of Organic Piperidinium-4-Nitrophenolate Crystal for Optical Applications**” **Zeichen Journal**, Volume 8, Issue 07 (2022) pg. 514-533, ISSN No: 0932-4747
31. N. Balasubramanian, S. Prabhu, N. Sakthivel, R. Ramesh, S. Arun Kumar and **P. M. Anbarasan\***, “**Electrochemical Performance of Fe<sub>2</sub>O<sub>3</sub>@PPy Nanocomposite as an Effective Electrode Material for Supercapacitor**” **ECS Journal of Solid State Science and Technology**, Volume 11, 9 (2022) 091001, pg. 1-9, ISSN / EISSN : 2162-8769 / 2162-8777, DOI: [10.1149/2162-8777/ac8837](https://doi.org/10.1149/2162-8777/ac8837), **Impact Factor: 2.070**
32. N. Balasubramanian, N. Sakthivel, S. Prabhu, R. Ramesh, S. Arun Kumar and **P. M. Anbarasan\***, “**Design of Cube-like MnO<sub>2</sub>/r-GO Nanocomposite as a Superior Electrode Material for an Asymmetric Supercapacitor**” **ECS Journal of Solid State Science and Technology**, Volume 11, Number 7 (2022) 071010, pg. 1-8, ISSN / EISSN : 2162-8769 / 2162-8777, DOI: [10.1149/2162-8777/ac7e6a](https://doi.org/10.1149/2162-8777/ac7e6a), **Impact Factor: 2.070**

33. Joseph Iruthayaraj Ragavan, **Ponnusamy M. Anbarasan\***, Ammasi Arunkumar and A. Ibrahim, “**Design, Synthesis, Spectroscopic Characterization, Molecular Docking and Biological Evaluation of 9H-Carbazole Linked 4-Nitrophenol: A DFT Approach**” **J. Comput. Biophys. Chem.** **21 (8)**, (2022), pg. 909-926 - DOI: [10.1142/S2737416522500259](https://doi.org/10.1142/S2737416522500259), ISSN (print): 2737-4165 | ISSN (online): 2737-4173 - **Impact Factor: 2.440**
34. **P. M. Anbarasan\***, A. Arunkumar and Shakir Mohd, “**Computational Analysis of Carbazole-based Newly Efficient D- $\pi$ -A Organic Spacer Dye Derivatives for Dye-Sensitized Solar Cells**”, **Structural Chemistry**, Electronic ISSN-1572-9001, Print ISSN-1040-0400, <https://doi.org/10.1007/s11224-021-01853-4>, Springer Nature, Published: 23 March 2022, 33, pages 1097–1107 (2022), **Impact Factor: 1.877**
35. R. Govindarasu, M. K. Subramanian\*, A. Arunkumar, **P. M. Anbarasan** & Mohd Shkir, “**D- $\pi$ -A Manufactured Organic Dye Molecules with Different Spacers for Highly Efficient Reliable DSSCs via Computational Analysis**” **Molecular Simulation**, Vol. 48, Issue 3, pg. 584-593, 16 Feb 2022, <https://doi.org/10.1080/08927022.2022.2037585>, Print ISSN: 0892-7022 Online ISSN: 1029-0435, **Impact Factor: 2.178**
36. Rajkumar Senthamarai, Venkatraman Madurai Ramakrishnan, Prabhu Murugan, **Anbarasan Ponnusamy Munusamy\***, Suguna Kulandhaivel, “**Synthesis and Characterization of Nickel Doped TiO<sub>2</sub> Nanoparticles by Green Method and its Performance as Dyesensitized Solar Cells Photoanodes**” **International Journal of Energy Research.**, (May 2022); Vol. 46, Issue 6, pg. 7749-7757, DOI: <https://doi.org/10.1002/er.7677>, Online ISSN: 1099-114X, © 2022 John Wiley & Sons Ltd, **Impact Factor: 5.164**
37. Shajahan Shanavas, Mohammad Abu Haija, Dinesh Pratap Singh, Tansir Ahamad, Selvaraj Mohana Roopan, Quyet Van Le, Roberto Acevedo, **Ponnusamy MunusamyAnbarasan\***, “**Development of High Efficient Co<sub>3</sub>O<sub>4</sub>/Bi<sub>2</sub>O<sub>3</sub>/rGO Nanocomposite for An Effective Photocatalytic Degradation of Pharmaceutical Molecules with Improved Interfacial Charge Transfer**” **Journal of Environmental Chemical Engineering**, Available online 21 January 2022, 107243, <https://doi.org/10.1016/j.jece.2022.107243>, **Volume 10, Issue 2**, April 2022, 107243, ISSN: 2213-3437, **Impact Factor: 7.968**
38. K. Periyasamy\*, P. Sakthivel, G. Venkatesh, **P. M. Anbarasan**, P. Vennila, Y. Sheena Mary, S. Kaya and Sultan Erkan, “**Synthesis, Photophysical, Electrochemical, and DFT Examinations of Two New Organic Dye Molecules Based on Phenothiazine and Dibenzofuran**” **Journal of Molecular Modeling** (2022) 28:34, pg.1-14, <https://doi.org/10.1007/s00894-022-05026-w>, ISSN: 0948-5023, **Impact Factor: 2.2**
39. **P. M. Anbarasan\***, A. Arunkumar and Shakir Mohd, “**Computational Investigations on Efficient Metal-free Organic D- $\pi$ -A Dyes with Different Spacers for Powerful DSSCs Applications**”, **Journal of Molecular Simulation**, (2022) ISSN: 0892-7022, 1029-0435, Taylor & Francis, Vol. 48, Issue 2, pg. 140-149, <https://doi.org/10.1080/08927022.2021.1994965>, **13.11.2021, Impact Factor: 2.178**

40. A. Prakasam\*, P.M. Anbarasan, R. Azhagu Raj, C. Ragupathi, Rajneesh Kumar, “**Morphologies, Crystal Structure And Antibacterial Properties of Chromium Substituted Zinc Oxide Nanoparticles Synthesized by Microwave Method**” **Materials Today: Proceedings** Volume 49, Part 7, 2022, Pages 2928-2933, <https://doi.org/10.1016/j.matpr.2021.11.100> ISSN: 2214-7853, **Impact Factor: 1.8**
41. A. Manaka, R. Uvarani\*, I. Ragavan and P. M. Anbarasan “**Experimental and Computational Investigation on Spectroscopic Characterization, Molecular Modeling and Biological Evaluation of 3, 3', 4'7-tetrahydroxyflavone, 3, 3',4'7-tetrahydroxyflavone-6-methoxymethane against in A549 cells**” **Journal of Molecular Structure**, Volume 1250, Part 3, 15 February 2022, 131878, ISSN: 0022-2860, <https://doi.org/10.1016/j.molstruc.2021.131878>, **Impact Factor: 3.196**
42. A. Nallathambi, A. Prakasam\*, R. Azhagu Raj, P.M. Anbarasan, C. Ragupathi, “**Effects on Size, Optical and Antibacterial Activity of Pristine and Cr-Doped NiO Prepared By Microwave-Assisted Method**” **Materials Today: Proceedings**, Available online 5 November 2021, <https://doi.org/10.1016/j.matpr.2021.10.111> Volume 49, Part 7, 2022, Pages 2867-2871, ISSN: 1735-2428, **Impact Factor: 1.8**  
**2021**
43. Raman Govindarasu, Muthugoundar Karuppugoundar Subramanian\*, Ammasi Arunkumar, Shajahan Shanavas, Ponnusamy Munusamy Anbarasan\*, Tansir Ahamad & Saad M. Alshehri, “**Acceptor Substituent Effect on Triphenylamine-Based Organic Dye Sensitizers for DSSCs: Quantum Chemical Study**” **Journal of the Iranian Chemical Society**, volume 18, pages 1279–1288 (2021), ISSN: 1735-2428, <https://doi.org/10.1007/s13738-020-02112-9>, **Impact Factor: 2.019**
44. Ananthan Nisha, Pandaram Maheswari, Santhanakumar Subanya, Ponnusamy Munusamy Anbarasan, Karuppaiya Balasundaram Rajesh\* and Zbigniew Jaroszewicz, “**Ag-Ni Bimetallic Film on CaF<sub>2</sub> Prism for High Sensitive Surface Plasmon Resonance Sensor**” [doi: 10.4302/plp.v13i3.1114](https://doi.org/10.4302/plp.v13i3.1114), **Photonics Letters of Poland**, Vol. 13 (3) (2021), Pg. 58-60, Photonics Society of Poland, ISSN: 2080-2242, **Impact Factor: 0.8**
45. T. Saravana Kumaran\*, A. Prakasam, P. M. Anbarasan, P. Vennila, G. Venkatesh, S. Parveen Banu and Y. Sheena Mary, “**New Phenoxazine-Based Organic Dyes with Various Acceptors for Dye-Sensitized Solar Cells: Synthesis, Characterization, DSSCs Fabrications and DFT Study**” **Journal of Computational Biophysics and Chemistry**, <https://doi.org/10.1142/S2737416521500253>, Vol. 20, No. 05, pp. 465-476 (2021), ISSN: 2737-4173, **Impact Factor: 2.2**
46. K. Periyasamy\*, P. Sakthivel, P.Vennila, P. M. Anbarasan, G. Venkatesh, Y. Sheena Mary, “**Novel D- $\pi$ -A Phenothiazine and Dibenzofuran Organic Dyes with Simple Structures for Efficient Dye-Sensitized Solar Cells**” **Journal of Photochemistry and Photobiology A: Chemistry**, <https://doi.org/10.1016/j.jphotochem.2021.113269>, Volume 413, 15 May 2021, 113269, ISSN: 1010-6030, **Impact Factor: 4.291**

47. Ponnusamy Munusamy Anbarasan\*, Arunkumar Ammasi, Shanavas Shajahan, Tansir Ahamad and M. A. Majeed Khan “**Quantum Chemical Investigation on D- $\pi$ -A Based Phenothiazine Organic Chromophores with Spacer and Electron Acceptor Effect for DSSCs**” Doi: <https://doi.org/10.1007/s11224-021-01787-x>, **Structural Chemistry**, Vol. 32, pages 2199–2207 (2021) ISSN: 1572-9001, **Impact Factor: 2.081**
48. Shajahan Shanavas, Tansir Ahamad, Saad M. Alshehri, Roberto Acevedo, Ponnusamy Munusamy Anbarasan\*, “**A Facile Microwave Route for Fabrication of NiO/RGO Hybrid Sensor with Efficient CO<sub>2</sub> And Acetone Gas Sensing Performance using Clad Modified Fiber Optic Method**” **Optik - International Journal for Light and Electron Optics** 226 (2) (2021) 165970, pg. 1-11, <https://doi.org/10.1016/j.ijleo.2020.165970>, ISSN: 0030-4026, Received 9 April 2020; **Impact Factor: 2.187 (2020)**
49. S. Haseena, S. Shanavas\*, T. Ahamad, S. M. Alshehri, P. Baskaran, J. Duraimurugan, R. Acevedo, M. A. Majeed Khan, P. M. Anbarasan and N. Jayamani\*, “**Investigation on Photocatalytic Activity of Bio-Treated  $\alpha$ -Fe<sub>2</sub>O<sub>3</sub> Nanoparticles Using *Phyllanthus Niruri* and *Moringa Stenopetala* Leaf Extract Against Methylene Blue and Phenol Molecules: Kinetics, Mechanism and Stability**”, **Journal of Environmental Chemical Engineering**, <https://doi.org/10.1016/j.jece.2020.104996>, ISSN: 2213-3437, Volume 9, Issue 1, February 2021, 104996, ISSN: 2213-3437, **Impact Factor: 5.909 (2022 - 7.7)**
- 2020**
50. Sumathi Mathiyalagan, Prakasam Annamalai\*, Ponnusamy Munusamy Anbarasan, “**Fabrication of Ultrathin Nanosheets of Graphitic Carbon Nitride Heterojunction with Spherical Shaped Bi<sub>2</sub>O<sub>3</sub> Nanoparticles for High Performance Visible Light Photocatalyst**” **Journal of Cluster Science Including Nanoclusters and Nanoparticles**, volume 31, pages 277–286 (2020) <https://doi.org/10.1007/s10876-019-01645-1> ISSN: 1040-7278, **Impact Factor: 3.061**
51. C. Indira Priyadharsini, G. Marimuthu, T. Pazhanivel, P. M. Anbarasan\*, V. Aroulmoji, V. Siva and L. Mohana, “**Sol–Gel Synthesis of Co<sub>3</sub>O<sub>4</sub> Nanoparticles as an Electrode Material for Supercapacitor Applications**” **Journal of Sol-Gel Science and Technology (Nano-Structured Materials (Particles, Fibers, Colloids, Composites, Etc.))** (2020) 96:416–422, <https://doi.org/10.1007/s10971-020-05393-x>, ISSN: 1573-4846, **Impact Factor: 2.236**
52. C. Indira Priyadharsini, P. M. Anbarasan\*, V. Aroulmoji & V. Siva, “**Synthesize, Characterization and Electrochemical Investigations of Cobalt Oxide Nanoparticles to Supercapacitor Application**” **AEGLAEUM JOURNAL**, Volume 8, Issue 8, 2020, Page No: 750-758, <http://aegaeum.com>, ISSN NO: 0776-3808, <http://aegaeum.com/gallery/agm.j-3785.79-f.pdf>, **UGC CARE Group - II Journals Link**, <https://ugccare.unipune.ac.in/Apps1/User/LR/Login>
53. K. Prabakaran, V. Karthik, K. B. Rajesh, P. M. Anbarasan, V. Aroulmoji, A. Mohamed Musthafa, “**Focal Hole Shifting Azimuthally Polarized Sinh gaussian Beam using Cosine Phase Filter**” **Int. J. Adv. Sci. Engg.** Vol. 6, No. 4, pg. 1476-1481 (2020) ISSN: 2349 5359 <https://doi.org/10.29294/IJASE.6.4.2020.1476-1481>, **Impact Factor: 2.75, Cite Score: 1.03**

54. A. Arunkumar, S. Shanavas and P.M. Anbarasan\*, “Quantum Chemical Investigation of Modified Coumarin-based Organic Efficient Sensitizers for Optoelectronic Applications” *The European Physical Journal D (EPJD) – (Atomic, molecular, Optical and Plasma Physics) – Springer Berlin Heidelberg*, ISSN: 1434-6079, 74, 35 (20 February, 2020), pg. 1-8, <https://doi.org/10.1140/epjd/e2019-100246-9>, **Impact Factor: 1.425**
55. A. Arunkumar, S. Shanavas, Roberto Acevedo & P. M. Anbarasan\*, “Computational Analysis on D- $\pi$ -A Based Perylene Organic Efficient Sensitizer in Dye-Sensitized Solar Cells” *Optical and Quantum Electronics* volume 52, Article number: 164 (2020), 139, ISSN: 1752-817X, <https://doi.org/10.1007/s11082-020-02273-0>, **Impact Factor: 2.084**
56. M. Gomathi, A. Prakasam\*, P. V. Rajkumar, S. Rajeshkumar, R. Chandrasekaran, P. M. Anbarasan, “Green Synthesis of Silver Nanoparticles Using *Gymnema Sylvestre* Leaf Extract and Evaluation of its Antibacterial Activity” *South African Journal of Chemical Engineering*, <https://doi.org/10.1016/j.sajce.2019.11.005>, ISSN: 1026-9185, Volume 32, April 2020, Pages 1-4, **Impact Factor: 2.06**
57. C. Indira Priyadharshini, G. Marimuthu, T. Pazhanivel, P.M. Anbarasan\*, V. Aroulmoji, S. Prabhu, R. Ramesh, “Electrochemical Supercapacitor Studies of Ni<sup>2+</sup> Doped SrTiO<sub>3</sub> Nanoparticles by Ball Milling Method” *International Journal of Ionics (The Science and Technology of Ionic Motion) – Ionics*, volume 26, pages 3591–3597 (2020) <https://doi.org/10.1007/s11581-019-03412-8>, ISSN: 1862-0760, **Impact Factor: 2.394**
58. A. Arunkumar, S. Shanavas, R. Acevedo, P. M. Anbarasan\* “Acceptor Tuning Effect on TPA-Based Organic Efficient Sensitizers for Optoelectronic Applications – Quantum Chemical Investigation” – *Structural Chemistry*, Vol. 31, Pg. 1029–1042 (2020), ISSN: 1572-9001, <https://doi.org/10.1007/s11224-019-01484-w>, **Impact Factor: 1.887**
59. S. Shanavas, A. Priyadharsan, R. Ramesh, P. M. Anbarasan\*, “Optimization and Detailed Stability Study on Pb Doped Ceria Nanocubes f, r Enhanced Photodegradation of Several Anionic and Cationic Organic Pollutants” *Arabian Journal of Chemistry*, (2020) <https://doi.org/10.1016/j.arabjc.2017.11.001>, Volume 13, Issue 1, January 2020, Pages-1309-1322, ISSN: 1878-5352, Elsevier, **Impact Factor: 5.388, Citations: 4**
60. S. Shanavas, Tansir Ahamad, Saad M. Alshehri, Aeysha Sultan, Roberto Acevedo, P.M. Anbarasan\*, “Development of High-Performance Fiber Optic Gas Sensor Based Rice-like CeO<sub>2</sub>/MWCNT Nanocomposite Synthesized by Facile Hydrothermal Route” *Optics & Laser Technology* (2020) DOI: 10.1016/j.optlastec.2019.105902, EID: 2-s2.0-85073937238, (March 2020) Vol. 123, Pg. 105902, ISSN: 0030-3992, **Impact Factor: 3.867**
61. A. Priyadharsan, S. Shanavas, C. Vidya, J. Kalyana Sundar, Roberto Acevedo, P. M. Anbarasan\*, “Structural and Optical Properties of Sn Doped ZnO-rGO Nanostructures using Hydrothermal Technique” *Materials Today: Proceeding*

(Elsevier), (2020), ISSN: 2214-7853, DOI: [10.1016/j.matpr.2019.05.440](https://doi.org/10.1016/j.matpr.2019.05.440), Volume 26, Part 4, 2020, Pages - 3522-3525, **Impact Factor: 1.17**

62. S. Shanavas, A. Priyadharsan, Subramani Karthikeyan, K. Dharmaboopathi, I. Ragavan, Vidya Parthiban, Roberto Acevedo, **P. M. Anbarasan\***, “**Green Synthesis of Titanium Dioxide Nanoparticles Using Phyllanthus Niruri Leaf Extract and Study on its Structural, Optical and Morphological Properties**” **Materials Today: Proceedings**, DOI: [10.1016/j.matpr.2019.06.715](https://doi.org/10.1016/j.matpr.2019.06.715), Volume 26, Part 4, 2020, Pages 3531-3534, ISSN: 2214-7853, **Impact Factor: 1.17**
  63. S. Karthikeyan, M. Selvapandian\*, S. Shanavas, **P. M. Anbarasan\***, Roberto Acevedo, “**A Role of Annealing Temperature on the Properties of Lanthanum Oxide (La<sub>2</sub>O<sub>3</sub>) Microplates by Reflux Routes**” **Materials Today: Proceedings**, <https://doi.org/10.1016/j.matpr.2019.07.700>, Volume 26, Part 4, 2020, Pages 3576-3578 ISSN: 2214-7853 , **Impact Factor: 1.17**
- 2019**
64. I. Ragavan, C. Vidya, S. Shanavas, Roberto Acevedo, A. Manjri, **P. M. Anbarasan\***, A. Prakasam, C. Sudhakar, T. Selvankumar “**Synthesis, Spectroscopic Characterization and Molecular Docking Study of Ethyl 2-(4-(5, 9-dihydro-6-hydroxy-2-mercapto-4H-purin-8-ylthio) thiophen-2-yl)-2-oxoacetate Molecule for the Chemotherapeutic Treatment of Breast Cancer Cells**” **Chemical Physics**, Vol. 530, 13 Nov, **2019**, 110596, <https://doi.org/10.1016/j.chemphys.2019.110596>, ISSN: 0301-0104, **Impact Factor: 2.348**
  65. J. Duraimurugan, G. Suresh Kumar, S. Shanavas, R. Ramesh, Roberto Acevedo, **P. M. Anbarasan**, P. Maadeswaran\* “**Hydrothermal Assisted Phytofabrication of Zinc Oxide Nanoparticles with Different Nanoscale Characteristics for the Photocatalytic Dgradation of Rhodamine B**” **Optik – International Journal for Light and Electron Optics (Oct 2019)**, DOI: [10.1016/j.ijleo.2019.163607](https://doi.org/10.1016/j.ijleo.2019.163607), Vol. 202, Pg. 163607, ISSN: 0030-4026, **Impact Factor: 2.443**
  66. Vidya Chinnaiyan, Jayaprakash Jeyaram, I. Ragavan, S, Shanavas, A. Priyadharsan, Roberto Acevedo, **P. M. Anbarasan\***, “**Synthesis, Structural Analysis, Spectroscopic Characterization and Second Order Hyperpolarizability of 2-Amino-4-Methylpyridinium-4-Hydroxybenzolate Crystal**” **Journal of Materials Science: Materials in Electronics (Oct 2019)**, DOI: [10.1007/s10854-019-02396-5](https://doi.org/10.1007/s10854-019-02396-5), Vol. 30, pg. 20489–20505 (2019), ISSN: 1573-482X , **Impact Factor: 2.478**
  67. M. Sumathi, A. Prakasam\* and **P. M. Anbarasan**, “**Fabrication of Hexagonal Disc Shaped Nanoparticles g-C<sub>3</sub>N<sub>4</sub>/NiO Heterostructured Nanocomposites for Efficient Visible Light Photocatalytic Performance**” **Journal of Cluster Science Including Nanoclusters and Nanoparticles**, ISSN: 1040-7278, DOI: [10.1007/s10876-019-01535-6](https://doi.org/10.1007/s10876-019-01535-6), Springer, 30, 3, 757-766 (2019), **Impact Factor: 3.061**
  68. S. Shanavas, J. Duraimurugan, G. Suresh Kumar, R. Ramesh, R. Acevedo, **P. M. Anbarasan** and P. Maadeswaran\*, “**Ecofriendly Green Synthesis of ZnO Nanostructures Using Artabotrys Hexapetalu and Bambusa Vulgaris Plant Extract and Investigation on their**

**Photocatalytic and Antibacterial Activity”** *Materials Research Express*, IOP Publishing Ltd., <https://doi.org/10.1088/2053-1591/ab3efe>, Vol. 6, No. 10, Pg. 105098 (2019), ISSN: 2053-1591, **Impact Factor: 1.618**

69. A. Victor Bastin, I. Ragavan, **P. M. Anbarasan**, A. Prakasam, S. Meenakshi Sundar, “**Efficient D- $\pi$ -A Type Organic Dyes Having Carbazole Based Functional Groups Moiety as Acceptor for Dye-Sensitized Solar Cells: Experimental and Theoretical Studies**” *Young Scientist – Tomorrow’s Science Begins Today*, ISSN: 2581-4737, Vol. 3, Issue 1, (2019), pg. 1-14, [http://webcache.googleusercontent.com/search?q=cache:WuASpxVcyjAJ:technology.eurekajournals.com/index.php/Young\\_Scientist/article/download/475/609+&cd=1&hl=en&ct=clnk&gl=in](http://webcache.googleusercontent.com/search?q=cache:WuASpxVcyjAJ:technology.eurekajournals.com/index.php/Young_Scientist/article/download/475/609+&cd=1&hl=en&ct=clnk&gl=in)
70. S. Shanavas, S. M. Roopan, A. Priyadharsan, D. Devipriya, S. Jayapandi, Roberto Acevedo, **P. M. Anbarasan\***, “**Computationally Guided Synthesis of (2D/3D/2D) rGO/Fe<sub>2</sub>O<sub>3</sub>/g-C<sub>3</sub>N<sub>4</sub> Nanostructure with Improved Charge Separation and Transportation Efficiency for Degradation of Pharmaceutical Molecules**” *Applied Catalysis B: Environmental (Elsevier)*, Volume 255, page 117758, 15th October (2019), <https://doi.org/10.1016/j.apcatb.2019.117758>, ISSN: 0926-3373, **Impact Factor: 24.319/19.503 (As Corresponding Author)**
71. M. Sumathi, A. Prakasam\*, **P. M. Anbarasan**, “**A Facile Microwave Stimulated g-C<sub>3</sub>N<sub>4</sub>/ $\alpha$ -Fe<sub>2</sub>O<sub>3</sub> Hybrid Photocatalyst with Superior Photocatalytic Activity and Attractive Cycling Stability**” *Journal of Materials Science: Materials in Electronics*: ISSN: 0957-4522, e-ISSN: 1573-482X, DOI: [10.1007/s10854-019-01439-1](https://doi.org/10.1007/s10854-019-01439-1) (May 2019), Vol.30, Issue 12, Pg. 10985-10993, **Impact Factor: 2.22**
72. M. Sumathi, A. Prakasam\*, **P. M. Anbarasan**, “**High Capable Visible Light Driven Photocatalytic Activity of WO<sub>3</sub>/g-C<sub>3</sub>N<sub>4</sub> Heterostructure Catalysts Synthesized by a Novel One Step Microwave Irradiation Route**” *Journal of Materials Science: Materials in Electronics*: ISSN: 0957-4522, e-ISSN: 1573-482X, DOI: [10.1007/s10854-018-00602-4](https://doi.org/10.1007/s10854-018-00602-4), Vol. 30, Issue 4, Pg. 3294-3304 (March 2019), **Impact Factor: 2.22**
73. A. Arunkumar, M. Deepana, S. Shanavas, Roberto Acevedo, **P. M. Anbarasan\***, “**Computational Investigation on Series of Metal-Free Sensitizers in Tetrahydroquinoline with Different  $\pi$ —Spacer Group for DSSCs**” *ChemistrySelect* 4 (14): 4097-4104, (April 2019) , DOI: [10.1002/slct.201803961](https://doi.org/10.1002/slct.201803961), ISSN: 2365-6549, **Impact Factor: 2.109**
74. A. Arunkumar, **P. M. Anbarasan\***, “**Optoelectronic Properties of a Simple Metal-Free Organic Sensitizer with Different Spacer Groups: Quantum Chemical Assessments**” *Journal of Electronic Materials*” 48, 3, 1522-1530, (January 2019), DOI: [10.1007/s11664-018-06912-x](https://doi.org/10.1007/s11664-018-06912-x), ISSN: 0361-5235, **Impact Factor: 1.938**
75. A. Priyadharsan, V. Vasanthakumar, S. Shanavas, S. Karthikeyan, and **P. M. Anbarasan\***, “**Crumpled Sheet like Graphene Based WO<sub>3</sub>-Fe<sub>2</sub>O<sub>3</sub> Nanocomposites for Enhanced**

**Charge Transfer and Solar Photocatalysts for Environmental Remediation" *Applied Surface Science*, 470 (2019): 114-128, <https://doi.org/10.1016/j.apsusc.2018.11.130>, ISSN: 0169-4332 , **Impact Factor: 6.182**, **Citations: 3****

76. V. Manikandan, P. Jayanthi, A. Priyadharsan, E. Vijayapathap, **P. M. Anbarasan**, and P. Velmurugan\*, "**Green Synthesis of Ph-Responsive Al<sub>2</sub>O<sub>3</sub> Nanoparticles: Application to Rapid Removal of Nitrate Ions with Enhanced Antibacterial Activity**" *Journal of Photochemistry and Photobiology A: Chemistry* 371 (2019): 205-215, <https://doi.org/10.1016/j.jphotochem.2018.11.009>, Online ISSN: 1873-2666, ISSN: 1010-6030, **Impact Factor: 4.291**
77. S. Shanavas, A. Priyadharsan, I. Gkanas, R. Acevedo, and **P. M. Anbarasan\***, "**High Efficient Catalytic Degradation of Tetracycline and Ibuprofen Using Visible Light Driven Novel Cu/Bi<sub>2</sub>Ti<sub>2</sub>O<sub>7</sub>/rGO Nanocomposite: Kinetics, Intermediates and Mechanism**" *Journal of Industrial and Engineering Chemistry* 72, 25<sup>th</sup> April (2019) 512-528, DOI: <https://doi.org/10.1016/j.jiec.2019.01.008>, Online ISSN: 1876-794X, ISSN: 1226-086X , **Impact Factor: 5.278**
78. V. Vasanthakumar, S. Mohanapriya, A. Priyadharsan, **P. M. Anbarasan**, P. M. G. Nambissan, and V. Raj\*, "**Tunable Physicochemical and Free Volume Characteristics of Novel Terpolymer-Poly (Vinyl Alcohol) Grafted Membranes for Direct Methanol Fuel Cell**" *New Journal of Chemistry (RSC)* 43 (7) 2942-2954 (2019), <https://doi.org/10.1039/C8NJ00295A>, ISSN: 1369-9261, **Impact Factor: 3.288**
79. A. Nisha, P. Maheswari, **P. M. Anbarasan**, K. B. Rajesh\*, and Z. Jaroszewicz, "**Sensitivity Enhancement of Surface Plasmon Resonance Sensor with 2D Material Covered Noble and Magnetic Material (Ni)**" *Optical and Quantum Electronics (Springer)* 51, no. 1 (2019): 19, <https://doi.org/10.1007/s11082-018-1726-3>, ISSN: 1752-817X, **Impact Factor: 2.804**
80. J. Duraimurugan, G. Suresh Kumar, P. Maadeswaran\*, S. Shanavas, **P. M. Anbarasan**, and V. Vasudevan, "**Structural, Optical and Photocatalytic Properties of Zinc Oxide Nanoparticles Obtained by Simple Plant Extract Mediated Synthesis**" *Journal of Materials Science: Materials in Electronics* 30, 2 (2019) 1927-1935: ISSN: 1573-482X, <https://doi.org/10.1007/s10854-018-0466-2>, **Impact Factor: 2.324**
81. M. Prakasan and **P. M. Anbarasan\***, "**Stilbene Based Organic Dye as Efficient Sensitizer for NLO and Dye-Sensitized Solar Cells: A First Principle Study**" *Materials Today: Proceedings (Elsevier)*, 9: 156-163, [Doi: 10.1016/j.matpr.2019.02.148](https://doi.org/10.1016/j.matpr.2019.02.148) (January 2019), ISSN: 2214-7853, **Impact Factor: 1.09**
- 2018**
82. A. Priyadharsan, S. Shanavas, V. Vasanthakumar, B. Balamuralikrishnan, and **P. M. Anbarasan\***, "**Synthesis and Investigation on Synergetic Effect of rGO-ZnO Decorated MoS<sub>2</sub> Microflowers with Enhanced Photocatalytic and Antibacterial Activity**" *Colloids and Surfaces A: Physicochemical and Engineering Aspects* 559 (2018): 43-53,

<https://doi.org/10.1016/j.colsurfa.2018.09.034>, ISSN: 0927-7757, **Impact Factor: 4.539**,  
**Citations: 6**

83. Shanavas Shajahan, Arumugam Priyadharsan, Kaliyannan Dharmaboopathi, Iruthayaraj Ragavan, Chinnaian Vidya, and **Ponnusamy Munusamy Anbarasan\***, "**Ultrasonically and Photonically Simulatable Bi-Ceria Nanocubes for Enhanced Catalytic Degradation of Aqueous Dyes: A Detailed Study on Optimization, Mechanism and Stability**" **ChemistrySelect**, Vol. 3, No. 45 (2018): 12841-12853, <https://doi.org/10.1002/slct.201802836>, ISSN: 2365-6549, **Impact Factor: 2.109**, **Citations: 3**
84. A. Arunkumar, S. Shanavas, and **P. M. Anbarasan\***, "**First-Principles Study of Efficient Phenothiazine-Based D- $\Pi$ -A Organic Sensitizers with Various Spacers for DSSCs**," **Journal of Computational Electronics**, 17, no. 4 (2018): 1410-1420, ISSN: 1572-8137, <https://doi.org/10.1007/s10825-018-1226-5>, **Impact Factor: 1.431**
85. K. Ramar, V. Vasanthakumar, A. Priyadharsan, P. Priya, V. Raj, **P. M. Anbarasan**, R. Vasanthakumari, and A. Jafar Ahamed\*, "**Green Synthetic Approach of Silver Nanoparticles from Bauhinia Tomentosa Linn Leaves Extract for Potent Photocatalytic and In-Vitro Biological Applications**" **Journal of Materials Science: Materials in Electronics**, 29, no. 13 (2018): 11509-11520, ISSN: 1573-482X, <https://doi.org/10.1007/s10854-018-9246-2>, **Impact Factor: 2.324**, **Citations: 6**
86. A. Arunkumar, **P. M. Anbarasan\***, "**Highly Efficient Organic Indolocarbazole Dye in Different Acceptor Units for Optoelectronic Applications - A First Principle Study**" **Structural Chemistry (Springer)**, 29, 4 (2018), pg. 967-976; ISSN: 1572-9001, <https://doi.org/10.1007/s11224-018-1073-9>, **Impact Factor: 1.582**
87. M. Prakasam and **P. M. Anbarasan\***, "**Effects of the Bridge Unit in D- $\pi$ -A Architecture to Improve Light Harvesting Efficiency at DSSCs: A First Principle Theoretical Study**" **Environmental Progress & Sustainable Energy**, Vol. 37, Issue 4, Pg. 1403-1410 (2018) American Institute of Chemical Engineers, John Wiley & Sons, Inc., <https://doi.org/10.1002/ep.12787>, ISSN: 1944-7450, **Impact Factor: 2.431**
88. C.Indira Priyadharsini, M. Sumathi, A.Prakasam, **P. M. Anbarasan**, V. Hariharan, "**Structural and Optical Properties of Nanocrystalline Zn-Ce Doped SnO<sub>2</sub> by Co-Precipitation Method**" **Int. J. Adv. Sci. Engg.** Vol.4, No.4, 750-754 (2018) 750 ISSN: 2349 5359, <http://mahendrapublications.com/Document/MP460695.pdf>
89. S. Ranjitha, R. Lavanya Dhevi, V. Hariharan, **P. M. Anbarasan**, R. Sathiyapriya, M. Sridharan, "**Photovoltaic and Impedance Spectroscopy Analysis of ZrO<sub>2</sub>/TiO<sub>2</sub> Composites for Dye Sensitized Solar Cells**," **Int. J. Adv. Sci. Engg.** Vol.5 No.2, pg. 948-956 (2018) 948, E-ISSN: 2349 5359; P-ISSN: 2454-9967, <https://mahendrapublications.com/Document/MP180596.pdf>

90. A. Arunkumar, M. Prakasam, **P. M. Anbarasan\***, “**Donor Influence of Light-Harvesting Capacity for Highly Efficient Dye-Sensitized Solar Cells: A First Principle Study**” **The Journal of Chemical Science** 111 (2017) 313-327, ISJN: 7248-4712: [ISJN72484712D851828112017](https://doi.org/10.1007/s12017-017-0587-5), **Impact Index: 5.87**
91. I. Ragavan, A. Prakasam and **P. M. Anbarasan**, “**Electronic Structure, Nonlinear Optical Properties and Spectroscopic Studies of 4-Methyl-3-Nitropyridine-1-Carbonitrile: Using Density Functional Theory**” **Int. J. Adv. Sci. Engg.** Vol. 4, No. 2, pg. 554-565 (2017), **ISSN: 2349 5359**, <https://doi.org/10.29294/IJASE.4.2.2017.554-565>, **Impact Factor: 3.554**
92. Vasudevan Vasanthakumar, Arumugam Priyadharsan, **Ponnusamy Munusamy Anbarasan**, Samuthiravelu Muthumari, Srinivasan Subramanian, and Vairamuthu Raj\* “**Enhancing Toxic Metal Ions and Dye Removal Properties of Nanostructured Terpolymer Formed by Diaminodiphenylmethane-Resorcinol-Formaldehyde**” **ChemistrySelect**, Online ISSN: 2365-6549 (2017) 2, pg. 9501–9510, <https://doi.org/10.1002/slct.201700685>, Wiley-VCH Verlag GmbH & Co. KGaA, Weinhei, **Impact Factor: 1.505, Citations: 5**
93. G. Sowmiya, **P. M. Anbarasan**, G. Velraj, “**Synthesis, Characterization and Electrical Conductivity Study of Conductive Polypyrrole doped with Nano Tin Composite for Antibacterial Application**” **International Research Journal of Engineering and Technology (IRJET)**, Volume: 04 Special Issue: 09 | Sep –(2017), pg. 127-131, [https://www.irjet.net/archives/V4/i9/Special\\_Issue/IRJET-ISMST30.pdf](https://www.irjet.net/archives/V4/i9/Special_Issue/IRJET-ISMST30.pdf), ISSN: 2395-0056 - **Impact Factor: 5.181**
94. S. Tamilarasu, **P.M. Anbarasan** and G. Velraj\*, “**Characterization of Archaeological Ceramic Materials Collected from Recently Excavated Site in India using Spectroscopic Techniques**” **International Research Journal of Engineering and Technology (IRJET)**, Volume: 04 Special Issue: 09 | Sep –(2017), pg. 217-275, [https://www.irjet.net/archives/V4/i9/Special\\_Issue/IRJET-ISMST57.pdf](https://www.irjet.net/archives/V4/i9/Special_Issue/IRJET-ISMST57.pdf), ISSN: 2395-0056, **Impact Factor: 5.181**
95. R. S. Nathiya, Suresh Perumal, Vajjiravel Murugesan, **P. M. Anbarasan** and V. Raj\*, “**Agarose as an Efficient Inhibitor for Aluminium Corrosion in Acidic Medium: An Experimental and Theoretical Study**” **Journal of Bio- and Tribo-Corrosion**, December (2017) 3:44, pg.1-17, <https://doi.org/10.1007/s40735-017-0103-2>, **Publisher Name: Springer International Publishing, Print ISSN: 2198-4220, Online ISSN: 2198-4239; Impact Factor: 1.69**
96. S. Ranjitha, V. Aroulmoji, G. Rajarajan, V. Hariharan, **P. M. Anbarasan**, “**Synthesis and Fabrication of Dye Sensitized Solar Cells based on ZnO and TiO<sub>2</sub> Nano Composites**” **Int. J. Adv. Sci. Engg. Vol.4 , No.1, pg. 502-511 (2017), ISSN 2349 5359**, [http://mahendrapublications.com/article\\_details.php?id=MP369290](http://mahendrapublications.com/article_details.php?id=MP369290), **Impact Factor: 3.554**
97. D. Sakthi, M. Prakasam, A. Prakasam, S. Sivakumar, **P. M. Anbarasan\***, “**A Complete DFT, TD-DFT and Non-Linear Optical Property Study on 6-Amino-2-Methylpyridine-**

**3-Carbonitrile” Computational Chemistry (2017), 5, 129-144**, ISSN Online: 2332-5984, ISSN Print: 2332-5968, **DOI: [10.4236/cc.2017.53011](https://doi.org/10.4236/cc.2017.53011)**, **Impact Factor: 0.95, Citations: 4**

98. C. Indira Priyadharsini, M. Sumathi, A. Prakasam, **P. M. Anbarasan\***, R. Sathiyapriya, V. Aroulmoji, “**Effect of Mg Doping on Structural and Optical Properties of SnO<sub>2</sub> Nanoparticles by Chemical Co-Precipitation Method**” **Int. J. Adv. Sci. Engg. Vol. 3 No. 4 428-434 (2017) 428**, <http://mahendrapublications.com/Document/MP400315.pdf>, ISSN 2349 5359, **Impact Factor: 3.554**
99. C. Mohansundaram, K. Prabakaran, **P. M. Anbarasan**, K. B. Rajesh\*, A. Mohamed Mustafa, V, Aroulmoji, “**Tight Focusing Properties of Phase Modulated Transversely Polarised sinh Gaussian Beam**” **Optical and Quantum Electronics**, 49, 11, 1-10, (2017) <https://doi.org/10.1007/s11082-016-0857-7>, ISSN: 1572-817X, **Impact Factor: 1.547, Citations: 3**
100. A. Priyadharsan, V. Vasanthakumar, S. Karthikeyan, V. Raj, S. Shanavas, **P. M. Anbarasan\***, “**Multi-Functional Properties of Ternary CeO<sub>2</sub>/SnO<sub>2</sub>/rGO Nanocomposites: Visible Light Driven Photocatalyst and Heavy Metal Removal**” **Journal of Photochemistry and Photobiology A: Chemistry**, <http://dx.doi.org/10.1016/j.jphotochem.2017.05.030>, Elsevier B.V. 346 (2017) 32–45, ISSN: 1010-6030, **Impact Factor: 2.573, Citations: 31**
101. C. Vidya and **P. M. Anbarasan\***,” **Wind Power Target and Recent Update of Wind Energy in India**” **Int. J. Adv. Sci. Engg.** Vol. 3 No. 3, pg. 391-397 (2017) 391, ISSN 2349 5359 <http://mahendrapublications.com/Document/MP447237.pdf>, **Impact Factor: 3.554**
102. A. Arunkumar, M. Prakasam and **P. M. Anbarasan\***, “**Influence of Donor Substitution at D- $\pi$ -A Architecture in Efficient Sensitizers for Dye-Sensitized Solar Cells: First Principle Study**” **Bulletin of Materials Science**, [Doi: 10.1007/s12034-017-1497-7](https://doi.org/10.1007/s12034-017-1497-7), Published by Indian Academy of Sciences, Print ISSN: 0250-4707, 40, pages: 1389–1396 (2017), **Impact Factor: 1.264 , Citations: 5**
103. S. Padmanathan, I. Ragavan, A. Prakasam,\* and **P. M. Anbarasan**, “**DFT and TD-DFT calculations of 2-aminopyrimidine-5-carbonitrile Dye Sensitizer for Solar Cells**” **Int. J. Adv. Sci. Engg. Vol. 3, No.3, 384-390 (2017), ISSN 2349 5359**, <http://mahendrapublications.com/Document/MP864615.pdf>, **Impact Factor: 3.554**
104. S. Shanavas, A. Priyadharsan, V. Vasanthakumar, A. Arunkumar, **P. M. Anbarasan\***, S. Bharathkumar, “**Mechanistic Investigation of Visible Light Driven Novel La<sub>2</sub>CuO<sub>4</sub>/CeO<sub>2</sub>/rGO Ternary Hybrid Nanocomposites for Enhanced Photocatalytic Performance and Antibacterial Activity**” **Journal of Photochemistry & Photobiology, A: Chemistry**, [DOI: 10.1016/j.jphotochem.2017.03.002](https://doi.org/10.1016/j.jphotochem.2017.03.002), ISSN: 1010-6030, 340 (2017) 96–108, **Impact Factor: 2.573; Citations: 19**
105. P. Girija, S. Kumaravel, C. Vidya and **P. M. Anbarasan\***, “**Synthesis and Characteristic Studies of Mercury Doped Potassium Hydrogen Phthalate for**

**Optoelectronic Applications” *Int. J. Adv. Sci. Engg. Vol. 3, No.3, 373-378 (2017), ISSN 2349 5359, <http://mahendrapublications.com/Document/MP864107.pdf>, Impact Factor: 3.554***

106. C. Vidya, P. M. Anbarasan\* and K. M. Prabu, “**Energy Crisis and Recent Technological Development in India” *Journal of Energy Technologies and Policy*, ISSN: 2224-3232 (Paper) ISSN: 2225-0573 (Online), (2017) Vol.7, No.1, pg. 19-30, <https://www.iiste.org/Journals/index.php/JETP/article/view/35140/36145>, Impact Factor: 5.54**

**2016**

107. D. Sakthi, M. Prakasam, A. Prakasam, S. Sivakumar and P. M. Anbarasan\*, “**Theoretical Investigations of 1,5-Diaminoanthraquinone Organic Dye Sensitizer for Dye Sensitizer Solar Cell” *Chemical Science Transactions*, (2016) 5 (4), 1107-1113, DOI:10.7598/cst2016.1296, ISSN: 2278-3458, Impact Factor: 1.011**

108. C. Mohana Sundaram, K. Prabakaran, K. B. Rajesh\*, M. Udhayakumar, P. M. Anbarasan, A. Mohamed Musthafa, “**Tight Focusing Properties of Phase Modulated Azimuthally Polarized Doughnut Gaussian Beam” *Opt. Quant. Electron.* (2016) 48: 507-518, DOI [10.1007/s11082-016-0765-x](https://doi.org/10.1007/s11082-016-0765-x), ISSN: 1752-817X , Impact Factor: 1.290, Citations: 4**

109. C. Ramesh, K. Maniysundar, S. Selvanandan, P. M. Anbarasan, “**XRD Structural and Magnetic Study on  $Mg_{0.3}Zn_{0.7}Ni_xFe_{2-x}O_4$  Ferrite System Synthesised by Sol-Gel Method (Tribotechnics – mixed ferrite nanoparticles powders)” *Journal of the Balkan Tribological Association* Vol. 22, No 3, 2243–2251 (2016), Bulgarian-English Academic Pub. House, ISSN: 1310-4772, <https://scibulcom.net/en/article/rGL13IDoB2MzchUC0bMw>, Impact Factor: 0.61**

110. M. Prakasam and P. M. Anbarasan\*, “**Second Order Hyperpolarizability of Triphenylamine Based Organic Sensitizers: A First Principle Theoretical Study” *RSC Advances*, DOI: [10.1039/C6RA11200E](https://doi.org/10.1039/C6RA11200E), (2016) 6, 75242–75250, ISSN: 2046-2069, Impact Factor: 3.289; Citations: 12**

111. K. Lalithambigai, P. M. Anbarasan, K. B. Rajesh\*, “**Creation of Movable Optical Chain by High NA Lens with Complex Phase Annular Obstruction” *Advanced Science, Engineering and Medicine (ASEM)*, American Scientific Publishers (ASP) Volume 8, Number 7, July (2016) pp. 526-532, <http://dx.doi.org/10.1166/ asem.2016.1888>, ISSN: 2164-6627 (print); EISSN: 2164-6635 (online) - Impact Factor under evaluation (0.987)**

112. K. Prabakaran, K.B. Rajesh, V. Hariharan, V. Aroulmoji, P.M. Anbarasan, A. Mohamed Musthafa, “**Creation of Sub Wavelength Focal Spot Segment Using Longitudinally Polarized Multi Gaussian Beam” *Int. J. Adv. Sci. Engg.* Vol. 2 No.4 164-167 (2016), [http://mahendrapublications.com/Document/MP882975\\_Manuscript\\_2016\\_09\\_12\\_0319.pdf](http://mahendrapublications.com/Document/MP882975_Manuscript_2016_09_12_0319.pdf), ISSN: 2349 5359, Impact Factor: 3.554**

113. D. Sakthi, M. Prakasam, A. Prakasam, S. Sivakumar and **P. M. Anbarasan\***, **Geometrical, Electronic Structure, Nonlinear Optical and Spectroscopic Investigations of 2-Amino-6-Nitrobenzothiazole as Sensitizer for DSSC**” **Int. J. Adv. Sci. Engg.** Vol. 2 No.4, 168-176 (2016) [http://www.mahendrapublications.com/article\\_details.php?id=MP416626](http://www.mahendrapublications.com/article_details.php?id=MP416626), 168, ISSN: 2349 5359, **Impact Factor: 3.554**
114. K. Subramani, S. Mohan & **P. M. Anbarasan\***, **“Separation and Identification of Four Phenolic Acids from Some Selected Medicinal Plants of South India”** **Natural Products: An Indian Journal**, Volume 12, Issue 2, pg. 57-61 (2016), <https://www.tsijournals.com/articles/separation-and-identification-of-four-phenolic-acids-fromsome-selected-medicinal-plants-of-south-india.pdf>, ISSN (PRINT): 0974-7508
115. C. Mohanasundaram, K. Prabakaran, **P. M. Anbarasan**, K. B. Rajesh\* & A. M. Musthafa, **“Creation of Super Long Transversely Polarized Optical Needle Using Azimuthally Polarized Multi-Gaussian Beam”** **CHINESE PHYSICS LETTERS**, (Chinese Physical Society and IOP Publishing Ltd) Vol. 33, No. 6 (2016), pg. 064203, pg.1-4, <https://iopscience.iop.org/article/10.1088/0256-307X/33/6/064203/pdf>, Online ISSN: 1741-3540, **Impact Factor: 0.927**, Citations: 15, **Impact Factor: 1.483**
116. D. Narayanasamy, K. Sahadevan, B. Latha, P. Kumaresan\* & **P. M. Anbarasan**, **“Effect of Swift Heavy Ion Irradiation on Dye Doped Thiourea -TGS Crystals for IR Detector And Laser Applications”** **Journal of Optoelectronics and Advanced Materials (JOAM)**, Vol. 18, Issue 1-2, January-February 2016, p. 70-76, ISSN: 1454 – 4164, <https://joam.inoe.ro/articles/effect-of-swift-heavy-ion-irradiation-on-dye-doped-thiourea-tgs-crystals-for-ir-detector-and-laser-applications/>, **Impact Factor: 0.29**
117. K. Sahadevan, D. Narayansamy, P. Kumaresan\* & **P. M. Anbarasan**, **“Effect of Swift Heavy Ion Irradiation on Coumarine Doped Glycine Zinc Sulphate (GZS) Semi Organic Crystals for Laser Applications”** **International Journal of Advanced Research in Physical Science (IJARPS)**, Volume 3, Issue 1, January 2016, PP. 21-28, ISSN 2349-7874 (Print) & ISSN 2349-7882 (Online), <https://www.arcjournals.org/pdfs/ijarps/v3-1/5.pdf>, **Impact Factor: 2.228**
- 2015**
118. M. Prakasam, A. Arunkumar, A. Priyadharsan, D. Nicksonsebastin & **P. M. Anbarasan\***, **“Anthracene Based Organic Dye Sensitizer for Dye Sensitizer Solar Cell: Quantum chemical calculations”** **Int. J. Adv. Sci. Engg.** Vol. 2, Issue No. 2, Pg. 93-97 (2015), [http://mahendrapublications.com/Document/MP425952\\_Manuscript\\_2016\\_09\\_12\\_0213.pdf](http://mahendrapublications.com/Document/MP425952_Manuscript_2016_09_12_0213.pdf), ISSN: 2349 5359, **Impact Factor 3.554**
119. A. Prakasam, G.Rajeswari and **P. M. Anbarasan\***, **“Molecular Modeling of 3-Thiophenecarbonitrile Dye Sensitizer for Solar Cells Using Quantum Chemical Calculations”** **Chemical Physics Letters**, Elixir Chem. Phys. Letters 83 (2015) 33298-33304, [https://www.elixirpublishers.com/articles/1435236758\\_83%20\(2015\)%2033298-33304.pdf](https://www.elixirpublishers.com/articles/1435236758_83%20(2015)%2033298-33304.pdf), ISSN No. 2229-712X,

120. P. M. Anbarasan\*, A. Priyadharsan, A. Arunkumar, M. Prakasam and D. Nicksonsebastin, “DFT and TD-DFT Study of (e)-3-(5-(anthracen-3-yl)-Hexahydrothieno [3,4-b][1,4]Dioxin-7-yl)-2-Cyanoacrylic Acid Dye for Dye Sensitized Solar Cell Application”, *Materials Science* 87 (2015) 35486-35490, ISSN No. 2229-712X, [https://www.elixirpublishers.com/articles/1443855912\\_87%20\(2015\)%2035486-35490.pdf](https://www.elixirpublishers.com/articles/1443855912_87%20(2015)%2035486-35490.pdf)
121. C. Ramesh, K. Maniysundar, S. Selvanandan and P. M. Anbarasan, “Structural and Magnetic Study on Al Substituted MgZn Mixed Ferrite Powders Prepared by Sol-gel Method” *Der Pharma Chemica*, (2015) 7(5):11-20, ISSN: 0975-413X, CODEN (USA): PCHHAX, <https://www.derpharmachemica.com/archive/dpc-volume-7-issue-5-year-2015.html>,
122. K. M. Prabu & P. M. Anbarasan, “Preparation and Performance Study of Dye Sensitized Solar Cells Using Colorful Natural Dyes” *Int. J. Adv. Sci. Eng.* Vol. 2 No.1, 5-11 (2015) ISSN 2349-5359, [http://mahendrapublications.com/Document/MP174962\\_Manuscript\\_2015\\_10\\_19\\_1135.pdf](http://mahendrapublications.com/Document/MP174962_Manuscript_2015_10_19_1135.pdf), **Impact Factor 3.554**
123. K. Suguna, P.B. Nagabalasubramanian, P.M. Anbarasan, R. Rengaiyan, “Experimental and Quantum Chemical Study on Geometry, Stability, Electronic Structures, Electronic Absorption, Solvents Effect and Efficiency Of B,E-Carotene-3,3'- Diol as Natural Sensitizers for Dye Sensitized Solar Cells” *Int. J. Adv. Sci. Eng.* Vol. 1 No. 4, pg. 1-9 (2015) [http://mahendrapublications.com/Document/MP776267\\_Manuscript\\_2018\\_03\\_10\\_0255.pdf](http://mahendrapublications.com/Document/MP776267_Manuscript_2018_03_10_0255.pdf), ISSN: 2349 5359, **Impact Factor 3.554**
124. M. Sajitha, S. Indhumathi, K. Subramani, P. M. Anbarasan\*, “Chemical Investigation and Anti-Microbial Study of Cleome Gynandra” Volume 11 Issue 2 NPAIJ, 11(2), 2015 [049-053] *Natural Products*, An Indian Journal, ISSN : 0974-7508, <https://www.tsijournals.com/articles/chemical-investigation-and-antimicrobial-study-of-cleome-gynandra.pdf> , **Impact factor: 0.78**
125. R. Govindaraj\*, R. Govindan, M. Geetha and P.M. Anbarasan, “Structural, Morphological and Luminescence Studies on Pristine and La Doped Zinc Oxide (ZnO) Nanoparticles” *Optik*, Volume 126, Issue 17, September (2015), Pages 1555-1558 <https://doi.org/10.1016/j.ijleo.2015.04.043>, ISSN: 0030-4026, **Impact Factor: 0.742, Citations: 6**
126. K. Lalithambigai, P. M. Anbarasan, K.B. Rajesh\*, “Creation of Super-Length Optical Tube by Phase Modulated Azimuthally Polarized Beam with Multi-Zone Phase Filter” *Optik* 126 (2015) 554-557, <https://doi.org/10.1016/j.ijleo.2015.02.009>, ISSN: 0030-4026, **Impact Factor: 0.769 (Impact Factor in 2020 is 2.443)**
127. D. Narayanasamy, P. Kumaresan & P. M. Anbarasan, “Pyro Electric Studies On Dye Doped TGS Crystals For IR Detector And Laser Applications” *International Journal of Material Sciences and Technology (IJMST)*, ISSN - 2249-3077, Volume 5, Number 1

(2015), pp. 5-14, (15989-15998) Research India Publications,  
<https://www.ripublication.com/Volume/ijmstv5n1.htm>

128. L. Arivuselvam, D. Sakthi, P. Sakthivel, **P. M. Anbarasan\*** and V. Aroulmoji, “**Irradiance Dependence on Performance of Dye Sensitized and V-Grooved Silicon Solar Cells**”, **Int. J. Adv. Sci. Engg.** Vol. 1, No. 3, 18-26 (2015) ISSN: 2349-5359, [http://mahendrapublications.com/Document/MP033803\\_Manuscript\\_2015\\_04\\_10\\_0630.pdf](http://mahendrapublications.com/Document/MP033803_Manuscript_2015_04_10_0630.pdf), **Impact Factor: 3.554**
129. N. Sakthivel, A. Santhakumar and **P. M. Anbarasan\***, “**Spectroscopic Investigation, Optical, Electronic Excitation Mechanism and HOMO-LUMO Analysis of Glutamic Acid Crystal**” **Int. J. Adv. Sci. Engg.** Vol. 1 No. 3, pg. 32-36 (2015) ISSN - 2349-5359, [http://mahendrapublications.com/Document/MP735572\\_Manuscript\\_2015\\_04\\_10\\_0624.pdf](http://mahendrapublications.com/Document/MP735572_Manuscript_2015_04_10_0624.pdf), **Impact Factor: 3.554**
130. P. Ramu, S. Aravindan, N. Surumbarkuzhali, **P. M. Anbarasan**, R. Ramesh, S. Ponnusamy, “**Surfactant Assisted One-Pot Hydrothermal Synthesis of Nano ZnO and its Property Observations**” **International Journal of ChemTech Research, CODEN (USA): IJCRGG** ISSN: 0974-4290, Vol. 7, No. 3, pg. 1358-1363 (2015), [http://www.sphinxesai.com/2015/ch\\_vol7\\_no3\\_ICONN/14/ON39%20\(1358-1363\).pdf](http://www.sphinxesai.com/2015/ch_vol7_no3_ICONN/14/ON39%20(1358-1363).pdf), **Impact Factor: 0.598**
131. C. Ramesh, K. Maniysundar, S. Selvanandan\* and **P. M. Anbarasan**, “**Structural and Magnetic Study on Nickel Substituted MnZn Mixed Ferrite**”, **Elixir Materials Science** 79 (2015) 30353-30356, ISSN: 2227-712X, [https://www.elixirpublishers.com/articles/1423304742\\_79%20\(2015\)%2030353-30356.pdf](https://www.elixirpublishers.com/articles/1423304742_79%20(2015)%2030353-30356.pdf)
132. D. Narayanasamy, P. Kumaresan\*, **P. M. Anbarasan**, “**Growth and Characterization of Dyes Doped TGS Crystals for IR Detector Applications**”, **Optoelectronics And Advanced Materials – Rapid Communications** Vol. 9, No. 11-12, Nov. – Dec. 2015, Pg. 1411–1414, ISSN: 2065 – 3824, <https://oam-rc.inoe.ro/articles/growth-and-characterization-of-dyes-doped-tgs-crystals-for-ir-detector-applications/fulltext>, <https://old.oam-rc.inoe.ro/index.php?option=magazine&op=view&idu=2726&catid=93>, **Impact Factor; 0.68**
133. D. Narayanasamy, P. Kumaresan & **P.M. Anbarasan**, “**Effect of Dyes on TGS Crystals for IR Detector Applications**”, **International Journal of Advanced Research in Physical Science (IJARPS)**, Volume 2, Issue 1, January 2015, PP 19-24, ISSN 2349-7874 (Print) & ISSN: 2349-7882 (Online), [www.arcjournals.org](http://www.arcjournals.org), <https://www.arcjournals.org/pdfs/ijarps/v2-i1/4.pdf>
134. K. M. Prabu, **P. M. Anbarasan**, S. Janarthanan and G. Sivakumar, “**Preparation and Characterization of CdO Nanoparticles by Precipitation Method**” **IJSRD - International Journal for Scientific Research & Development** | Vol. 2, Issue 11, 2015, pg. 368-370 | ISSN (online): 2321-0613, <http://www.ijcns.com/pdf/ijrasevol3no2-2.pdf>

135. K. Lalithambigai, K. B. Rajesh\* & P. M. Anbarasan, "Creation of Super-Long Bright Channel Using High NA Lens Axicon With Dedicated Multibelt Binary Phase Mask", *Optical and Quantum Electronics (OQEL)*, (2015) DOI: [10.1007/s11082-014-0074-1](https://doi.org/10.1007/s11082-014-0074-1), Jul2015, Vol. 47 Issue 7, pg. 2009-2016 (8p), ISSN: 0306-8919, **Impact Factor; 1.078**
136. K. Lalithambigai, K. B. Rajesh\* & P. M. Anbarasan, "Formation of Optical Needle by High NA Lens Axicon with Dedicated Complex Spiral Phase Mask", *Optical and Quantum Electronics (OQEL)* (2015) 47 (7) : 2017–2025, DOI: [10.1007/s11082-014-0075-0](https://doi.org/10.1007/s11082-014-0075-0), ISSN: 0306-8919, **Impact Factor; 1.078**
137. T Mohr\*, V. Aroulmoji, R. Samson Ravindran, R. Müller, S. Ranjitha, G. Rajarajan And P. M. Anbarasan, "DFT And TD-DFT Study on Geometries, Electronic Structures and Electronic Absorption of Some Metal Free Dye Sensitizers for Dye Sensitized Solar Cells," – *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 135 (2015) 1066–1073, <https://doi.org/10.1016/j.saa.2014.07.094>, ISSN: 1386-1425, **Citations: 24, Impact Factor: 1.977 (IF in 2022 is 4.098)**
138. K. Lalithambigai, K. B. Rajesh\* & P. M. Anbarasan, "Generation of Needle of Transversely Polarized Beam Using Complex Spiral Phase Mask", *Journal of Optical and Quantum Electronics*, (2015) 47:1027–1033, DOI: [10.1007/s11082-014-9958-3](https://doi.org/10.1007/s11082-014-9958-3), , ISSN: 0306-8919, **Citations: 6, Impact Factor; 1.078**
139. K. Lalithambigai, C. Mohana Sundaram, P. M. Anbarasan and K. B. Rajesh, "Combination of Spherical Aberration and Defocusing Effect for Azimuthally Polarized Beam" *Sci. Lett. J.* 2015, 4: 113 (*ScienceJet* (2015) 4: 113, pg. 1-6; ISSN: 2454 – 7239, <http://www.cognizure.com/scilett.aspx?p=200638571>
140. K. Lalithambigai, C. Mohana Sundaram, P. M. Anbarasan, K. B. Rajesh, "Creation of Multiple Transversally Polarized Focal Spots Using Complex Spiral Phase Mask" *Sci. Lett. J.* 2015, 4: 116 (*ScienceJet* (2015) 4: 116), pg. 1-6, ISSN: 2278 – 3393, <http://www.cognizure.com/scilett.aspx?p=200638579>
141. S. Ranjitha, G. Rajarajan\*, T.S. Gnanendra, P. M. Anbarasan, V. Aroulmoji, "Structural and Optical Properties of Purpurin for Dye-Sensitized Solar Cells" *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* 149 (2015) 997-1008, <https://doi.org/10.1016/j.saa.2015.04.046> ISSN: 1386-1425, **Citations: 8, Impact Factor: 1.977 (IF in 2022 is 4.098)**
142. V. Niraimathi, V. Aroulmoji, P. M. Anbarasan, G. Rajarajan, "Influence of Mg<sup>2+</sup> Dopant on Structural, Optical and Mechanical Properties of Potassium Acid Phthalate (KAP) Single Crystals", *Journal of Optoelectronics and Advanced Materials (JOAM)*, Vol. 17, No. 1-2, January - February 2015, p. 205–210, <https://joam.inoe.ro/articles/influence-of-mg2-dopant-on-structural-optical-and-mechanical-properties-of-potassium-acid-phthalate-kap-single-crystals/>, ISSN: 1454-4164, **Impact Factor: 0.631**

143. A. Prakasam and P. M. Anbarasan, “**Molecular Modeling Of 1, 4-Phenylenediacetonitrile Dye Sensitizer For Solar Cells Using Quantum Chemical Calculations**” *Journal of Computational Chemistry, Elixir Comp. Chem.* **76 (2014) 28245-28251**, ISSN-2229-712X, [https://www.elixirpublishers.com/articles/1414822367\\_76%20\(2014\)%2028245-28251.pdf](https://www.elixirpublishers.com/articles/1414822367_76%20(2014)%2028245-28251.pdf)
- 
144. T. Selvankumar, C. Sudakar, K. Selvam, M. Govarthanan, B. Senthil Kumar, P. M. Anbarasan, S. Kamala-Kannan, “**Statistical Optimization of Citric Acid Production from Alkali-Treated Coffee Husk with Lemon Peel Pomace by Using *Aspergillus Niger***”, *Int. J. Adv. Sci. Engg.* Vol. 1, No. 2 (2014) 14-19; Online ISSN-2349-5359, [http://www.mahendrapublications.com/article\\_details.php?id=MP0008](http://www.mahendrapublications.com/article_details.php?id=MP0008), <http://mahendrapublications.com/Document/00008.pdf>
- 
145. P. M. Anbarasan\*, M. Prakasam & A. Priyadharsan, “**Theoretical Investigations of stilbene derivative fulleropyrrolidine dye sensitizer for dye sensitized solar cell applications using Quantum Chemical Calculations**” *Journal of Research in Science* (ISSN: 2278-9073) Vol. 2, December 2014, pp. 41-44, <https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbnxqcmVzc2NpfGd4OjRkODU3OGYwNDEyOWU3ZDQ>
146. K. M. Prabu\*, K. Suguna, P. M. Anbarasan\* and V. Aroulmoji, “**Sensitizers Performance of Dye-Sensitized Solar Cells Fabricated With Indian Fruits and Leaves**” *Int. J. Adv. Sci. Engg.* Vol. 1 No.2 (2014) 24-32; Online ISSN-2349-5359, [http://www.mahendrapublications.com/article\\_details.php?id=MP0010](http://www.mahendrapublications.com/article_details.php?id=MP0010), <http://mahendrapublications.com/Document/00010.pdf>
147. K. M. Prabu and P. M. Anbarasan\*, “**Preparation and Characterization of Silver, Magnesium & Bismuth Doped Titanium Dioxide Nanoparticles for Solar Cell Applications**” *International Journal of Science and Research (IJSR)*, ISSN (Online): 2319-7064, Volume 3 Issue 9, September (2014), pg. 132-137, [https://www.ijsr.net/get\\_count\\_search.php?paper\\_id=SEP1445](https://www.ijsr.net/get_count_search.php?paper_id=SEP1445), <https://www.ijsr.net/archive/v3i9/U0VQMTQ0NQ==.pdf>
148. P. M. Anbarasan\*, L. Arivuselvam, D. Sakthi, P. Sakthivel, S. Selvanandan, S.K. Bhullar and V. Aroulmoji, “**Heat Transfer Investigation on Performance of Dye Sensitized and V-Grooved Silicon Solar Cells**” *Int. J. Adv. Sci. Eng.* Vol. 1 No. 2 (2014) 41-50; Online ISSN-2349-5359, <http://mahendrapublications.com/Document/00013.pdf>, **Impact Factor: 3.554 (SJIF-2015)**
149. K. Prabakaran, K.B. Rajesh\*, P.M. Anbarasan, “**Tight Focusing of Phase Modulated Radially Polarized Hollow Gaussianbeam Using Complex Phase Filter**” *Journal of Optik* Volume 125, Issue 23, December 2014, Pages 6965–6968, [doi:10.1016/j.ijleo.2014.08.057](https://doi.org/10.1016/j.ijleo.2014.08.057), ISSN: 0030-4026, **Impact Factor: 0.677**

150. K. Lalithambigai, C. Mohana Sundaram, **P. M. Anbarasan**, K. B. Rajesh' "Creation of Needle of Transversely Polarized Beam in Vacuum by Using Complex Phase Plate" *J. Environ. Nanotechnol.* Volume 3, No.3 (2014) pp. 67-72 ISSN (Print): 2279-0748 ISSN (Online): 2319-5541, [doi: 10.13074/jent.2014.09.143097](https://doi.org/10.13074/jent.2014.09.143097)
151. K. B. Rajesh, K. Lalithambigai, C. Mohanasundaram, **P. M. Anbarasan**, "Tight Focusing of Double-Ring-Shaped Azimuthally Polarised Beam using High NA Lens Axicon" *J. Environ. Nanotechnol.*, Volume 3, No. 4 (2014) pg. 39-42, ISSN: 2319-5541, [doi: 10.13074/jent.2014.12.144129](https://doi.org/10.13074/jent.2014.12.144129)
152. K. M. Prabu, **P. M. Anbarasan\*** & S. Ranjitha, "Natural Dye-Sensitized Solar Cells (NDSSCs) From Opuntia Prickly Pear Dye Using ZnO Doped TiO<sub>2</sub> Nanoparticles by Sol-Gel Method" *Int. Journal of Engineering Research and Applications (IJERA)*, ISSN : 2248-9622, Vol. 4, Issue 7, July 2014, pp.140-149, [http://www.ijera.com/papers/Vol4\\_issue7/Version%206/V04706140149.pdf](http://www.ijera.com/papers/Vol4_issue7/Version%206/V04706140149.pdf), - UGC Listed.
153. K. M. Prabu, **P. M. Anbarasan\***, "Improved Performance of Natural Dye-Sensitized Solar Cells (NDSSCS) Using ZnO Doped TiO<sub>2</sub> Nanoparticles by Sol-Gel Method" *International Journal of Science and Research (IJSR)* ISSN (Online): 2319-7064, , Volume 3 Issue 6, June 2014, pg.1740-1747, <https://www.ijer.net/archive/v3i6/MDIwMTQ1NzQ=.pdf>, **Impact Factor: 3.358, Citations: 6**
154. K. Lalithambigai, **P.M. Anbarasan** and K.B. Rajesh\*, "Generation of Multiple Focal Holes by Tightly Focused Azimuthally Polarized Double-Ring-Shaped Beam with Complex Phase Mask" *Optik* 125 (May 2014) 2225–2228, ISSN: 0030-4026, <https://doi.org/10.1016/j.ijleo.2013.10.051>, **Impact Factor: 0.677, Citations: 4**
155. K. Lalithambigai, P. M. Anbarasan, K. B. Rajesh\*, "Effect of Complex Phase Plate on Tight Focusing of Azimuthally Polarized Double Ring Shaped Beam" *Optik*, Volume 125, Issue 15, August 2014, Pages 4047-4050, <https://doi.org/10.1016/j.ijleo.2014.03.002>, ISSN: 0030-4026, **Impact Factor: 0.677**
156. K. Lalithambigai, K. B. Rajesh\* & **P. M. Anbarasan**, "Study on Higher Order Azimuthally Polarized Laguerre-Gaussian Mode Beams with High NA Lens", *Journal of Theoretical and Applied Physics*, (J Theor Appl Phys) (2014) 8: 134, DOI [10.1007/s40094-014-0134-8](https://doi.org/10.1007/s40094-014-0134-8), ISSN: 2251-7235, **Impact Factor: 1.184**
- 
157. M. Geetha, K. Suguna, **P. M. Anbarasan\*** and V. Aroulmoji, "Preparation and Characterisation of Tailored TiO<sub>2</sub> nanoparticles Photoanode for Dye Sensitised Solar Cells" *Int. J. Adv. Sci. Engg.* Vol. 1 No. 1 (2014) 1-5; Online ISSN-2349-5359, <https://hal.archives-ouvertes.fr/hal-03108287/document>, **Citations: 6**

158. K. Lalithambigai, P. M. Anbarasan, K.B. Rajesh\*, “**Formation of Multiple Focal Spots by High NA Lens with Complex Spiral Phase Mask**” *Physica Scripta*, 89 (2014) 075501 (7pp), [doi:10.1088/issn.1402-4896](https://doi.org/10.1088/issn.1402-4896), Online ISSN: 1402-4896, Print ISSN: 0031-8949, **Impact Factor: 1.032**
159. K. Lalithambigai, P. M. Anbarasan & K. B. Rajesh\*, “**Generation of Ultra-Long Focal Depth by Tight Focusing of Double-Ring-Shaped Azimuthally Polarized Beam**” *Journal of Optics*, (Springer) J Opt (October–December 2014) 43(4): 278–283 DOI [10.1007/s12596-014-0216-7](https://doi.org/10.1007/s12596-014-0216-7), ISSN: 0974-6900, **Impact Factor: 0.895**
160. S. Ranjitha, V. Aroulmoji, T. Mohr, P. M. Anbarasan & G. Rajarajan\*, “**Structural and Spectral Properties of 1,2, Dihydroxy 9-10 Anthraquinone Dye Sensitizer For Solar Cell Applications**”, *Acta Physica Polonica A*, Vol. 126 (2014) No.3, pg. 833-839, <http://przvrbnw.icm.edu.pl/APP/PDF/126/a126z3p36.pdf>, ISSN: 1509-5770, **Citations: 8, Impact Factor: 0.44**
161. P. Ramu\*, P.M. Anbarasan, R. Ramesh, S. Aravindan, S. Ponnusamy, C. Muthamizhchelvan & Z. Yaakob, “**Synthesis of dumbbell shaped ZnO crystals using one-pot hydrothermal method and their characterizations**” *Materials Letters* 122 (2014) 230–233, ISSN: 0167-577X, <https://doi.org/10.1016/j.matlet.2014.02.021>, **Impact Factor:3.574, Citations: 8**
162. K. M. Prabu, L. Arivuselvan, K. Suguna, K. Subramani, V. Aroulmoji and P. M. Anbarasan\*, “**Synthesis of Silver Particles Using the Extracts of Strychnos Potatorum**” *Nano Science & NanoTechnology: An Indian Journal*, Trade Science Inc. ISSN- 0974 - 7494, *NSNTAIJ*, 8 (4), 2014 [pg. 130-137], <https://www.tsijournals.com/articles/synthesis-of-silver-particles-using-the-extracts-of-strychnos-potatorum.pdf>
163. N. Sakthivel, L. Arivuselvan, K. Suguna, K. Subramani, V. Aroulmoji and P. M. Anbarasan, “**Growth, Characterization and Computational Analysis on the NLO Crystal 3-Pyridinecarboxamide**” *Materials Science: An Indian Journal*, MSAIJ 781, Trade Science Inc. Vol. 10, Issue 11, pg. 454-460 (2014), **ISSN (PRINT): 0974-7486**, <https://www.tsijournals.com/articles/growth-characterization-and-computational-analysis-on-the-nlo-crystal-3pyridinecarboxamide.pdf>, **Impact Factor: 0.5**
164. P. Senthilkumar, C. Nithya and P. M. Anbarasan\*, “**Quantum Chemical Investigations on the Effect of Dodecyloxy Chromophore in 4-Amino Stilbene Sensitizer for DSSCs**” *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, Volume 122, 25 March 2014, Pages 15–21, DOI: [10.1016/j.saa.2013.11.023](https://doi.org/10.1016/j.saa.2013.11.023), ISSN: 1386-1425; **Citations: 5, Impact Factor: 1.977 (IF in 2022 is 4.098)**
165. P. Senthilkumar, C. Nithya and P. M. Anbarasan\*, “**Effect of Donor (Tetradecyloxy) and Acceptor (Carboxamide) groups in Trans-Stilbene for DSSCs: Quantum Chemical Investigations**”, *Spectrochimica Acta Part A: Molecular and Biomolecular*

**Spectroscopy**, Elsevier, 117 (2014) 181–185, <http://dx.doi.org/10.1016/j.saa.2013.07.110>.  
ISSN: 1386-1425, **Impact Factor: 1.977, Citations: 8 (IF in 2022 is 4.098)**

2013

166. D. Narayanasamy, P. Kumaresan\*, P. Ambalavanan and P. M. Anbarasan, “**Effect of Amino Acids Doped TGS Crystals for IR Detectors**” **Optoelectronics and Advanced Materials – Rapid Communications**, Vol. 7, No. 9-10, September - October 2013, p. 784 – 788, ISSN: 1842-6573; <http://oam-rc2.inoe.ro/articles/effect-of-amino-acids-doped-tgs-crystals-for-ir-detectors/fulltext>, **Impact Factor: 0.402**
167. P. Ramu\*, P.M. Anbarasan, R. Ramesh, S. Ponnusamy, C. Muthamizhchelvan, “**Synthesis of ZnO Nanoflakes by the Wet Chemical Method in the Presence of Pb<sup>2+</sup> Alien Cation and their Structural and Morphological Properties**” **Materials Letters**, (Elsevier) 106 (2013) 59–62.: ISSN: 0167-577X, <https://doi.org/10.1016/j.matlet.2013.04.026>, **Impact Factor:2.224**
168. C. Indira Priyadharsini, A. Prakasam\* and P. M. Anbarasan\*, “**Enhanced Photoelectrical Performance of DSSC by Co-doped SnO<sub>2</sub> Nanoparticles**” **International Letters of Chemistry, Physics and Astronomy** 12 (2013) 82-93; ISSN: 2299-3843, <https://www.scipress.com/ILCPA.17.82.pdf> , **Citations: 8**
169. K. Lalithambigai, P.M. Anbarasan & K.B. Rajesh\*, “**Generation of Nano-scale Transversally Polarized Multiple Focal Spot using Complex Phase Filter**” in the Proceedings of **Third National Conference on Multifunctional Nanomaterials and Nanocomposites – Volume - II**, Bharathiar University, Coimbatore, Tamilnadu, India, ISBN-978-81-9212 (2013) Pg: 31-36.
170. K. Lalithambigai, R. C. Saraswathi, K. B. Rajesh\*, Z. Jaroszewicz and P. M. Anbarasan, “**Generation of Multiple Focal Hole Segments using Double-Ring Shaped Azimuthally Polarized Beam**” Published in **Journal of Atomic, Molecular, and Optical Physics**, Hindawi Publishing Corporation (2013) ISSN-1687-9384, e-ISSN- 1687-9392, Article Id 451715, Vo. 2013, pg. 1-4, <http://Dx.Doi.Org/10.1155/2013/451715>, **Citations: 7**
171. P. Senthilkumar, C. Nithya & P. M. Anbarasan\*, “**2,3'- Diamino- 4,4'- Stilbenedicarboxylic acid Sensitizer for Dye Sensitized Solar Cells: Quantum Chemical Investigations**” **Journal of Molecular Modeling - Springer-Verlag - DOI** (2013) 19: 4561–4573; DOI: [10.1007/s00894-013-1953-2](https://doi.org/10.1007/s00894-013-1953-2) - ISSN: 0948-5023, **Impact factor: 2.336, Citations: 8**
172. P. Ramu\*, P. M. Anbarasan, S. Aravindan, R. Ramesh, S. Ponnusamy And C. Muthamizhchelvan, “**Surfactant Free Synthesis of Ag+ Additive Added ZnO Nanostructures**” **Asian Journal of Chemistry**; Vol. 25, Supplementary Issue (2013), pp S147-S149, **March 2013**, ISSN: 0970-7077, [http://www.asianjournalofchemistry.co.in/User/ViewFreeArticle.aspx?ArticleID=25\\_Supplementary%20Issue\\_39](http://www.asianjournalofchemistry.co.in/User/ViewFreeArticle.aspx?ArticleID=25_Supplementary%20Issue_39), **Impact Factor-0.27**

173. K. Subramani, R. Karnan, M. Sajitha & **P. M. Anbarasan\***, “**New and Rare Acylated Flavone Glycosides from the Aerial Parts of Chrozophora Rottleri**” **Journal of Biochemistry - An Indian Journal** (BCAIJ) ISSN : 0974 – 7427, Vol. 7, Issue 3 (2013) 102-106, <https://www.tsijournals.com/articles/new-and-rare-acylated-flavone-glycosides-from-the-aerial-parts-of-chrozophora-rotleri.pdf>
174. K. M. Prabu and **P. M. Anbarasan\***, “**Comparative Analysis of Natural Sample and Synthesis of Silver Nanoparticles (Nps) using Medical Plant Caesalpinia Bonducella Seed**” **Journal of NanoScience and NanoTechnology- An Indian Journal**, Trade Science Inc. ISSN- 0974-7494 –Vol. 7, Issue 4 (2013) 147-155, <https://www.tsijournals.com/articles/comparative-analysis-of-natural-sample-and-synthesis-of-silver-nanoparticles-nps-using-medical-plant-caesalpinia-bonduce.pdf>
175. A. Prakasam\*, D. Sakthi and **P. M. Anbarasan**, “**DFT Studies on the Electronic Structures of 4-Methoxybenzotrile Dye for Dye-Sensitized Solar Cell**”, **International Letters of Chemistry, Physics and Astronomy**, ISSN: 2299-3843, 7 (2013) 8-22, <https://doi.org/10.18052/www.scipress.com/ILCPA.12.8>, **Citations: 4**
176. A. Prakasam, P. Sakthivel and **P. M. Anbarasan\***, “**Quantum Chemical Calculation of 4-Amino-3-Nitrobenzotrile for Dye Sensitized Solar Cells Applications**” **International - Global Journal for Research Analysis**, Volume: 2, Issue: 1, Jan (2013), ISSN No. 2277-8160 , pg. 189-193, [https://www.worldwidejournals.com/global-journal-for-research-analysis-GJRA/recent\\_issues\\_pdf/2013/January/quantum-chemical-calculation-of-4-amino-3-nitrobenzotrile-for-dye-sensitized-solar-cells-applications\\_January\\_2013\\_1598874798\\_18.pdf](https://www.worldwidejournals.com/global-journal-for-research-analysis-GJRA/recent_issues_pdf/2013/January/quantum-chemical-calculation-of-4-amino-3-nitrobenzotrile-for-dye-sensitized-solar-cells-applications_January_2013_1598874798_18.pdf), - (UGC Care Journal Approved Status)
177. **P. M. Anbarasan\***, A. Prakasam and P. Sakthivel, “**Molecular Modeling of 2-Ethoxybenzotrile Dye Sensitizer for Solar Cells using Quantum Chemical Calculations**” **International Journal of Pharmaceutical and Chemical Sciences**, ISSN: 2277-5005, Vol. 2 (1) Jan-Mar 2013, Pg. 477-487, <https://ijpcsonline.com/files/files/67-361.pdf>
178. M. Geetha, K. Suguna, A. Prakasam, **P. M. Anbarasan\***, “**Growth and Characterization of Magnesium in TiO<sub>2</sub> Nanoparticles for Dye Sensitized Solar Cells**” **Nano Science - NanoTechnology: An Indian Journal - Trade Science Inc.** (2013) NSNTAIJ, 7(1), 2013 pg. [36-40] <https://www.tsijournals.com/articles/growth-and-characterization-of-magnesium-in-tio2-nanoparticles-for-dye-sensitized-solar-cells.pdf>, ISSN : 0974 –7494
- 2012**
179. A. Prakasam, L. Arivuselvam and P. Sakthivel and **P. M. Anbarasan**, “**Quantum Chemistry Calculations of 2-(Trifluoromethoxy) Phenylacetoneitrile Dye Sensitizer for Solar Cells**” **International Journal of Chemical Science and Technology** (ISSN: 2248-9797) Volume 2-Issue3, Oct 2012 pp. 236-243
180. A. Prakasam, P. Sakthivel and **P. M. Anbarasan\***, “**DFT and TD-DFT Study on Structure and Optical Properties of 2-Ethylbenzotrile Dye Sensitizer for Solar Cell**”

**Applications” International Journal of Pharmaceutical, Chemical and Biological Sciences, IJPCBS 2012, 2 (4), pg. 649-661, <http://www.ijpcbs.com/files/volume2-4-2012/32.pdf>, (ISSN: 2249-9504)**

181. M. Geetha, K. Suguna and **P. M. Anbarasan\***, “**Photoanode Modification in DSSC using Chromium Doped TiO<sub>2</sub> Nanoparticles by Sol-Gel Method**” **Archives of Physics Research**, Scholars Research Library, **ISSN : 0976-0970 CODEN (USA): APRRC7 2012, 3 (4): 303-308, <https://www.scholarsresearchlibrary.com/abstract/photoanode-modification-in-dssc-using-chromium-doped-tio2-nanoparticles-by-solgel-method-6191.html>, **Citations: 10****
182. **P. M. Anbarasan\***, K. Vasudevan, P. Senthil Kumar, A. Prakasam, M. Geetha and K. Lalithambigai, “**Structural and Spectral Properties of 4-Phenoxyphthalonitrile Dye Sensitizer for Solar Cell Applications**”, **Bulletin of Materials Science (BOMS)-: Volume 35, Issue 2 (2012), Page 265-275, <https://doi.org/10.1007/s12034-012-0281-y>, ISSN: 0250-4707 (print version) ISSN: 0973-7669 (electronic version), **Citations: 2; Impact Factor: 0.584****
183. V. Ravi, P. Suresh, K. B. Rajesh\*, Z. Jaroszewicz, **P. M. Anbarasan** and T. V. S. Pillai, “**Generation of Sub Wavelength Longitudinal Magnetic Probe using High Numerical Aperture Lens Axicon and Binary Phase Plate**” **Institute of Physics (IOP) JOURNAL OF OPTICS**, Vol. 14, No. 5 (2012) 055704, pp (1-7) ; [doi:10.1088/2040-8978/14/5/055704](https://doi.org/10.1088/2040-8978/14/5/055704) ISSN: 2040-8986 (Online). **Citations: 13; Impact Factor: 1.765, (2.516 (2020))**
184. N. D’Amelio\*, V. Aroulmoji, A. Toraldo, N. Sundaraganesan and **P. M. Anbarasan**, “**Aggregation Properties and Structural Studies of Anticancer Drug Irinotecan in DMSO Solution Based on NMR Measurements**” **Journal of Molecular Structure – Vol. 1013 (2012) 26–35, ISSN: 0166-1280, <http://dx.doi.org/10.1016/j.molstruc.2012.01.012>, **Citations: 2; Impact Factor: 1.634 (IF in 2022 is 3.196)****
185. K. Lalithambigai, P. Suresh, V. Ravi, K. Prabakaran, Z. Jaroszewicz, K. B. Rajesh\*, **P. M. Anbarasan** and T. V. S. Pillai, “**Generation of Sub Wavelength Super-Long Dark Channel Using High NA Lens Axicon**” **Optics Letters (Optical Society of America) – Vol. 37, Issue 6, pp. 999-1001 (2012); ISSN: 0146-9592 | eISSN: 1539-4794; <http://dx.doi.org/10.1364/OL.37.000999>, **Citations: 38; Impact Factor: 3.399****
186. K.Lalithambigai, K.Leelavathi, **P.M.Anbarasan** and K.B.Rajesh “**Generation of Sub Wavelength Super Long Dark Channel Using Complex Phase Filter**” **International Conference on Fibre Optics and Photonics (Photonics 2012)** held at IIT Madras, Chennai, India, December 9-12, 2012, The conference Proceedings Papers are Published in OSA (OpticsInfoBase). DOI: <https://ieeexplore.ieee.org/document/6545522>, pg. 1-3, NSPEC Accession Number: 13597355

187. G, Therese Anita, R. Mahesh Kumar, K. Lalithambigai, K. B. Rajesh & P.M. Anbarasan, “Effect of Spherical Aberration in Tight Focusing of Azimuthally Polarized Double Ring Shaped Beam” Publisher; IEEE, Publication date: 2012/12/18, Date of Conference: 18-20 Dec. 2012, Conference name: **2012 IEEE International Conference on Computational Intelligence & Computing Research (ICCIC)**, Sl. No. 134, Pages: 654-657 (4), Digital Object Identifier : [10.1109/ICCIC.2012.6510307](https://doi.org/10.1109/ICCIC.2012.6510307); Print ISBN: 978-1-4673-1342-1, NSPEC Accession Number: 13502668.

**2011**

188. K.B. Rajesh\*, Zbigniew Jaroszewicz, P. M. Anbarasan, T.V.S. Pillai and N. Veerabagu Suresh, “Extending the Depth of Focus with High NA Lens Axicon” **Optik - International Journal for Light and Electron Optics**, 122, 18 (2011) pg. 1619–1621, <http://dx.doi.org/10.1016/j.ijleo.2010.10.012>, ISSN: 0030-4026; Citations: 6; Impact factor: 2.433

189. S. Bhuvaneshwari\*, R. Rengaiyan and P. M. Anbarasan, “Fuzzy Interpretation of Absorption in Solar Cells” **Journal of Energy Technologies and Policy**, ISSN: 2224-3232, Vol. 1, No. 1 (2011) pp. 43-52, <https://www.iiste.org/Journals/index.php/JETP/article/view/797/702>, Citations: 3; Impact factor: 5.54

190. P. Senthilkumar and P. M. Anbarasan\*, “Molecular Modeling of 4-Methylphthalonitrile for Dye Sensitized Solar Cells using Quantum Chemical Calculations” – **Journal of Molecular Modeling - Springer-Verlag - DOI 10.1007/s00894-010-0704-x** – Volume 17, Issue 1 (2011), Page 49-58, ISSN: 1610-2940 (print version) ISSN: 0948-5023 (electronic version), Citations: 10; Impact factor: 2.336

191. P. M. Anbarasan\*, P. Senthilkumar, K. Vasudevan, R. Govindan and V. Aroulmoji, “Geometries, Electronic Structures and Vibrational Spectral Studies of 4-Aminophthalonitrile using Quantum Chemical Calculations for Dye Sensitized Solar Cells” **Indian J. Phys.** Vol 85, No. 10, (2011) pp. 1477-1494, ISSN: 0973-1458 (print version) ISSN: 0974-9845 (electronic version); <https://doi.org/10.1007/s12648-011-0167-7>, Citations: 12; Impact Factor: 1.381

192. K. B. Rajesh\*, N. Veerabagu Suresh, P. M. Anbarasan, K. Gokulakrishnan, G. Mahadevan, “Tight Focusing of Double Ring Shaped Radially Polarized Beam with High NA Lens Axicon” **Optics & Laser Technology**, 43 (2011) pg. 1037–1040, <http://dx.doi.org/10.1016/j.optlastec.2010.11.009> ISSN: 0030-3992, Citations: 28; Impact Factor: 1.515

193. K. B. Rajesh\*, P. M. Anbarasan, G. Mohan Kumar, T. V. S. Pillai, G. Mahadevan, “All Optical Magnetic Recording using High NA Lens Axicon and A Binary Phase Plate” **Physics Express** | Volume 1 | Issue 5 | February (2011) pg. 39-42. [www.simplex-academic-publishers.com](http://www.simplex-academic-publishers.com), <http://www.cognizure.com/abstract.aspx?p=106637213>, ISSN: 2231 - 0002 | EISSN 2231 – 0010, Citations: 2, Impact Factor: 2.265

194. P. M. Anbarasan\*, P. Senthil Kumar, K. Vasudevan, S. Moorthy Babu and V. Aroulmoji, “DFT and TD-DFT Calculations of Some Metal Free Phthalonitrile Derivatives for Enhancement of the Dye Sensitized Solar Cells” *Acta Physica Polonica (A)*, Vol. 119 (2011) A No. 3, pg. 395-404, ISSN: 0587-4246, ACCESSION # 67254620, Citations: 12; <http://przyrbwn.icm.edu.pl/APP/PDF/119/a119z3p20.pdf>, Impact Factor: 0.44
195. P. M. Anbarasan\*, P. Senthil kumar, K. Vasudevan, R. Govindan, A. Prakasam, and M. Geetha, “Geometrical, Electronic Structure, NLO and Spectroscopic Investigations of 4-(Phenylthio)Phthalonitrile Dye Sensitizer for Solar Cells using Quantum Chemical Calculations – *European Journal of Chemistry* 2 (2) (2011) pg. 206-213, ISSN 2153-2249 (Print) / ISSN: 2153-2257 (Online) □ 2011 EURJCHEM, DOI:10.5155/eurjchem.2.2.206-213.269, Citations: 12; Impact Factor: 0.640
196. P. M. Anbarasan\*, M. K. Subramanian, P. Senthilkumar, C. Mohanasundaram, V. Ilangovan and N. Sundaraganesan, “Molecular Modeling of 2-Chloro-5-Nitrotoluene by Quantum Chemical Calculation for Pharmaceutical Application” *J. Chem. Pharm. Res.*, 2011, 3 (1): pg. 597-612, ISSN No: 0975-7384 CODEN(USA): JCPRC5, <https://www.jocpr.com/articles/molecular-modeling-of-2chloro5nitrotoluene-by-quantum-chemical-calculation-for-pharmaceutical-application.pdf>, Citations: 9.
197. P. M. Anbarasan\*, M. K. Subramanian, S. Manimegalai, K. Suguna, V. Ilangovan, and N. Sundaraganesan, “4-Chlorotoluene: Spectral Studies and Quantum Chemical Calculations” *J. Chem. Pharm. Res.*, (2011) 3 (3): pg. 123-136, ISSN No: 0975-7384 CODEN(USA): JCPRC5, Citations: 22.
198. P. M. Anbarasan\*, P. Senthil kumar, S. Manimegalai, G. Meenakshi, K. Subramani, “Geometries, Electronic Structure, Polarizability, Hyperpolarizability and Spectral Analysis on Silicon Dihydroxide Substituted Phthalocyanine for Dye Sensitized Solar Cells” *Journal of Spectroscopy & Dynamics* (2011) 1: 10, [www.simplex-academic-publishers.com](http://www.simplex-academic-publishers.com). <http://www.cognizure.com/abstract.aspx?p=110637225>, ISSN-2249-2704 | EISSN 2249–2712.
199. N. Sakthivel and P. M. Anbarasan, “Crystallization and Characterization of Nonlinear Optical Material: Glycolylurea” *Recent Research in Science and Technology* (2011) 3 (10): pg. 103-105, <http://updatepublishing.com/journal/index.php/rrst/article/view/806>, ISSN: 2076-5061
200. N. Sakthivel and P. M. Anbarasan, “Growth, Structural and Optical Studies of L-Proline Hydrate Crystals” *International Journal of Current Research*, (2011) Vol. 3, Issue 11, pg. 386-389, <http://journalcra.com/sites/default/files/issue-pdf/1213.pdf>, ISSN-0975-833X.
- 2010**
201. K. B. Rajesh\*, Z. Jaroszewicz, and P. M. Anbarasan, “Improvement of Lens Axicon’s Performance for Longitudinally Polarized Beam Generation by Adding A Dedicated

**Phase Transmittance” OPTICS EXPRESS (Optical Society of America),** eISSN: 1094-4087, Vol. 18, No. 26, (December 2010) pg. 26799-26805, <http://dx.doi.org/10.1364/OE.18.026799>, **Citations: 45; Impact Factor: 3.587**

202. N. Sakthivel and P. M. Anbarasan, “**Growth of Nonlinear Optical Material: 1-Hydroxyurea Hydrate Crystal and its Characterization**” **Asian Journal of Science and Technology (2010)** Vol. 4 pg. 67-69, [https://www.journalajst.com/sites/default/files/issues-pdf/Download\\_1.pdf](https://www.journalajst.com/sites/default/files/issues-pdf/Download_1.pdf), **ISSN-0776-3376**
203. S. Selvanandan\* and P. M. Anbarasan, “**Power Coupling Efficiency Enhancement in Multimode Step-Index Fiber Using Refractive and Growth of Nonlinear Optical Material: 1-Hydroxyurea Hydrate Crystal and its Characterization Diffractive Microlenses**” Hindawi Publishing Corporation, **International Journal of Optics**, Vol. 2010, ISSN/EISSN: 1687-9384/1687-9392 Article ID 601675, pg. 1-7 (2010), [doi:10.1155/2010/601675](https://doi.org/10.1155/2010/601675), **Citations: 2, Impact Factor: 1.033**
204. M. Geetha, P. Senthil kumar, R. Govindan, P. Ramu, L. Arivuselvam and P. M. Anbarasan\*, “**Design of Microlens Focused V-Groove Textured Silicon Solar Cell with Different Aspect Ratio using ZEMAX®**” **Recent Research in Science and Technology** 2(6): (2010) pg. 05-08, <https://www.semanticscholar.org/paper/Design-of-Microlens-Focused-V-groove-Textured-Solar-Geetha-Kumar/8954e724f8f6d7d1988b51ae6320d407b7bdc186>, **ISSN: 2076-5061, Citation: 4**
205. P. M. Anbarasan\*, P. Senthilkumar, S. Manimegalai, M. Geetha, K. Vasudevan, V. Ravi, D. Deivasagayam, S. Moorthy Babu and V. Aroulmoji, “**Spectral and Morphological Studies of Nanocrystalline Silicon Thin Films Synthesized by PECVD for Solar Cells**” **Silicon** 2, 7–17 (2010), ISSN: 1876-9918, <https://doi.org/10.1007/s12633-009-9028-9>, **Impact factor 2.474**
206. P. M. Anbarasan\*, P. Senthil Kumar, M. Geetha, R. Govindan, S. Manimegalai and K. Velmurugan, “**Geometries, Electronic Structures and Electronic Absorption Spectra of Silicon Dichloride Substituted Phthalocyanine for Dye Sensitized Solar Cells**” **Recent Research in Science and Technology**, 2010, 2(6): 08-16, <http://updatepublishing.com/journal/index.php/rrst/article/view/479>, **ISSN: 2076-5061, Citation: 14**
207. M. Geetha, P. Senthil Kumar, K. Vasudevan, A. Prakasam, G. Meenakshi, P. M. Anbarasan\*, “**Study of Geometrical, Electronic Structure, Spectral and NLO Properties of 3,4-Pyridinedicarbonitrile Dye Sensitizer for Solar Cells Using Quantum Chemical Calculations**”- **Journal of Saudi Chemical Society (Elsevier)**, 14 (4) (2010) pg. 399–407, [10.1016/j.jscs.2010.05.002](https://doi.org/10.1016/j.jscs.2010.05.002), ISSN: 1319-6103, **Impact Factor: 2.16; Citations: 3**
208. P. Senthil kumar, K. Vasudevan, A. Prakasam, M. Geetha and P. M. Anbarasan\*, “**Quantum Chemistry Calculations of 3-Phenoxyphthalonitrile Dye Sensitizer for Solar Cells**” - **Journal of Spectrochimica Acta Part A (2010)** – Volume 77, Issue 1, 15

September (2010), Pages 45-50, [doi:10.1016/j.saa.2010.04.021](https://doi.org/10.1016/j.saa.2010.04.021), ISSN: 1386-1425, Citations: 56; Impact factor 1.77 (IF in 2022 is 4.098)

209. S. Selvanandan and P. M. Anbarasan\*, “A Modern Interconnect Lens Design using Genetic Algorithm for Laser-Fibre Coupling Applications” *Atti della Fondazione Giorgio Ronchi*, ANNO LXV, (2010) – Vol. 65, Issue N. 2, Page 257-265, <http://ronchi.isti.cnr.it/db/article.php?idarticle=3994&startingRow=3826>, ISSN: 0391 2051.
210. M. K. Subramanian, P. M. Anbarasan\* and S. Manimegalai, “Molecular Structure, Vibrational Spectroscopic Studies and NBO Analysis of 7-Amino- 4-Trifluoromethylcoumarin” - *Pramana*, Volume 74, Number 5 (2010) 845-850, <https://doi.org/10.1007/s12043-010-0104-x> , ISSN: 0304-4289 (print version) ISSN: 0973-7111 (electronic version), Citations: 11; Impact Factor 1.688
211. P. M. Anbarasan\* and K. B. Rajesh, “Generation of needle of longitudinally polarized beam by tight focusing of double-ring-shaped radially polarized beam with high NA lens axicon” *AIP Conference Proceedings* 1228, 338 (2010); <https://doi.org/10.1063/1.3426072>, LIGHT AT EXTREME INTENSITIES—OPPORTUNITIES AND TECHNOLOGICAL ISSUES OF THE EXTREME LIGHT INFRASTRUCTURE: LEI 2009, Conference date: 16–21 October 2009, Location: Brasov (Romania), ISBN: 978-0-7354-0771-8, Editors: Dan Dumitras, Volume number: 1228, Published: Apr 16, 2010, pg. 338-345
212. P. M. Anbarasan\* and K. B. Rajesh, “Generation of Needle of Longitudinal Polarized Non Diffracting Beam using High NA Lens Axicon” *International Conference LEI-2009, Light at Extreme Intensities*, Scientific opportunities and technological issues of the Extreme Light Infrastructure, 16-21. October, 2009, Brasov, ROMANIA. Light at Extreme Intensities: Opportunities and technological Issues of the Extreme Light Infrastructure - LEI 2009, Romania, 2009 (AIP Conference Proceedings) Vol. 1228 -DE-ISBN:9780735407718, Page.496 Edited by Dumitras, Dan (EDT) 2010/05, *American Institute of Physics (AIP)*. AIP Conf. Proc. 1228, pp. 338-345; doi:<http://dx.doi.org/10.1063/1.3426072> (8 pages).
213. P. M. Anbarasan\*, “Geometries, Electronic Structures, and Spectral Properties of Some Metal Free Phthalonitrile Derivatives for Enhancement of The Dye Sensitized Solar Cells” organized by XXII – ICORS, in collaboration with Boston University Departments of Physics & Chemistry, The Photonics Center and the College of Arts & Sciences Northeastern University Departments of Physics & Chemistry and the College of Arts & Sciences during 8 - 13, August 2010, Boston, Massachusetts, USA, *AIP Conf. Proc.* -- Volume 1267, Issue 1, pp. 544-545 XXII INTERNATIONAL CONFERENCE ON RAMAN SPECTROSCOPY (ICORS); [doi:10.1063/1.3482667](https://doi.org/10.1063/1.3482667).
214. P. M. Anbarasan\* and P. Senthil Kumar, “Dye Sensitized Solar Cells” *Second International Conference on Hybrid and Organic Photovoltaics (HOPV-2010)* organized by Carsten Deibel (Julius-Maximilians-University of Würzburg, Germany) and Frederik C.

Krebs (Risø National Laboratory for Sustainable Energy, Technical University of Denmark) during 23-27, May, **2010** at Grand Hotel, ASSISI, **ITALY**.

- 215.** Selvanandan Selvaraj, Senthil Kumar Palanivel, Govindan Raji, Geetha Munusamy, **Anbarasan Ponnusamy Munusamy**, “**A Modern Interconnect Lens Design Using Genetic Algorithm for V-Grooved Microcrystalline Silicon Solar Cell Application**” **J. Atti della Fond. Giorgio Ronchi, Italy**, Vol.65, No.2 (2008) pg. 1-9, **ISSN: 0391 2051**.  
**2009**
- 216.** M. K. Subramanian, **P. M. Anbarasan\*** and S. Manimegalai, “**DFT Simulations and Vibrational Analysis of FT-IR and FT-Raman Spectra of 2,4-Diamino-6-Hydroxypyrimidine**” **Journal of Spectrochimica Acta Part A** 73 4 (2009) 642–649, <http://dx.doi.org/10.1016/j.saa.2009.03.006>, **ISSN: 1386-1425**, **Citations: 27**; **Impact factor: 1.77 (IF in 2022 is 4.098)**
- 217.** M. K. Subramanian, **P. M. Anbarasan\*** and S. Manimegalai, “**Molecular Structure, NMR and Vibrational Spectral Analysis of 2,4-difluorophenol by *abinitio* HF and Density Functional Theory**” **Journal of Raman Spectroscopy**, (www.interscience.wiley.com) **DOI: 10.1002/jrs.2315** (2009), Vol. 40, Issue 11, pp. 1657-1663, **ISI Journal Citation Reports © Ranking: 2011: 11/42 (Spectroscopy)**, **Online ISSN: 1097-4555**, **Citations: 28**; **Impact Factor: 3.087**  
**2008**
- 218.** K. B. Rajesh\* and **P. M. Anbarasan**, “**Generation of Sub-Wavelength and Super-Resolution Longitudinally Polarized Non-Diffraction Beam using Lens Axicon**” **Chinese Optics Letters**, (Optical Society of America) Vol. 6, No.10 (October 10, 2008) 785 – 787, **ISSN: 1671-7694** **doi: 10.3788/COL20080610.0785**, **COL 2011**, **Citations: 40**; **Impact Factor 0.967 (IF of 2022 is 2.448)**
- 219.** K. B. Rajesh, **P. M. Anbarasan\*** and K. Tamilmaran, “**Nanoscale Resolution Lens Axicon for High Density Optical Recording Using Krypton Ion Laser**” **JP Journal of Solids and Structures**, Vol.2, Issue 2, (2008) 139-149, **Citations: 3**; **ISSN: 0973-5615**, <http://www.pphmj.com/abstract/3508.htm>
- 220.** **P. M. Anbarasan\***, G. Meenakshi, K. Jeyapriya, M. K. Subramanian and K. Subramani, “**Growth, Structural and Optical Studies on Organic Single Crystal Imidazole**” – **Indian Journal of Physics**, 82 (11), (2008) 1473-1483, **ISSN: 0973-1458**, **Citations: 5**; **Impact Factor: 0.381**, <http://arxiv.iacs.res.in:8080/jspui/bitstream/10821/8056/1/Growth%2C%20Structural%20and%20Optical%20Studies%20on%20By%20P%20M%20Anbarasan.pdf>
- 221.** **P. M. Anbarasan\***, G. Meenakshi, K. Jayapriya, N. Sakthivel and K. Subramani, “**Studies on Growth, Structural and Optical Properties of Linear Organic Single Crystal Imidazole**” – **International Journal of Chemical Sciences**, 6 (3) (2008) 1463-1479, **ISSN: 0972-768X**, <https://www.tsijournals.com/articles/studies-on-growth-structural-and-optical-properties-of-linear-organic-single-crystal-imidazole.pdf>

222. P. Kumaresan\*, S. Moorthy babu and P. M. Anbarasan, “**Thermal Dielectric Studies on Pure and Amino Acid (L-Glutamic, L-Histidine, L-Valine) Doped KDP Single Crystals**” **Optical Materials**, Volume 30, Issue 9, May 2008, Pages 1361-1368, <http://dx.doi.org/10.1016/j.optmat.2007.07.002>, ISSN: 0925-3467, Citations: 61; Impact Factor: 2.023
223. P. Kumaresan\*, S. Moorthy babu and P. M. Anbarasan, “**Growth and Characterization of Metal Ions and Dye Doped KDP Single Crystals for Laser Applications**” **Materials Research Bulletin**, Volume 43, Issue 7, 1 July 2008, Pages 1716-1723, <http://dx.doi.org/10.1016/j.materresbull.2007.07.018>, ISSN: 0025-5408, Citations: 33; Impact Factor: 2.105
224. P. Kumaresa\*, S. Moorthy babu and P. M. Anbarasan, “**Effect of Irradiation of Swift Heavy Ions on Dyes Doped KDP Crystals for Laser Applications**” **Journal of Crystal Growth**, Volume 310, Issues 7-9, April 2008, Pages 1999-2004, <http://dx.doi.org/10.1016/j.jcrysgro.2007.10.053>, ISSN: 0022-0248, Citations: 25; Impact Factor: 1.726
225. M. K. Subramanian, P. M. Anbarasan, V. Ilangovan , N. Sundaraganesan\*, “**FT-IR, FT-Raman Spectra and DFT Vibrational Analysis of 2-Aminobiphenyl**” **Molecular Simulation**, Volume 34, Issue 3, March 2008 , pages 277 – 287, ISSN: 0892-7022, DOI: <https://doi.org/10.1080/08927020701829856>, 2008 (2012 Thomson Reuters, Journal Citation Reports), Citations: 6; Impact Factor: 1.328
226. M. K. Subramanian, P. M. Anbarasan\*, V. Ilangovan , S. Moorthy Babu, “**FT-IR, NIR-FT-Raman and Gas Phase Infrared Spectra Of 3-Aminoacetophenone by Density Functional Theory and Ab-initio Hartree-Fock Calculations**”, **Spectrochimica Acta Part-A** 71 (2008) 59 – 67, DOI:10.1016/j.saa.2007.11.013, ISBN/ISSN: 1386-1425, Citations: 18; Impact factor: 1.77
227. R. Rengaiyan, P. M. Anbarasan\*, A. Kalyanasundaram and S. Selvanandan, “**Variable Field Angle Study on Conic Interconnects Lens System for Higher Coupling Efficiency**” **J. Atti della Fond. Giorgio Ronchi, Italy** (ISSN: 0391 2051) Vol.63, No.5 (2008) pg. 693 – 706, ISSN 0391 2051, [https://www.google.co.in/books/edition/Atti\\_Della\\_Fondazione\\_Giorgio\\_Ronchi\\_Ann/BGG\\_e1JV82W0C?hl=en&gbpv=1&dq=Variable+Field+Angle+Study+on+Conic+Interconnects+Lens+System+for+Higher+Coupling+Efficiency&pg=PA693&printsec=frontcover](https://www.google.co.in/books/edition/Atti_Della_Fondazione_Giorgio_Ronchi_Ann/BGG_e1JV82W0C?hl=en&gbpv=1&dq=Variable+Field+Angle+Study+on+Conic+Interconnects+Lens+System+for+Higher+Coupling+Efficiency&pg=PA693&printsec=frontcover)
228. K. B. Rajesh, V. Ravi, K. Vasudevan and P. M. Anbarasan\*, “**A Comparative Study on Focal Performance of Fiber Ended Lens and Fiber Ended Axicon for Optical Recording**”, **J. Atti della Fond. Giorgio Ronchi, Italy**, Vol. 63, No.4 (2008) 445 – 456, ISSN: 0391 2051, <http://ronchi.isti.cnr.it/db/article.php?idarticle=3847&startingRow=1>

229. P. M. Anbarasan, K. B. Rajesh, M. Geetha, S. Selvanandan and S. Moorthy Babu, “Efficient Light Trapping Scheme of Microlens Focused Beam for Silicon Solar Cells”, - Presented at **International Conference on Solar Cells, Proceedings of SOLACE-2008**, page Vol. 1, Page No. 195-198, 2008.
- 2007**
230. P. Kumaresan\*, S. Moorthy babu and P. M. Anbarasan, “Effect of Metal Ion and Amino Acid Doping on the Optical Performance Of KDP Single Crystals” **Journal of Optoelectronics and Advanced Materials**, Vol. 1, 2 (February 2007) pg. 65-69, ISSN: 1454-4164, [https://old.joam.inoe.ro/arhiva/pdf8\\_2/2Kumaresan.pdf](https://old.joam.inoe.ro/arhiva/pdf8_2/2Kumaresan.pdf), **Impact Factor: 0.46, Citations: 12**
231. P. Kumaresan, S. Moorthy babu and P. M. Anbarasan, “Effect of Irradiation of Swift Heavy Ions on Dyes Doped Potassium Dihydrogen Phosphate Crystals for Laser Applications” **Journal of Optoelectronics and Advanced Materials - Rapid Communications**, Vol.1, 4 (April 2007) pg. 152-157, ISSN: 1842-6573, Citations: 3; **Impact Factor: 0.304**
232. P. Kumaresan\*, S. Moorthy babu and P. M. Anbarasan, “Thermal Dielectric Studies on Pure and Amino Acids (L-Glutamic and L-Histidine, L-Valine) doped Potassium Dihydrogen Phosphate Single Crystals” **Journal of Nonlinear Optical Physics & Materials (JNOPM)**, Volume 16, Number 2, (June 2007) 255–268, DOI: [10.1142/S0218863507003676](https://doi.org/10.1142/S0218863507003676), Print ISSN: 0218-8635, Online ISSN: 1793-6624, **Citations: 4; Impact factor: 0.553**
233. P. M. Anbarasan\*, S. Selvanandan and K. B. Rajesh “A Novel Study on Coupling Property of Low Aberration with High Throughput Microlens” **J. Atti della Fond. Giorgio Ronchi, Italy** Vol. 62, No. 2 (2007) P.219- 228, ISSN: 0391 2051, [https://www.google.co.in/books/edition/Atti della Fondazione Giorgio Ronchi/zJpikbL6o80C?hl=en&gbpv=1&pg=PA219&printsec=frontcover](https://www.google.co.in/books/edition/Atti_della_Fondazione_Giorgio_Ronchi/zJpikbL6o80C?hl=en&gbpv=1&pg=PA219&printsec=frontcover)
234. P. M. Anbarasan\*, S. Manimeglai S. Selvanandan and K. B. Rajesh, A. Kalyanasundaram and R. Rengaiyan, “A Novel Light Trapping Scheme of Microlenses Focused Beam on Silicon Solar Cells”- **J. Atti della Fond. Giorgio Ronchi, Italy**, Vol. 62, No.3 (2007) P. 363-374, ISSN: 0391 2051, [https://www.google.co.in/books/edition/Atti Della Fondazione Giorgio Ronchi Ann/19StEszRfQAC?hl=en&gbpv=1&pg=PA363&printsec=frontcover](https://www.google.co.in/books/edition/Atti_Della_Fondazione_Giorgio_Ronchi_Ann/19StEszRfQAC?hl=en&gbpv=1&pg=PA363&printsec=frontcover)
235. P. M. Anbarasan\*, B. Shanmugavelu, S. Manimegalai, A. Kalyanasundaram, R. Rengaiyan and S. Selvanandan, “A Scheme to Improve the Coupling Efficiency Between Laser Diode and Single Mode Fibre Via Hemi Spherically Ended Gif Microlenses” **J. Atti della Fond. Giorgio Ronchi, Italy**, Vol. 62, No.4,(2007) P. 443-454, ISSN: 0391 2051, [https://www.google.co.in/books/edition/Atti Della Fondazione Giorgio Ronchi Fon/JMrwSWEoDIoC?hl=en&gbpv=1&pg=PA447&printsec=frontcover](https://www.google.co.in/books/edition/Atti_Della_Fondazione_Giorgio_Ronchi_Fon/JMrwSWEoDIoC?hl=en&gbpv=1&pg=PA447&printsec=frontcover)

236. P. Kumaresan\*, S. Moorthy Babu, **P. M. Anbarasan** “**Growth and Characterization of Metal Ions and Dye Doped KDP Single Crystals**” **Journal of Optoelectronics and Advanced Materials**, Vol. 9, No. 9, September 2007, pg. 2774 – 2779, ISSN: 1454-4164, <https://old.joam.inoe.ro/index.php?option=magazine&op=view&idu=905&catid=17>,  
**Citations: 6; Impact Factor: 0.46**
237. P. Kumaresan\*, S. Moorthy Babu, **P. M. Anbarasan**, “**Optical Studies on Pure and Aminoacids Doped KDP Crystal**” **Journal of Optoelectronics And Advanced Materials** Vol. 9, No. 9, September 2007, P. 2780 – 2786, ISSN: 1454-4164, <https://old.joam.inoe.ro/index.php?option=magazine&op=view&idu=906&catid=17>,  
**Citations: 3; Impact Factor: 0.46**
238. P. Kumaresan\*, S. Moorthy Babu, **P. M. Anbarasan** “**Effect of Copper Thiourea Complex on the Performance of KDP Single Crystals**” **Journal of Optoelectronics and Advanced Materials**, Vol. 9, No. 9, September 2007, pg. 2787 – 2791, ISSN: 1454-4164, <https://old.joam.inoe.ro/index.php?option=magazine&op=view&idu=907&catid=17>,  
**Citations: 8; Impact Factor: 0.46**
- 2006**
239. S. Selvanandan, **P. M. Anbarasan\***, A. Kalyanasundaram and R. Rengaiyan, “**Theoretical Study on Focal Performance of Cylindrical Microlens in Dielectric Incidence Space**”, **J. Atti della Fond. Giorgio Ronchi, Italy**, Vol 61, No.6, (2006) Pg. 737-744, ISSN 0391 2051, <http://ronchi.isti.cnr.it/db/article.php?idarticle=3672&startingRow=1>
240. S. K. Geetha\*, R. Perumal, S. Moorthy Babu and **P. M. Anbarasan**, “**Habit Modification and Improvement in Properties of Potassium Hydrogen Phthalate (KAP) Crystals Doped with Metal Ions**”, **Crystal Research Technology**, 41, 3 (2006) 221-224, DOI: 10.1002/crat.200510563, ISSN: 0232-1300, **Citations: 25; Impact Factor: 1.164**
241. P. Kumaresa\*n, S. Moorthy Babu and **P. M. Anbarasan** (2006), ‘**Investigation of Optical Properties of Dyes Doped KDP Crystals**’, **6<sup>th</sup> DAE-BRNS Laser Symposium**, ISBN No.81-903321-1-2, (Prof. U.Nundy, Convener, NLS-06) Vol.4, pp. 94-95, The Sixth DAE-BRNS National Laser Symposium (NLS-06) was held at the Raja Ramanna Centre for Advanced Technology, Indore, between 5<sup>th</sup> and 8<sup>th</sup> December, 2006. For last six years, this symposium is being sponsored by the Board of Research in Nuclear Sciences (BRNS), <https://www.rrcat.gov.in/happenings/nls06.html>
- 2005**
242. P. Kumaresan\*, S. Moorthy Babu and **P. M. Anbarasan** (2005b), “**Growth and Characterization of Doped KDP Crystals**”, **5<sup>th</sup> DAE-BRNS Laser Symposium**, [https://www.rrcat.gov.in/symposiums/conf/nls2005/Brochure\\_NLS-5.pdf](https://www.rrcat.gov.in/symposiums/conf/nls2005/Brochure_NLS-5.pdf), ISBN No.81-903321-0-4, Vol.5, pp.189-190, Board of Research in Nuclear Sciences; Mumbai (India); NLS-5: 5. DAE-BRNS national laser symposium; VIT, Vellore (India); 7-10 Dec 2005.
243. P. Kumaresan\*, S. Moorthy Babu and **P. M. Anbarasan** (2005a), “**Influence of Dopants (L-Glutamic Acid, L-Histidine and L-Valine) on the Performance of KDP Crystals**”, **4<sup>th</sup> DAE-BRNS laser symposium**, ISBN No.81-903321-0-3, Vol. 4, pp.521-522, organised at

BARC from January 10 to 13, 2005 under the auspices of Board of Research in Nuclear Sciences, Department of Atomic Energy, Government of India along with short conducted prior to Indian Laser Association (ILA), The symposium had special session on the theme, "Lasers in Nuclear Science & Technology", <http://www.barc.gov.in/publications/nl/2004/200408-7.pdf>

244. N. K. Sharma and **P. M. Anbarasan\***, “**Point Contact One Injection Current in Solid Insulators with Traps**”, **Indian Journal of Pure and Applied Physics**, Vol. 43 (2005) 308-310, <http://nopr.niscair.res.in/bitstream/123456789/8751/1/IJPAP%2043%284%29%20308-310.pdf>, ISSN: 0975-1041 (Online); 0019-5596 (Print); **Impact Factor: 0.763**  
**2004**
245. **P. M. Anbarasan** and S. Mohan\*, “**Theoretical and Experimental study on Coupling Property of Distributed Index Microlenses in Micro Optics**”, **Journal of Optics**, Vol. 33, No. 1, (2004) 37 – 45, <https://doi.org/10.1007/BF03354752>, ISSN: 0972-8821 (print version), ISSN: 0974-6900 (electronic version), **Impact Factor: 0.278**  
**2002**
246. P. Nallasamy\*, **P. M. Anbarasan** and S. Mohan, “**Vibrational Spectra and Assignment of Cis- and Trans-1, 4-Polybutadiene**”, **Turkish Journal of Chemistry**, 26 (2002) 105 – 111, ISSN 1300-0527 , E-ISSN: 1303-6130, <https://dergipark.org.tr/tr/download/article-file/124369>, **Citations: 33; Impact Factor: 1.36**  
**2000**
247. **P. M. Anbarasan\*** and S. Mohan, “**Theoretical Aspects of Single Wave Length Oscillation in Semiconductor Laser at High-Speed Pulse Modulation**”, **XXVI National Symposium of the Optical Society of India on Optics and Opto-Electronics**, February 4-6, 2000, REC, Warangal, A.P (2000) pg. 246-249.
248. **P. M. Anbarasan\***, James Jebaseelan Samuel and S. Mohan, “**A Novel Study on Coupling Property of Distributed Index Microlenses**” **International Conference Asia – Pacific Telecom – 2000 on Advances in Telecommunications and Information Technology**, December 14-16, 2000 at Vellore Institute of Technology, Vellore. Proceedings of the APT-2000, Page No. 88-94, 2000.  
**1999**
249. **P. M. Anbarasan\***, S. Mohan, “**2-D arrayed Distributed-Index Planar Microlens**” ICLMD '99 **International Conference on Laser Materials and Devices** - December 8-10, 1999 at Defence Science Centre, Delhi. Proceedings of the ICMLD '99, Page No. 437-445, 1999, *Allied Publishers Limited*, Delhi. Edited by Dr. Amitav Mallik. DSC, Delhi, ISBN: 81-7023-993-1, DOI: <https://www.tib.eu/en/search/id/BLCP:CN039578440/2-D-Arrayed-Distributed-Index-Planar-Microlens?cHash=a1dadeb01e40f214b835965bf97832ce>

## II. Publications in Refereed Conference / Symposium/Seminar Proceedings & Publications in Non-Refereed Conference / Symposium / Seminar Proceedings:

\*K. Lalithambigai, **P.M. Anbarasan**, and K.B. Rajesh, “**Generation of Nanoscale Sub Wavelength Super-Long Dark Channel Using High NA Lens Axicon**”, **National Conference on Advanced Nanomaterials (ANM-2012) held at Centre for Nanoscience and**

**Nanotechnology, Periyar University, Salem - 636 011, Tamilnadu, India on February 6 & 7, 2012 - Oral Presentation - Cash Award for the Best Oral Presentation.**

1. I. Ragavan and P. M. Anbarasan, “**Molecular Structure, Spectroscopic, Electronic and Thermal Properties of 9-Ethyl-3-Thiophenyl-9H-Carbazole Compound using Computational Approaches**” **Proceedings of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER - 2023)**, organised by Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, India, in association with Indian SpectroPhysics Association (ISPA), Chennai, Tamil Nadu, India, held during 14 – 16, September - 2023, MS-12, Pg. 36, **ISBN: 978-81-1982-108-2**
2. I. Ragavan and P. M. Anbarasan, “**Theoretical predictions of molecular, antioxidant, HS, QSAR models, molecular docking and pharmaceutical activities of flavone compounds: using the DFT and PASS program**” **Proceedings of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER - 2023)**, organised by Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, India, in association with Indian SpectroPhysics Association (ISPA), Chennai, Tamil Nadu, India, held during 14 – 16, September - 2023, MS-13, Pg. 37, **ISBN: 978-81-1982-108-2**
3. K. Guna , I. Ragavan, P. M. Anbarasan and P. Sakthivel, “**Molecular structure, spectroscopic, electronic, MEP, drug-like and molecular docking analysis of 6(Furfurylamino)purine compound: A compared experimental and theoretical calculations**” **Proceedings of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER - 2023)**, organised by Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, India, in association with Indian SpectroPhysics Association (ISPA), Chennai, Tamil Nadu, India, held during 14 – 16, September - 2023, MS-15, Pg. 39, **ISBN: 978-81-1982-108-2**
4. M. Vanitha, K. Prabakaran, K. B. Rajesh and P. M. Anbarasan, “**Tight focusing properties of phase modulated radially polarized beam transmitting through a linear axicon using complex phase filter**” **Proceedings of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER - 2023)**, organised by Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, India, in association with Indian SpectroPhysics Association (ISPA), Chennai, Tamil Nadu, India, held during 14 – 16, September - 2023, MS-18, Pg. 42, **ISBN: 978-81-1982-108-2**
5. S. Aadheeswari and P. M. Anbarasan, “**Effect of Donor Substitution at D- $\pi$ -A Structured Highly Efficient Organic Dyes for DSSCs Using Computational Study**” **Proceedings of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER - 2023)**, organised by Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, India, in association with Indian SpectroPhysics Association (ISPA), Chennai, Tamil Nadu, India, held during 14 – 16, September - 2023, MS-28, Pg. 56, **ISBN: 978-81-1982-108-2**

6. S. Manikandan, K. Prabhakaran, K. B. Rajesh, C. Mohana Sundaram and **P. M. Anbarasan**, **“Formation of multiple focal holes using phase modulated azimuthally polarized Beam with linear axicon”** **Proceedings of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER - 2023)**, organised by Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, India, in association with Indian SpectroPhysics Association (ISPA), Chennai, Tamil Nadu, India, held during 14 – 16, September -2023, MS-32, Pg. 60, **ISBN: 978-81-1982-108-2**
7. R Arul kumar, I. Ragavan and **P. M. Anbarasan**, **“Organic dye-sensitized solar cells (ODSSCs) based on the D- $\pi$ -A structure for efficient DSSCs: DFT/TD-DFT Calculations”** **Proceedings of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER - 2023)**, organised by Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, India, in association with Indian SpectroPhysics Association (ISPA), Chennai, Tamil Nadu, India, held during 14 – 16, September - 2023, MS-43, Pg.71 , **ISBN: 978-81-1982-108-2**
8. I. Ragavan, C. Vidya, A. Durganandhini, S. Arunkumar, A. Vinnarasi and **P. M. Anbarasan**, **“Design, synthesis, molecular docking and biological evaluation studies of flavone-based inhibitors using MCF-7 cell lines”** **Proceedings of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER - 2023)**, organised by Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, India, in association with Indian SpectroPhysics Association (ISPA), Chennai, Tamil Nadu, India, held during 14 – 16, September - 2023, MS-44, Pg.72, **ISBN: 978-81-1982-108-2**
9. K. Parimala, I. Ragavan and **P. M. Anbarasan**, **“Structural, Vibrational spectroscopic, electronic and biological activity of Hydrocortisone acetate molecule using a combined Experimental and Computational calculations”** **Proceedings of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER - 2023)**, organised by Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, India, in association with Indian SpectroPhysics Association (ISPA), Chennai, Tamil Nadu, India, held during 14 – 16, September - 2023, MS-45, Pg.73, **ISBN: 978-81-1982-108-2**
10. K. Parimala, I. Ragavan and **P. M. Anbarasan**, **“Molecular design, synthesis, spectroscopic characterization, and biological evaluation of purine derivatives as potential anticancer agents”** **Proceedings of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER - 2023)**, organised by Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, India, in association with Indian SpectroPhysics Association (ISPA), Chennai, Tamil Nadu, India, held during 14 – 16, September -2023, MS-50, Pg.79, **ISBN: 978-81-1982-108-2**
11. M. Sathiyamoorthy, I. Ragavan and **P. M. Anbarasan**, **“Molecular structure, vibrational spectroscopic, charge transfer interaction and biological activity of Hydrocortisone using DFT, TD-DFT computational approach”** **Proceedings of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER - 2023)**, organised by Department of Physics, Periyar University, Salem - 636011, Tamil

Nadu, India, in association with Indian SpectroPhysics Association (ISPA), Chennai, Tamil Nadu, India, held during 14 – 16, September - 2023, MS-51, Pg.80, ISBN: 978-81-1982-108-2

12. S. Arun Kumar, I. Ragavan, A. Arunkumar and **P. M. Anbarasan**, “**Molecular Design, Synthesis and electrochemical properties of three Carbazole-based organic compounds as blue light-emitting Application**” **Proceedings of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER - 2023)**, organised by Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, India, in association with Indian SpectroPhysics Association (ISPA), Chennai, Tamil Nadu, India, held during 14 – 16, September - 2023, MS-52, Pg.81, ISBN: 978-81-1982-108-2
13. K. Lalithambigai, **P. M. Anbarasan** and K. B. Rajesh, “**Long linear flat-top beam formation by an azimuthally polarized beam with a seven-zone binary phase pupil filtration system**” **Proceedings of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER - 2023)**, organised by Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, India, in association with Indian SpectroPhysics Association (ISPA), Chennai, Tamil Nadu, India, held during 14 – 16, September -2023, MS-56, Pg.85, ISBN: 978-81-1982-108-2
14. C. Vidya, I. Ragavan, and **P. M. Anbarasan**, “**Synthesis, Growth and Characterization of Non-Linear Optical Organic Piperidinium 3-hydroxy-2-naphthoate Crystal by Slow Evaporation Solution Growth Technique**” **Proceedings of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER - 2023)**, organised by Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, India, in association with Indian SpectroPhysics Association (ISPA), Chennai, Tamil Nadu, India, held during 14 – 16, September - 2023, CP-3, Pg.88, ISBN: 978-81-1982-108-2
15. A. Durganandhini and **P. M. Anbarasan**, “**Green synthesis, characterization and applications of TiO<sub>2</sub> nanoparticles with various ratio using aqueous extract of Carica papaya leaves for phytochemical applications**” **Proceedings of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER - 2023)**, organised by Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, India, in association with Indian SpectroPhysics Association (ISPA), Chennai, Tamil Nadu, India, held during 14 – 16, September - 2023, NM-2, Pg.102, ISBN: 978-81-1982-108-2
16. A. Vinnarasi and **P.M. Anbarasan**, “**Facile hydrothermal synthesis of Cu doped SnS<sub>2</sub> nanoparticles with various characterizations for High-Performance Supercapacitor Applications**” **Proceedings of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER - 2023)**, organised by Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, India, in association with Indian SpectroPhysics Association (ISPA), Chennai, Tamil Nadu, India, held during 14 – 16, September - 2023, NM-5, Pg.105, ISBN: 978-81-1982-108-2

17. M. Gokul, S. Arun Kumar and P.M. Anbarasan, **“DFT study on TM-N-Doped Triangulene molecule as an excellent catalyst for Oxidation Reduction Reaction in PEM fuel cell application”** **Proceedings of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER - 2023)**, organised by Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, India, in association with Indian SpectroPhysics Association (ISPA), Chennai, Tamil Nadu, India, held during 14 – 16, September -2023, NM-7, Pg.107, ISBN: 978-81-1982-108-2
18. B. Divya, S. Arunkumar and P. M. Anbarasan, **“Green synthesis, characterization and antibacterial activity of iron oxide nanoparticles derived from Euphorbia Hirta flower extract”** **Proceedings of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER - 2023)**, organised by Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, India, in association with Indian SpectroPhysics Association (ISPA), Chennai, Tamil Nadu, India, held during 14–16, September-2023, NM-11, Pg.112, ISBN: 978-81-1982-108-2
19. E. Vasithira, R. Ranjith, P.M. Anbarasan and A. Priyadharsan, **“Hydrothermal Synthesis of g-C<sub>3</sub>N<sub>4</sub>/FeWO<sub>4</sub>/rGO Nanocomposites for Enhanced Photocatalytic Degradation of Ciprofloxacin and Antimicrobial Activity”** **Proceedings of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER - 2023)**, organised by Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, India, in association with Indian SpectroPhysics Association (ISPA), Chennai, Tamil Nadu, India, held during 14 – 16, September - 2023, NM-23 , Pg.126, ISBN: 978-81-1982-108-2
20. M. M. Arthisri, S. Arun Kumar, R. Ramesh and P. M. Anbarasan, **“Solvothermally Synthesized Bismuth Oxide Nanoparticles as an Electrode Material for Energy Storage Applications”** **Proceedings of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER - 2023)**, organised by Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, India, in association with Indian SpectroPhysics Association (ISPA), Chennai, Tamil Nadu, India, held during 1 –16, September-2023, NM-44 , Pg.149, ISBN: 978-81-1982-108-2
21. P. Sneka, S. Arun Kumar and P. M. Anbarasan, **“Green Synthesis and Characteration of Iron Oxide Nanoparticles (NPs) (Fe<sub>2</sub>O<sub>3</sub>) Using Euphorbia Hirta in Antibacterial Activity”** **Proceedings of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER - 2023)**, organised by Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, India, in association with Indian SpectroPhysics Association (ISPA), Chennai, Tamil Nadu, India, held during 14 – 16, September - 2023, NM-54, Pg.160, ISBN: 978-81-1982-108-2
22. R. Kavipriya, S. Arun Kumar, R. Ramesh and P. M. Anbarasan, **“Construction of Co<sub>3</sub>O<sub>4</sub> Nanostructures as High-Performance Anode Material for Energy Storage Application”** **Proceedings of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER - 2023)**, organised by Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, India, in association with Indian SpectroPhysics

Association (ISPA), Chennai, Tamil Nadu, India, held during 14 – 16, September - 2023, NM-61, Pg.167, ISBN: 978-81-1982-108-2

23. R. Ranjith, P.M. Anbarasan and A. Priyadharsan, **“Electrospun PCL/RGO/Fe<sub>2</sub>O<sub>3</sub> Composite Nanofibers for Efficient Removal and Photocatalytic Degradation of Malachite Green and Leucomalachite Green from Aqueous Solution”** **Proceedings of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER - 2023)**, organised by Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, India, in association with Indian SpectroPhysics Association (ISPA), Chennai, Tamil Nadu, India, held during 14 – 16, September - 2023, NM-65, Pg.171, ISBN: 978-81-1982-108-2
24. R. Ranjith, P.M. Anbarasan and A. Priyadharsan, **“Enhanced Photocatalytic Activity of PVP/g-C<sub>3</sub>N<sub>4</sub>/rGO Composite Nanofibers for Methyl Orange Degradation”** **Proceedings of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER - 2023)**, organised by Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, India, in association with Indian SpectroPhysics Association (ISPA), Chennai, Tamil Nadu, India, held during 14 – 16, September - 2023, NM-66, Pg.172, ISBN: 978-81-1982-108-2
25. R. Stalin, S. Arun Kumar, R. Ramesh and P. M. Anbarasan, **“Facile Hydrothermal Synthesis of CuFe<sub>2</sub>O<sub>4</sub> Nanostructures for High Performance Supercapacitor Application”** **Proceedings of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER - 2023)**, organised by Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, India, in association with Indian SpectroPhysics Association (ISPA), Chennai, Tamil Nadu, India, held during 14 – 16, September - 2023, NM-68, Pg.174, ISBN: 978-81-1982-108-2
26. R. Rajakavimani, S. Arun Kumar, P. M. Anbarasan, **“Magnesium Bis (Oxalate) borate as a Potential Electrolyte for Rechargeable Mg-Ion Batteries- A DFT Study”** **Proceedings of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER - 2023)**, organised by Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, India, in association with Indian SpectroPhysics Association (ISPA), Chennai, Tamil Nadu, India, held during 14 – 16, September - 2023, NM-69, Pg.175, ISBN: 978-81-1982-108-2
27. S. Archana, S. Arun Kumar, R. Ramesh and P. M. Anbarasan, **“Facile One-Step Synthesis of NiCo<sub>2</sub>O<sub>4</sub> as an Anode Material for HighPerformance Electrochemical Supercapacitor”** **Proceedings of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER - 2023)**, organised by Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, India, in association with Indian SpectroPhysics Association (ISPA), Chennai, Tamil Nadu, India, held during 14 – 16, September - 2023, NM-70, Pg.176, ISBN: 978-81-1982-108-2
28. S. Arun Kumar, R. Ramesh and P. M. Anbarasan, **“Electrochemical Performance of MnCo<sub>2</sub>O<sub>4</sub> Needles as Positive Electrodes for Energy Storage Application”** **Proceedings**

of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER - 2023), organised by Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, India, in association with Indian SpectroPhysics Association (ISPA), Chennai, Tamil Nadu, India, held during 14 – 16, September - 2023, NM-71, Pg. 177, ISBN: 978-81-1982-108-2

29. A. Vinnarasi and P. M. Anbarasan, “Hydrothermal Design and Synthesis of CoWO<sub>4</sub>/CoMn<sub>2</sub>O<sub>4</sub> Nanoparticles Composites on NiO Foam for Electrochemical Supercapacitor Applications” Proceedings of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER - 2023), organised by Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, India, in association with Indian SpectroPhysics Association (ISPA), Chennai, Tamil Nadu, India, held during 14 – 16, September - 2023, NM-81, Pg.187, ISBN: 978-81-1982-108-2
30. Rajkumar Sentharamaia, Venkatraman Madurai Ramakrishnan, Anbarasan Ponnusamy Munusamy and Suguna Kulandhaivel, “Synthesis and characterization of silver doped TiO<sub>2</sub> nanoparticles by green method and its performance as dye sensitized solar cells photo anodes” Proceedings of the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER - 2023), organised by Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, India, in association with Indian SpectroPhysics Association (ISPA), Chennai, Tamil Nadu, India, held during 14 – 16, September - 2023, NM-84, Pg.190, ISBN: 978-81-1982-108-2
31. S. Arun Kumar, R. Ramesh, C. Balaji, A. Gowdhaman, and P. M. Anbarasan, “Synthesis of MgCo<sub>2</sub>O<sub>4</sub> Nanostructure Electrode Material for High-Performance Symmetric Supercapacitor”, “7<sup>th</sup> International Conference on Nanoscience and Nanotechnology (ICONN-2023)”, organized by Department of Physics and Nanotechnology, SRM IST, Kattankulathur - 603203, India during March 27- 29, 2023.
32. S. Arun Kumar, V. Sindhuja, S. Shanavas, I. Sarasamreen, C. Balaji, A. Gowdhaman, R. Ramesh and P. M. Anbarasan, “Construction of NiO as Positive Electrode and C-g-C<sub>3</sub>N<sub>4</sub> as Negative Electrode Materials for Efficient Energy Storage Device”, “7<sup>th</sup> International Conference on Nanoscience and Nanotechnology (ICONN-2023)”, organized by Department of Physics and Nanotechnology, SRM IST, Kattankulathur - 603203, India during March 27- 29, 2023.
33. V. Sindhuja, S. Arun Kumar, S. Shanavas, C. Balaji, A. Gowdhaman, R. Ramesh and P. M. Anbarasan, “Design of Surfactant-Free Co<sub>3</sub>O<sub>4</sub> Nanostructure Electrode Material for High-Performance Hybrid Supercapacitor”, “7<sup>th</sup> International Conference on Nanoscience and Nanotechnology (ICONN-2023)”, organized by Department of Physics and Nanotechnology, SRM IST, Kattankulathur - 603203, India during March 27- 29, 2023.
34. S. Aadheeswari, A. Arunumar and P. M. Anbarasan, “TD-DFT Study on D-π-A Structured with Spacer Tuned Metal-Free Organic Efficient Dye Molecules for DSSCs” National Conference on Science of Materials and its Advancements in Recent Trends (NCSMART - 2023) organised by Periyar University Centre for Post Graduate and Research Studies, Dharmapuri, Tamil Nadu, in

Association with Indian Spectrophysics Association, Chennai, held during 23-24, February, 2023, CP-27, page: 48, **ISNB - 978-93-81992-15-9**

35. S. Arunkumar, R. Ramesh and **P. M. Anbarasan**, “**Electrochemical Performnce of BiO<sub>3</sub> Microspheres as an Electrode Materials for Supercapacitor Applications**” **National Conference on Science of Materials and its Advancements in Recent Trends (NCSMART - 2023)** organised by Periyar University Centre for Post Graduate and Research Studies, Dharmapuri, Tamil Nadu, in Association with Indian Spectrophysics Association, Chennai, held during 23-24, February, 2023, CP-54, page: 75, **ISNB - 978-93-81992-15-9**
36. A. Vinnarasi and **P. M. Anbarasan**, “**One-Step Hydrothermal Synthesis of SnS<sub>2</sub> Nanoparticles and Cu doped SnS<sub>2</sub> Nanoparticles for Supercapacitor Applications**” **Online National Seminar on Advanced Energy Materials and Research (NSAEMR)-20202**, organized by Department of Physics, Periyar University, Salem, Tamilnadu, held during 26<sup>th</sup> & 27<sup>th</sup> May 2022, PP-
37. S. Arun Kumar, I. Sarasamreen, S. Prabhu, R. Ramesh and **P. M. Anbarasan**, “**Synthesis of Binder-Free (3D) NiCo<sub>2</sub>O<sub>4</sub>/Ni-Foam Nanostructure as an Efficient Electrode for High Performance Supercapacitor**” **International Virtual Conference on Recent Innovations in Chemical Sciences (RICS-2022)** organized by Department of Chemistry, Periyar University, Salem, Tamilnadu held during 24<sup>th</sup> and 25<sup>th</sup> March 2022, Pg-56
38. S. Arun Kumar, I. Sarasamreen, S. Prabhu, R. Ramesh and **P. M. Anbarasan**, “**Fabrication of Binder Free (3D) CuFe<sub>2</sub>O<sub>4</sub>/Ni-Foam Nanostructured Electrode for High Performance Hybrid Supercapacitor**” **International Virtual Conference on Advanced Materials for Sustainable Energy and Environment (ICAMSEE-2022)** organized by Department of Physics, PSGR Krishnammal College for Woment, Coimbatore, Tamilnadu, in Association with Orignalys, France, held during 16<sup>th</sup> -18<sup>th</sup> February, 2022, PP-1 (**Best Poster Award**)
39. S. Shanavas, Roberto Acevedo, Lal Behari Sukla, **P. M. Anbarasan**, “**Utilization of Novel Cu/Bi<sub>2</sub>Ti<sub>2</sub>O<sub>7</sub>/rGO Nanocomposite on Degradation of Pharmaceutical Contaminations with an Excellent Electron Trapping Design for Effective Production of Reactive Species**” Presented in the **International Conference on Green Technology for Clean Environment GTCE, 2019** organised at Biofuels & Bioprocessing Research Center (BBRC), Institute of Technical Education and Research, Siksha O Anusandhan (SAO) University, Khandagiri, Bhubaneswar - 751030, Odisha, India, held on 20<sup>th</sup> May, 2019.
40. C. Vidya, I. Ragavan, J. Jayaprakash and **P. M. Anbarasan**, “**Growth and characterization of an Organic NLO Crystal: Bis(2-amino-4-methylpyridinium) Terephthalate Tetrahydrate**” presented in the **23<sup>rd</sup> National Seminar on Crystal Growth and Applications (NSCGA-2019)** Organized by Department of Physics, Bharathiar University, Coimbatore, Tamil Nadu, India held during 28-30<sup>th</sup> January 2019, PP-14.
41. I. Ragavan, C. Vidya, **P. M. Anbarasan** and A. Prakasam, “**Experimental and Theoretical Investigations on Structural, Spectroscopic, Electronic Properties and Molecular**

**Docking Using Thyroid Hormone Receptor Alpha1**” presented in the **23<sup>rd</sup> National Seminar on Crystal Growth and Applications (NSCGA-2019)** Organized by Department of Physics, Bharathiar University, Coimbatore, Tamil Nadu, India held during 28-30<sup>th</sup> January, 2019, PP-15

42. M. Sumathi, A. Prakasam and **P. M. Anbarasan** , **“High Performance Visible Light Photocatalytic Activity of Hexagonal Shaped Nanodiscs G-C3N4/Nio Heterostructured Nanocomposites”** Presented in the **International Conference on Emerging Materials and Modeling (ICEMM-2019)** Organized by Department of Physics, K. S. Rangasamy College of Arts and Science (Autonomous), Tiruchengode, Tamil Nadu, India held during 7-9<sup>th</sup> January, 2019, PP-44, Pg.no. 118, **ISBN; 978-81-926279-7-7**
43. C. Vidya, I. Ragavan, A. Priyadharsan, S. Shanavas and **P. M. Anbarasan**, **“Synthesis, Growth and Characterization of Non-Linear Optical Organic 2-Amino-4-methylpyridinium 3-chlorobenzoate Crystal by Slow Evaporation Solution Growth Technique”** presented in the **International Conference on Emerging Materials and Modeling (ICEMM-2019)** Organized by Department of Physics, K. S. Rangasamy College of Arts and Science (Autonomous), Tiruchengode, Tamil Nadu, India held during 7-9<sup>th</sup> January, 2019, PP-27, Pg.no. 105, **ISBN; 978-81-926279-7-7**
44. I. Ragavan, **P.M. Anbarasan** and A. Prakasam, **“Molecular Docking and 3D-Pharmacophore Modeling to Study the Interactions of Purine Derivatives with Thyroid Hormone Receptor Alpha1”** Presented in the **International Conference on Emerging Materials and Modeling (ICEMM-2019)** Organized by Department of Physics, K. S. Rangasamy College of Arts and Science (Autonomous), Tiruchengode, Tamil Nadu, India held during 7-9<sup>th</sup> January, 2019, OP-14, Pg.no. 56, **ISBN; 978-81-926279-7-7**
45. S. Shanavas, A. Priyadharsan and **P.M. Anbarasan**, **“An Investigation on Photocatalytic and Antibacterial Performance of GO Based Ternary Nanocomposite under Visible Light Irradiation”** Presented in the **International Conference on Emerging Materials and Modeling (ICEMM-2019)** Organized by Department of Physics, K. S. Rangasamy College of Arts and Science (Autonomous), Tiruchengode, Tamil Nadu, India held during 7-9<sup>th</sup> January 2019, OP-05, Pg.no. 47, **ISBN; 978-81-926279-7-7**
46. A. Nisha, **P.M. Anbarasan**, K.B. Rajesh, P. Maheswari, Z. Jaroszewicz, **“Sensitivity Enhancement of Surface Plasmon Resonance Sensor with Copper Covered 2D Materials”** Presented at **National Seminar on Current Innovation & Future Perspectives in Nanoscience and Technology (NSNST-2019)** organized by Department of Physics, Chikkanna Government College, Tirupur held on 1<sup>st</sup> February, 2019, OPP-18.
47. A. Nisha, **P.M. Anbarasan**, K.B. Rajesh, P. Maheswari, Z. Jaroszewicz, **“Sensitivity Enhancement of Surface Plasmon Resonance Sensor with 2D Materials Covered Noble and Magnetic Materials (Ni<sup>+</sup>)”** Presented at **National Seminar on Current Innovation & Future Perspectives in Nanoscience and Technology (NSNST-2019)** organized by Department of Physics, Chikkanna Government College, Tirupur held on 1<sup>st</sup> February, 2019, OPP - 36.

48. A. Alagu Vibisha, A. Nisha, **P.M. Anbarasan**, K.B. Rajesh, Z. Jaroszewicz, “**Sensitivity Enhancement of Surface Plasmon Resonance Sensor using Nickel with Various 2D Materials**” Presented at **National Seminar on Current Innovation & Future Perspectives in Nanoscience and Technology (NSNST-2019)** organized by Department of Physics, Chikkanna Government College, Tirupur held on 1<sup>st</sup> February, 2019, OPP - 44.
49. P. Maheswari, A. Nisha, **P.M. Anbarasan**, K.B. Rajesh, Z. Jaroszewicz, “**Sensitivity Enhancement of Copper with the use of Transition Metal Dichalcogenides (TMDCs) in Surface Plasmon Resonance Biosensor**” Presented at **National Conference on Renewable Energy (NCRE-2019)** Organized by Department of Physics, PSGR Krishnammal College for Women, Coimbatore, held during 21<sup>st</sup> & 22<sup>nd</sup> January, 2019, PP-09.
50. K. Lalithambigai, **P.M. Anbarasan**, “**Creation of super-long bright channel using high NA lens axicon with dedicated multibelt binary phase mask**” **International Conference of Emerging Materials and Modelling (ICEMM-2019)** Organised by the Department of Physics, K.S.Rangasamy College of Arts and Science (Autonomous), Tiruchengode held during 7-9, January, 2019, PP-63, page 135, **ISBN; 978-81-926279-7-7**
51. C. Indira Priyadharshini, **P. M. Anbarasan** and V. Aroulmoji, “**The Performance Study of Perovskite Type Solar Cells Using Metal Substituted SrTiO<sub>3</sub> Nanoparticles**” **International Conference of Emerging Materials and Modelling (ICEMM-2019)** Organised by the Department of Physics, K.S.Rangasamy College of Arts and Science (Autonomous), Tiruchengode held during 7-9, January, 2019, PP-28, page 105, **ISBN; 978-81-926279-7-7**
52. C. Indira Priyadharshini, M. Sumathi, A. Prakasam, **P. M. Anbarasan**, V. Hariharan, “**Effect of Mg Doping on Structural and Optical Properties of SnO<sub>2</sub> Nanoparticle by Chemical Co-Precipitation Method**” **International Conference of Advanced Materials and Its Fabrications (ICAMF-2019)** Organised by the Department of Physics, A.V.S College of Arts and Science, Salem, Tiruchengode held on 10<sup>th</sup> January, 2019, OP-33
53. I. Ragavan, C. Vidya and **P. M. Anbarasan**, “**Synthesis Structural, Spectroscopic, NLO and Electrostatic Potential Properties of Purine Derivatives: Using Density Functional Theory**” Presented in the **National Conference on Recent Trends in Advanced Material Science (NCRTAMS-2018)** Organized by Department of Physics, Selvamm Arts and Science College (Autonomous), Namakkal, Tamil Nadu, India held on 5<sup>th</sup> February, 2018, PP-6
54. C. Vidya, I. Ragavan, A. Arunkumar and **P. M. Anbarasan**, “**Studies on Crystal Growth, Spectral and Thermal Properties of 2-Amino-4-Methylpyridinium-4-Hydroxybenzoate for Novel Organic Nonlinear Optical Application**” Presented in the **National Seminar on Crystal Growth and Applications (XXII NSCGA – 2018)** Organized by Department of Physics, Sacred Heart College (Autonomous), Tirupattur, Vellore, Tamil Nadu, India held during 29<sup>th</sup> – 31<sup>st</sup> January, 2018, PP-101

55. M. Hazeena, C. Vidya and **P. M. Anbarasan**, “**Synthesis and Characterization of Piperidinium-4-Nitrophenolate Organic crystal with Hygroscopic nature for Nonlinear Optical Application**” Presented in the **International Conference on Recent Trends in Material Science and Technology (ICRTMST – 2018)** Organized by Department of Physics, Sri Vijay Vidyalaya College of Arts & Science, Dharmapuri, Tamil Nadu, India held during 19<sup>th</sup> – 20<sup>th</sup> January, 2018, PP-10
56. S. Shanavas, A. Priyadharsan and **P.M. Anbarasan**, “**An Investigation on Photocatalytic and Antibacterial Performance of GO Based Ternary Nanocomposite under Visible Light Irradiation**” Presented in the **International Conference on Emerging Materials and Advanced Applications (ICEMAA-2018)** Organized by Department of Physics, Periyar University, Salem, Tamil Nadu, India held during 1-2<sup>nd</sup> March, 2018, PP.60
57. P. Sakthivel, S. Manohari, M. Sargunam and **P.M. Anbarasan**, “**Design of Organic Dye 2 Amino-6- Methylbenzonitrile (2A6MBN) for High- Efficiency Dye sensitized Solar Cells**” in the **National Conference on Recent Trends in Advanced Material Science (NCRTAMS – 2018)**, Organized by P.G & Research Department of Physics, Selvamm Arts and Science College (Autonomous), Namakkal -03, Tamil Nadu, India held on 05<sup>th</sup> February 2018. CP 17, pp 72.
58. M. Vinitha, I. Ragavan and **P. M Anbarasan**, “**Theoretical Studies on Organic D- $\pi$ -A Sensitizer with Carbazole Donor and Different  $\pi$ -Linkers for Dye Sensitized Solar Cells**” in the **National Conference on Recent Trends in Advanced Material Science (NCRTAMS – 2018)**, Organized by P.G & Research Department of Physics, Selvamm Arts and Science College (Autonomous), Namakkal -03, Tamil Nadu, India held on 05<sup>th</sup> February 2018. CP 24, pp 75.
59. M. Inthumathy, D. Krishnamoorthy, **P.M. Anbarasan** and A. Prakasam, “**The role of  $\pi$ -linkers in Tuning the Optoelectronic Properties of Carbazole Derivatives for Dye Sensitized Solar Cell: A DFT/TDDFT Study**” in the **National Conference on Recent Trends in Advanced Material Science (NCRTAMS – 2018)**, Organized by P.G & Research Department of Physics, Selvamm Arts and Science College (Autonomous), Namakkal -03, Tamil Nadu, India held on 05<sup>th</sup> February 2018. CP 27, pp 78.
60. M. Deepana, A. Arunkumar and **P. M. Anbarasan**, “**Analysis of Different Types of the Metal-Free Organic Dye Sensitizers for DSSCs Applications- First Principle Study**” in the **National Conference on Recent Trends in Advanced Material Science (NCRTAMS – 2018)**, Organized by P.G & Research Department of Physics, Selvamm Arts and Science College (Autonomous), Namakkal -03, Tamil Nadu, India held on 05<sup>th</sup> February 2018. CP 35, pp 90.
61. A. Arunkumar and **P. M. Anbarasan**, “**Quantum Chemical Study on the Different Organic Dyes for Dye Sensitized Solar Cells: Effects of Spacer Groups**” in the **National Conference on Recent Trends in Advanced Material Science (NCRTAMS – 2018)**, Organized by P.G & Research Department of Physics, Selvamm Arts and Science College (Autonomous), Namakkal -03, Tamil Nadu, India held on 05<sup>th</sup> February 2018. CP 36, pp 91.

62. I. Ragavan, S. Padmanathan, C. Vidya, A. Prakasam and P.M. Anbarasan, “**Synthesis, structural, spectroscopic, NLO and electrostatic potential properties of purine derivatives: using density functional theory**” in the **National Conference on Recent Trends in Advanced Material Science (NCRTAMS – 2018)**, Organized by P.G & Research Department of Physics, Selvamm Arts and Science College (Autonomous), Namakkal -03, Tamil Nadu, India held on 05<sup>th</sup> February 2018. CP 42, pp 96.
63. D. Krishnamoorthy, I. Ragavan, P.M. Anbarasan and A. Prakasam, “**Nonlinear Optical and Electronic properties of the  $\pi$  Linker in Donor- $\pi$ -Acceptor Organic Dyes for High-Performance Sensitized Solar Cells**” in the **International Conference on Recent Trends in Synthetic Methods and Material Chemistry (RTSMC-2018)** Organized by Department of Chemistry (DST-FIST & UGC-SAP Sponsored Department), Annamalai University, Annamalai Nagar – 608002, Tamil Nadu, India held on 2<sup>nd</sup> & 3<sup>rd</sup> February 2018, PP-41, pp 103
64. C. Indira Priyadharsini, A. Prakasam, P. M. Anbarasan, “**Microwave Assisted Synthesis Method of Perovskite Type Fe doped Sr TiO<sub>3</sub> solar cells**” in the **International Conference on Recent Trends in Synthetic Methods and Material Chemistry (RTSMC-2018)** Organized by Department of Chemistry (DST-FIST & UGC-SAP Sponsored Department), Annamalai University, Annamalai Nagar – 608002, Tamil Nadu, India held on 2<sup>nd</sup> & 3<sup>rd</sup> February 2018, PP -86, pp 130.
65. A.Nallathambi, A. Prakasam and P.M. Anbarasan, “**Density functional theory study on the electronic structure of Stilbene based Organic Sensitizers for DSSC**” in the **International Conference on Recent Trends in Synthetic Methods and Material Chemistry (RTSMC-2018)** Organized by Department of Chemistry (DST-FIST & UGC-SAP Sponsored Department), Annamalai University, Annamalai Nagar – 608002, Tamil Nadu, India held on 2<sup>nd</sup> & 3<sup>rd</sup> February 2018, PP-148, pp 169.
66. T. Saravana kumaran, M. Indhumathy, P.M. Anbarasan and A. Prakasam, “**Improved Molecular Architecture of D- $\pi$ -A Triphenylamine - Based Organic Sensitizers containing  $\pi$ -Extended Thiophene Spacers for DSSC’s**” in the **International Conference on Recent Trends in Synthetic Methods and Material Chemistry (RTSMC-2018)** Organized by Department of Chemistry (DST-FIST & UGC-SAP Sponsored Department), Annamalai University, Annamalai Nagar – 608002, Tamil Nadu, India held on 2<sup>nd</sup> & 3<sup>rd</sup> February 2018, PP-169, pp 182.
67. I. Ragavan, S. Padmanathan, M. Sumathi, A. Prakasam and P.M. Anbarasan, “**Molecular structure, vibrational spectra, natural bond analysis and theoretical approaches of 8-(2-chloro-10H-phenothiazin-7-ylthio)-5, 9-dihydro-2-mercapto-4H-purin**” in the **International Conference on Recent Trends in Synthetic Methods and Material Chemistry (RTSMC-2018)** Organized by Department of Chemistry (DST-FIST & UGC-SAP Sponsored Department), Annamalai University, Annamalai Nagar – 608002, Tamil Nadu, India held on 2<sup>nd</sup> & 3<sup>rd</sup> February 2018, PP-179, pp 182.

68. C. Vidya, I. Ragavan, A. Arunkumar and **P. M. Anbarasana**, “**Studies on Crystal Growth, Spectral and Thermal Properties of 2-Amino-4-Methylpyridinium-4-Hydroxybenzolate for Novel Organic Nonlinear Optical Application**” in the **National Seminar on Crystal Growth and Applications (XXII NSCGA – 2018)** Organized by Department of Physics, Sacred Heart College (Autonomous), Tirupattur, Vellore, Tamil Nadu, India held on 29<sup>th</sup> – 31<sup>st</sup> JAN’2018, PP-101, pg. 194.
69. S. Shanavas, A. Priyadharsan and **P. M. Anbarasan**, “**An Effective Photocatalytic Approach for Enhanced Degradation of Organic Pollutants Using Graphene Based Nanocomposites**” in the **International Conference on Recent Trends in Material Science and Technology (ICRTMST-2018)** held during 19 -20<sup>th</sup> January, 2018 organised by PG & Research Department of Physics, Sri Vijay Vidyalaya College of Arts and and Science College, Nallampalli – 636 807, Dharmapuri (Dt.), Tamilnadu, pg. 22
70. M. Hazeena, C. Vidya and **P. M. Anbarasan**, “**Synthesis and Characterization of Piperidinium-4-Nitrophenolate Organic Crystals with Hygroscopic Nature for Nonlinear Optical Application**” in the **International Conference on Recent Trends in Material Science and Technology (ICRTMST-2018)** held during 19 -20<sup>th</sup> January, 2018 organised by PG & Research Department of Physics, Sri Vijay Vidyalaya College of Arts and and Science College, Nallampalli – 636 807, Dharmapuri (Dt.), Tamilnadu, pg. 33
71. A. Nallathambi, A. Prakasam and **P. M. Anbarasan**, “**Density Functional Theory on the Electronic Structure of Stilbene Based Organic Sensitizers for DSSC**” in the **International Conference on Recent Trends in Material Science and Technology (ICRTMST-2018)** held during 19 -20<sup>th</sup> January, 2018 organised by PG & Research Department of Physics, Sri Vijay Vidyalaya College of Arts and and Science College, Nallampalli – 636 807, Dharmapuri (Dt.), Tamilnadu, pg. 35
72. S. Shanavas, A. Priyadarsan and **P. M. Anbarasan**, “**An Effective Photocatalytic Approach for Enhanced Degradation of Organic Pollutants Using Graphene Based Nanocomposites**” in the **4<sup>th</sup> National Conference on Nanotechnology for Environmental Applications** held on 5<sup>th</sup> January, 2018 organised by Albert Einstein Association & Department of Physics, E.R.K Arts and Science College, Erumiyampatti – 636 905, Kokkarapatti (PO), Pappireddipatti (TK), Dharmapuri (Dt.), Tamilnadu, CP-01, pg.13.
73. A. Priyadharsan, S. Shanavas and **P. M. Anbarasan**, “**Single-Step Hydrothermal Synthesis of Reduced Graphene Oxide Based Ternary Nanocomposites as Photocatalyst for Treatment of Dye Waste-Water**” in the **4<sup>th</sup> National Conference on Nanotechnology for Environmental Applications** held on 5<sup>th</sup> January, 2018 organised by Albert Einstein Association & Department of Physics, E.R.K Arts and Science College, Erumiyampatti – 636 905, Kokkarapatti (PO), Pappireddipatti (TK), Dharmapuri (Dt.),Tamilnadu, CP-03, pg.15.
74. A. Priyadharsan, S. Shanavas and **P. M. Anbarasan**, “**Single-Step Hydrothermal Synthesis of Reduced Graphene Oxide Based Ternary Nanocomposites as Photocatalyst for Treatment of Dye Waste-Water**” in the **4<sup>th</sup> National Conference on Nanotechnology for Environmental Applications** held on 5<sup>th</sup> January, 2018 organised by Albert Einstein Association & Department of Physics, E.R.K Arts and Science College, Erumiyampatti – 636

905, Kokkarapatti (PO), Pappireddipatti (TK), Dharmapuri (Dt.), Tamilnadu, CP-60, pg.72.

75. **P. M. Anbarasan**, I. Ragavan, C. Vidya, M. Prakasama and A. Prakasam, “**A Combined investigation of Vibrational properties and Excited State Intramolecular Charge Transfer of 2, 8-dimercapto-6-hydroxypurine**”, **International Conference on Molecular Spectroscopy (ICMS - 2017)** Organized by International Unit on Macromolecular Science and Engineering (IUMSE), Mahatma Gandhi University, Wuhan University, Wuchang Dist., Hubei, China & Beijing University of Chemical Technology, China & School of Applied of Physics, Mahatma Gandhi University, Kottayam, Kerala, India, held at School of Chemical Sciences Auditorium on 8-10<sup>th</sup> December 2017, (SIL 12), Pg. 71.
76. P. Sakthivel, K. Guna, I. Ragavan, A. Prakasam and **P. M. Anbarasan**, “**Experimental and theoretical studies of the 4-Methyl-3- Nitrobenzonitrile (4M3NBN) Metal-Free Organic Dyes for Efficient Solid-State Dye-Sensitized Solar Cells**”, **International Conference on Molecular Spectroscopy (ICMS - 2017)** Organized by International Unit on Macromolecular Science and Engineering (IUMSE), Mahatma Gandhi University, Kottayam, Wuhan University, Wuchang Dist., Hubei, China & Beijing University of Chemical Technology, China & School of Applied of Physics, Mahatma Gandhi University, Kottayam, Kerala, India, held at School of Chemical Sciences Auditorium on 8-10<sup>th</sup> December 2017, (SIL 24), Pg.93.
77. P. Sakthivel, K. Periyasamy, **P. M. Anbarasan**, “**Geometries, Electronic Structures and Vibrational Spectral Studies of 4-Aminopyridine-2-Carbonitrile (4AP2CN) Dye Using Quantum Chemical Calculations for Dye Sensitized Solar Cells**”, **International Conference on Molecular Spectroscopy (ICMS - 2017)** Organized by International Unit on Macromolecular Science and Engineering (IUMSE), Mahatma Gandhi University, Wuhan University, Wuchang Dist., Hubei, China & Beijing University of Chemical Technology, China & School of Applied of Physics, Mahatma Gandhi University, Kottayam, Kerala, India, held at School of Chemical Sciences Auditorium on 8-10<sup>th</sup> December 2017, (SIL.25), Pg. 94.
78. M. Deepana, A. Arunkumar, M. Prakasam and **P. M. Anbarasan**, “**First Principle Study of Highly Efficient or Ganic Dye Sensitized Solar Cell Based on D-II-A Architecture With Different Spacer Units**” in **the National Conference on Advanced Materials for Photovoltaic and Supercapacitors (NCAMPS – 2017)** held on 23.11.2017, organized by Department of Physics, Mahendra Engineering College (Autonomous), Mahendrapuri, Mallasamudram, Tiruchengodu, Namakkal, 637501, Tamilnadu, Paper Id: PP03.
79. C. Vidya, A. Arunkumar, I. Ragavan and **P. M. Anbarasan**, “**Crystallization and Characterization of Piperidinium 4-Nitrophenolate Using Quantum Chemical Calculations for Optoelectronic Applications**” in **the National Conference on Advanced Materials for Photovoltaic and Supercapacitors (NCAMPS – 2017)** held on 23.11.2017, organized by Department of Physics, Mahendra Engineering College (Autonomous), Mahendrapuri, Mallasamudram, Tiruchengodu, Namakkal, 637501, Tamilnadu. Paper Id: PP05

80. C. Vidya, A. Arunkumar, I. Ragavan and **P. M. Anbarasan**, “**Crystallization and Characterization of Piperidinium 4-Nitrophenolate Using Quantum Chemical Calculations for Optoelectronic Applications**” in the **National Conference on Advanced Materials for Photovoltaic and Supercapacitors (NCAMPS – 2017)** held on 23.11.2017, organized by Department of Physics, Mahendra Engineering College (Autonomous), Mahendrapuri, Mallasamudram, Tiruchengodu, Namakkal, 637501, Tamilnadu. Paper Id: PP06.
81. S. Shanavas, A. Priyadharsan, and **P. M. Anbarasan**, “**Enhancement in Photocatalytic and Antibacterial Performance of rGO Based Ternary Nanocomposite**” in the **National Conference on Advanced Materials for Photovoltaic and Supercapacitors (NCAMPS – 2017)** held on 23.11.2017, organized by Department of Physics, Mahendra Engineering College (Autonomous), Mahendrapuri, Mallasamudram, Tiruchengodu, Namakkal, 637501, Tamilnadu, Paper Id: OP07 - **Cash Award for the Best Oral Presentation.**
82. C. Indira Priyadharsini, A. Prakasam and **P. M. Anbarasan**, “**Synthesis & Characterisation of Perovskite Type Zn Doped SrTiO<sub>3</sub> Solar Cells**” in the **National Conference on Advanced Materials for Photovoltaic and Supercapacitors (NCAMPS – 2017)** held on 23.11.2017, organized by Department of Physics, Mahendra Engineering College (Autonomous), Mahendrapuri, Mallasamudram, Tiruchengodu, Namakkal, 637501, Tamilnadu, Paper Id: OP08
83. A. Priyadharsan, S. Shanavas and **P. M. Anbarasan**, **Green Synthesis of ZnO-CdS-Reduced Graphene Oxide Ternary Nanocomposites with Highly Enhanced Photocatalytic Activity**, Presented at **National Conference on “REACHING THE UNREACHED THROUGH SCIENCE AND TECHNOLOGY’** held during 09-11, October, 2017 organized by ISCA, Coimbatore Chapter, Kongunadu Arts and Science College, Coimbatore - 641 029, Sponsored by Indian Science Congress Association, Kolkata. NCPP-024, pg. 135
84. S. Shanavas, A. Priyadharsan and **P. M. Anbarasan**, “**Mechanistic Investigation on Photocatalytic and Antibacterial Performance of Novel Pervoskite/Metal Oxide/rGO Ternary Nanocomposite: A New Approach on Hybrid catalyst**” **International Conference on Materials Science and Technology (ICMST)** held on 5<sup>th</sup> October 2017, organized by Post Graduate and Research Department of Physics, Gonzanga College of Arts and Science for Women, Krishnagiri, Tamil Nadu, India. Page no.19 - **Cash Award for the Best Oral Presentation.**
85. T. Suganthi, I. Ragavan, **P. M. Anbarasan** and A. Prakasam, “**Theoretical Investigation of 3, 4-Difluorophenylacetone nitrile for Organic Dye-Sensitizer in Dye-Sensitized Solar Cells (DSCs)**” **National Conference on Recent Advances in Physics (NCRAP 2017)** held on 20<sup>th</sup> September 2017, organized by Department of Physics, Kavignar Ramalingam Government Arts College for Women, Namakkal. Pg. No: op-6.
86. S. Shanavas, A. Priyadharsan and **P. M. Anbarasan**, “**Photodegradation of Reactive Blue160 via Graphene Based Hybrid Nanocomposite under Solar Light Irradiation**”

National **Conference on Recent Advances in Physics (NCRAP 2017)** held on 20<sup>th</sup> September 2017, Organized by Post Graduate and Research Department of Physics, Namakkal Kavignar Ramalingam Government Arts College for Women, Namakkal. Tamil Nadu, India. Pg. No. op-7 - **Cash Award for the Best Oral Presentation.**

87. A. Nisha, **P. M. Anbarasan** and K.B.Rajesh, “**SPR based biosensor for detecting biomolecules using magnetic material**” in the **International Conference on Materials Science and Technology (ICMAST-2017)** organized by Department of Physics, Pachamuthu College of Arts and Science for Women in collaboration with Elavenil Science Association, Chennai, held on 28-29, August, 2017, pg. 17
88. A. Arun Kumar, M. Prakasam and **P. M. Anbarasan**, “**Quantum chemical study of indolo (3, 2, 1, k) Carbazole for dye sensitized solar cells: Effects of acceptor groups on optoelectronic properties**” **International Conference on Material Science and Technology (ICMAST-2017)** held on 28<sup>th</sup>-29<sup>th</sup> August, 2017, Organized by Pachamuthu Colleague of Arts and Science for Women in Collaboration with Elavenil Science Association, Chennai, Tamil Nadu, India. Pg. No. 17
89. S. Shanavas, A. Priyadharsan and **P. M. Anbarasan**, “**Effects of Electron Trapping on Degradation of Organic Pollutants by Graphene Based Hybrid Nanocomposite**” **International Conference on Material Science and Technology (ICMAST-2017)** held on 28<sup>th</sup>-29<sup>th</sup> August, 2017, Organized by Pachamuthu Colleague of Arts and Science for Women in Collaboration with Elavenil Science Association, Chennai, Tamil Nadu, Pg. No: 63 - **Cash Award for the Best Oral Presentation.**
90. C. Vidya, A. Arun Kumar, A. Priyadharsan and **P. M. Anbarasan**, “**Synthesis, Growth, and Characterization of Bis (2- Amino-4-Methylppridinium) Terephthalate Tetrahydrate for NLO Application: Using First Principle Theory**” **One day Research Conference on Advance in Material Science, held on 21<sup>st</sup> August 2017**, Organized by PG and Research Department of Physics, Mahendra Arts and Science College, Kallipatti (PO), Tiruchengode (TK), Namakkal (DT), Pg. No.24.
91. C. Boopathy, L. Kavitha, **P. M. Anbarasan** and D.Gopi, “**A Mathematical Model for Blood Flow in the External Uniform Magnetic field**” in the **International Conference on Advanced Materials Science and Technology (ICAMST - 2017)** organized by the Department of Physics, Bannari Amman Institute of Technology, Sathyamangalam – 638 401, Erode (Dist.), Tamilnadu, held on 17-19, August, 2017, OP-55.
92. M. Prakasam and **P. M. Anbarasan** “**Phenoxazine Based Photosensitizers for Dye Sensitized Solar Cells: A First Principle Study**” in the Souvenir of **The 2<sup>nd</sup> International Conference on Electrochemical Science and Technology (ICONEST – 2017), Theme: Electrochemistry, Electroplating, Energy, Environment and Corrosion (E4C)** organized by The Electrochemical Society of India and Department of Inorganic and Physical chemistry, Indian Institute of Science, Bengaluru, India held on August 10-12, 2017, PP-Eng-49.

93. I. Ragavan, M. Prakasam, A. Prakasam and **P.M. Anbarasan** “**Vibrational Studies, Molecular Electrostatic Potential, UV-Vis, Lewis Perturbation analysis, APT, NLO and Thermodynamical Properties of 3-(Benzyloxy) Benzoic acid**” in the Proceedings of the **One Day International Seminar on Materials Science and Technology (ISMST - 2017)** organized by Department of Physics, Mother Teresa Women’s University, Attuvampatti, Kodaikanal, Dindigul (District) Tamil Nadu - 624101 held on 04.08.2017, OR-29, pg. 36
94. S. Tamilarasu, **P. M. Anbarasan**, G. Velraj, “**Spectroscopic and Statistical Studies of Archaeological Pottery Samples Recently Excavated from Thiruikkampuliyur Site in South India**” in the proceedings of the **National Conference on Emerging Trends in Environmental Research (NCETER-17)** organised by the Department of Physics, SSN College of Engineering, Rajiv Gandhi Salai (OMR), Kalavakkam, Chennai – 603110, Tamilnadu, held on 22<sup>nd</sup> July 2017, ER-8, page 25.
95. S. Vennila, A. Pavithra, M. Prakasam and **P. M. Anbarasan**, “**A Spacer to Enhance Light Absorption of Organic Dye-Sensitized Solar Cells and Influences on Charge Transfer Dynamics: A Computational Study**” in the Proceedings of the **International Conference on Advances in Materials (AiM-2017)** Organised by Department of Physics, M. Kumarasamy College of Engineering, Thalavapalayam, Karur, Tamilnadu, 7<sup>th</sup> April, 2017, PP-36, pg. 85
96. R. Gnanadeepam, M. Rajalingam,, M. Prakasam and **P. M. Anbarasan**, “**Influence of Donor at D- $\pi$ -A Based Dyes Toward More Efficiently Sensitizer for Dye-Sensitized Solar Cells: A Computational Study**” Proceedings of the **International Conference on Advances in Materials (AiM-2017)** Organised by Department of Physics, M. Kumarasamy College of Engineering, Thalavapalayam, Karur, Tamilnadu, held on 7<sup>th</sup> April, 2017, PP-38, pg. 87
97. K. M. Prabu, **P. M. Anbarasan**, G. Kalaiyan, S. Kanimozhi & M. Anand Sagaya Chinnarani, “**Study of Geometrical, Electronic Structure, Spectral and NLO Properties of Marsileaquadrifolialinn Sensitizer for Solar Cell Applications**” in the **National Symposium on Recent Advances in Nanoscience and Nanotechnology (NSRANN – 2017)** organized by Department of Physics, Periyar University, Salem – 636 011, Tamilnadu, held on 15.03.2017, PP02, pg. 01
98. D. Vasuki, I. Ragavan, M. Prakasam, A. Arunkumar, A. Prakasam and **P. M. Anbarasan**, “**Study of Chemical Reactivity in Theoretical Parameters of Efficiency in Novel Carbazole Derivatives For Dye Sensitized Solar Cells Using DFT**” in the **National Symposium on Recent Advances in Nanoscience and Nanotechnology (NSRANN – 2017)** organized by Department of Physics, Periyar University, Salem – 636 011, Tamilnadu, held on 15.03.2017, PP39, pg. 30
99. A. Arunkumar and **P. M. Anbarasan**, “**The Effect of Spacer Group in the Performance of Triphenylamine Based Dyes for Dye Sensitized Solar Cells: A Theoretical Study**” in the **National Symposium on Recent Advances in Nanoscience and Nanotechnology**

(NSRANN – 2017) organized by Department of Physics, Periyar University, Salem – 636 011, Tamilnadu, held on 15.03.2017, PP42, pg. 33

100. P. Girija, C. Vidya and P. M. Anbarasan, “**Synthesis and Characteristic Studies of Mercury Doped Potassium Hydrogen Phthalate for Optoelectronic Applications**” in the **National Symposium on Recent Advances in Nanoscience and Nanotechnology (NSRANN – 2017)** organized by Department of Physics, Periyar University, Salem – 636 011, Tamilnadu, held on 15.03.2017, PP43, pg. 33
101. S. Shanavas, A. Priyadharsan and P. M. Anbarasan, “**Mechanistic Investigation of Visible Light Driven Novel La<sub>2</sub>CuO<sub>4</sub>/CeO<sub>2</sub>/rGO Ternary Hybrid Nanocomposites for Enhanced Photocatalytic Performance and Antibacterial Activity**” in the **National Symposium on Recent Advances in Nanoscience and Nanotechnology (NSRANN – 2017)** organized by Department of Physics, Periyar University, Salem – 636 011, Tamilnadu, held on 15.03.2017, PP49, pg. 38
102. A. Priyadharsan, S. Shanavas, and P. M. Anbarasan, “**Facile synthesis of reduced Graphene Oxide (rGO)/metal oxides (CeO<sub>2</sub>/SnO<sub>2</sub>) photocatalyst: an efficient photocatalytic performance**” in the **National Symposium on Recent Advances in Nanoscience and Nanotechnology (NSRANN – 2017)** organized by Department of Physics, Periyar University, Salem – 636 011, Tamilnadu, held on 15.03.2017, PP50, pg. 39
103. A. Priyadharsan, A. Arulvel and P. M. Anbarasan, “**Enhanced Solar-light Driven Photocatalytic Degradation of Methylene Orange by Cu<sub>2</sub>O/ZnO/rGO Ternary Nanohybrid Structures**” in the **National Symposium on Recent Advances in Nanoscience and Nanotechnology (NSRANN – 2017)** organized by Department of Physics, Periyar University, Salem – 636 011, Tamilnadu, held on 15.03.2017, PP51, pg. 40
104. S.. Shanavas, A. Priyadharsan and P. M Anbarasan, “**An Investigation on Photocatalytic and Antibacterial Performance of GO Based Ternary Nanocomposite Under Visible Light Irradiation**” in the **National Symposium on Recent Advances in Nanoscience and Nanotechnology (NSRANN – 2017)** organized by Department of Physics, Periyar University, Salem – 636 011, Tamilnadu, held on 15.03.2017, PP52, pg. 40
105. M. Sumathi I. Ragavan, A. Prakasam and P.M. Anbarasan, “**Electronic and Optical Properties of 3-((E)-3-(3-benzhydrylphenyl)prop-1-enyl) beryline Derivatives as Hole Transporting Materials: A First Principles Investigation**”, **National Conference on “Emerging Challenges in Materials Science”** Organized by Departments of Physics, Chemistry & Electronics & Communication, Muthayammal College of Arts & Science, Rasipuram - 637 408, Namakkal (Dt). Tamil Nadu, India, during 27<sup>th</sup> & 28<sup>th</sup> January 2017, (OP-3), pg. 23.
106. K. Jayaprakash, R. Raja, M. Arjunker, A. Prakasam & P. M. Anbarasan, “**Improve the efficiency of dye sensitized solar cell using DFT and TD-DFT of the dye (2E)-3-(4-(4-methoxystyryl) phenyl)-2-cyanoacrylic acid**” **National Conference on “Emerging Challenges in Materials Science”** Organized by Departments of Physics, Chemistry &

Electronics & Communication, Muthayammal College of Arts & Science, Rasipuram - 637 408, Namakkal (Dt). Tamil Nadu, India, during 27<sup>th</sup> & 28<sup>th</sup> January 2017, (OP-6), pg. 23.

107. C. Indira Priyadharsini, A. Suganya , A. Vilsu, A. Kavya, M. Muthusamy, **P. M. Anbarasan**, “**Preparation and Characterisation of Perovskite Type Nanoparticles for Solar Cell Applications**” **National Conference on “Emerging Challenges in Materials Science**” Organized by Departments of Physics, Chemistry & Electronics & Communication, Muthayammal College of Arts & Science, Rasipuram - 637 408, Namakkal (Dt). Tamil Nadu, India, during 27<sup>th</sup> & 28<sup>th</sup> January 2017, (OP-10), pg. 29.
108. M. Kaliyappan, C. Indira Priyadharsini, A. Priyadharsan, A. Arunkumar, C. Vidya and **P. M. Anbarasan**, “**Synthesis & Comparative Study of SrMnO<sub>3</sub> through Various Synthesis Methods**” **National Conference on “Emerging Challenges in Materials Science**” Organized by Departments of Physics, Chemistry & Electronics & Communication, Muthayammal College of Arts & Science, Rasipuram - 637 408, Namakkal (Dt). Tamil Nadu, India, during 27<sup>th</sup> & 28<sup>th</sup> January 2017, (OP-15), pg. 32
109. S. Shanavas, A. Priyadharsan, A. Arunkumar and **P. M. Anbarasan**, “**Enhanced Photocatalytic and Antibacterial Activity of Cu-TiO<sub>2</sub>/rGO Hybrid Heterostructures under Illumination of Visible Light**” **National Conference on “Emerging Challenges in Materials Science**” Organized by Departments of Physics, Chemistry & Electronics & Communication, Muthayammal College of Arts & Science, Rasipuram - 637 408, Namakkal (Dt). Tamil Nadu, India, during 27<sup>th</sup> & 28<sup>th</sup> January 2017, (OP-23), pg. 38
110. D. Vasuki, S. Padmanathan, A. Prakasam and **P.M. Anbarasan**, “**DFT and TD-DFT Using 2, 3-dihydro-2-(2-hydroxyphenyl) chromen-4-one as Photosensitizers for Dye-sensitized Solar Cells**” **National Conference on “Emerging Challenges in Materials Science**” Organized by Departments of Physics, Chemistry & Electronics & Communication, Muthayammal College of Arts & Science, Rasipuram - 637 408, Namakkal (Dt). Tamil Nadu, India, during 27<sup>th</sup> & 28<sup>th</sup> January 2017, (PP-4), pg. 40
111. M. Gomathi, C. Indira Priyadharsini, M. Indumathy, A. Prakasam and **P. M. Anbarasan**, “**Structural and Optical Properties of Mg Doped SnO<sub>2</sub> Nanoparticles by the Co-Precipitation Method**” **National Conference on “Emerging Challenges in Materials Science**” Organized by Departments of Physics, Chemistry & Electronics & Communication, Muthayammal College of Arts & Science, Rasipuram - 637 408, Namakkal (Dt). Tamil Nadu, India, during 27<sup>th</sup> & 28<sup>th</sup> January 2017, (PP-8), pg. 43
112. L. Mohana, C. Indira Priyadharsini, M. Indumathy, M. Gomathi, A. Prakasam and **P. M. Anbarasan**, “**Structural and Optical Properties of La Doped SrTiO<sub>3</sub> Nanoparticles by Hydrothermal Method**” **National Conference on “Emerging Challenges in Materials Science**” Organized by Departments of Physics, Chemistry & Electronics & Communication, Muthayammal College of Arts & Science, Rasipuram - 637 408, Namakkal (Dt). Tamil Nadu, India, during 27<sup>th</sup> & 28<sup>th</sup> January 2017, (PP-9), pg. 43

113. M. Indumathy, C. Indira Priyadharsini, M. Gomathi, A. Prakasam and **P. M. Anbarasan**, “**Structural, Functional and Optical Properties of Nanocrystalline Zn–Ce Doped Synthesized SNO<sub>2</sub> by the Co-Precipitation Method**” **National Conference on “Emerging Challenges in Materials Science”** Organized by Departments of Physics, Chemistry & Electronics & Communication, Muthayammal College of Arts & Science, Rasipuram - 637 408, Namakkal (Dt). Tamil Nadu, India, during 27<sup>th</sup> & 28<sup>th</sup> January 2017, (PP-10), pg. 44
114. A. Priyadharsan, A. Arunkumar, C. Vidya, C. Indira Priyadharsini, S. Shanavas and **P. M. Anbarasan**, “**Synthesis of Fe<sub>2</sub>O<sub>3</sub>-WO<sub>3</sub>-Graphene Composite: A Novel Hybrid Catalyst for Congo Red Degradation and Antibacterial Activity**” **National Conference on “Emerging Challenges in Materials Science”** Organized by Departments of Physics, Chemistry & Electronics & Communication, Muthayammal College of Arts & Science, Rasipuram - 637 408, Namakkal (Dt). Tamil Nadu, India, during 27<sup>th</sup> & 28<sup>th</sup> January 2017, (PP-14), pg. 46
115. A. Arunkumar and **P. M. Anbarasan**, “**The Effect of Spacer Group in the Performance of Triphenylamine Based Dyes For Dye Sensitized Solar Cells: A Theoretical Study**” **National Conference on “Emerging Challenges in Materials Science”** Organized by Departments of Physics, Chemistry & Electronics & Communication, Muthayammal College of Arts & Science, Rasipuram - 637 408, Namakkal (Dt). Tamil Nadu, India, during 27<sup>th</sup> & 28<sup>th</sup> January 2017, (PP-15), pg. 47
116. C. Vidya and **P. M. Anbarasan**, “**Solar energy crisis and recent technological enlargement in India**” **National Conference on “Emerging Challenges in Materials Science”** Organized by Departments of Physics, Chemistry & Electronics & Communication, Muthayammal College of Arts & Science, Rasipuram - 637 408, Namakkal (Dt). Tamil Nadu, India, during 27<sup>th</sup> & 28<sup>th</sup> January 2017, (PP-16), pg. 48.
117. D. Krishnamoorthy, I. Ragavan, A. Prakasam, and **P.M. Anbarasan**, “**Efficient of Organic Dye sensitized Solar Cells with 4-(4-nitrostyryl)-1-methoxy-2-methylbenzeneis using Density Functional Theory**” **National Conference on Recent Trends in Materials Science – 2017 (NCRTMS-2017)** held on 5<sup>th</sup> January 2017, organized by Department of Physics, Thiruvalluvar Govt. Arts College, Rasipuram. No: pp-7.
118. P. Nallathambi, A. Prakasam, and **P. M. Anbarasan**, “**Time Dependent Density Functional Theory Study with Stilbene Based Dye-Sensitized Solar Cells**” **National Conference on Recent Trends in Materials Science – 2017 (NCRTMS-2017)** held on 5<sup>th</sup> January 2017, organized by Department of Physics, Thiruvalluvar Govt. Arts College, Rasipuram, No. pp-2.
119. M. Sumathi, A. Prakasam, and **P. M. Anbarasan**, “**Recent Developed in Chemical Stability of Perovskite-based Solar Cells,**” **National Conference on Recent Trends in Materials Science – 2017 (NCRTMS-2017)** held on 5<sup>th</sup> January 2017, organized by Department of Physics, Thiruvalluvar Govt. Arts College, Rasipuram. No: pp-3.

120. K. Jayaprakesh, R. Raja, A. Prakasam and **P. M. Anbarasan**, “**Quantum Chemical Calculation of Dye Sensitized Solar Cell using DFT and TD-DFT of the Dye (2E)-3-(4-(4-aminostyryl) phenyl)-2-cyanoacrylic**” **National Conference on Recent Trends in Materials Science – 2017 (NCRTMS-2017)** held on 5<sup>th</sup> January 2017 organized by Department of Physics, Thiruvalluvar Govt. Arts College, Rasipuram, No: pp-12.
121. S. Inthumathi, A. Prakasam, and **P. M. Anbarasan**, “**A Quantum Chemical Study on Some Polyatomic Molecules Using DFT Method**” **National Conference on Recent Trends in Materials Science – 2017 (NCRTMS-2017)** held on 5<sup>th</sup> January 2017 organized by Department of Physics, Thiruvalluvar Govt. Arts College, Rasipuram, No: pp-12.
122. I. Ragavan, A. Prakasam, and **P. M. Anbarasan**, “**Experimental and Theoretical studies of Vibrational Spectra (FT-IR, FT-Raman), Molecular Electrostatic Potential and Non-linear optical Properties: Using DFT method**” **National Conference on Recent Trends in Materials Science – 2017 (NCRTMS-2017)** held on 5<sup>th</sup> January 2017 organized by Department of Physics, Thiruvalluvar Govt. Arts College, Rasipuram. Abstract no: pp-1
123. K. Suguna, P. B. Nagabalasubramanian and **P. M. Anbarasan**, “**Effect of Solvents in Chlorophyll from Azadirachta Indica (Neem Leaves) on the Performance of Dye-Sensitized Solar Cells**” **Proceedings of National Conference on “Material Science and Technology: Recent Trends And Future Prospects (NCMST: RTFP-2016)”** on 29.12.2016 organised by PG & Research Department of Physics, Arignar Anna Government Arts College, Villupuram, Tamilnadu, India - 605 602, A-56, pg. 71.
124. M. Prakasam, A. Arunkumar and **P. M. Anbarasan**, “**Triphenylamine Based Organic Dye as Efficient Sensitizer for DSSCs: Computational Study**”, Proceedings of the **International Conference on Modern Materials Research-2016 (ICMMR-2016)**, 19-20, December, 2016 organized by PG and Research Department of Physics, Sri Vidya Mandir Arts and Science College, Katteri, Uthangarai, Krishnagiri (District), Tamilnadu, India – 636 902, in Collaboration with Indian Spectrophysics Association (ISPA), Chennai - 600 030, CP-09, pg. 40, **ISBN: 978-93-85648-86-5, Published by Eswari Publishers and SLAA Publications Pvt. Ltd., Bangalore – 32.**
125. L. Arivu Selvam, M. Prakasam and **P. M. Anbarasan**, “**DFT and TD-DFT studies on 7-Amino-4-methylcoumarin dye with Photoelectronic and Non-Linear Optical Property Study**”, Proceedings of the **International Conference on Modern Materials Research-2016 (ICMMR-2016)**, 19-20, December, 2016 organized by PG and Research Department of Physics, Sri Vidya Mandir Arts and Science College, Katteri, Uthangarai, Krishnagiri (District), Tamilnadu, India – 636 902, in Collaboration with Indian Spectrophysics Association (ISPA), Chennai - 600 030, CP-20, pg. 49, **ISBN: 978-93-85648-86-5, Published by Eswari Publishers and SLAA Publications Pvt. Ltd., Bangalore – 32.**
126. S. Padmanathan, A. Prakasam, M. Prakasam and **P. M. Anbarasan** “**Theoretical Investigation and Electronic Structure NBO Analysis on the structure 2-(pyridine-4-yl)ethanamine**” Proceedings of the **International Conference on Modern Materials Research-2016 (ICMMR-2016)**, 19-20, December, 2016 organized by PG and Research

Department of Physics, Sri Vidya Mandir Arts and Science College, Katteri, Uthangarai, Krishnagiri (District), Tamilnadu, India – 636 902, in Collaboration with Indian Spectrophysics Association (ISPA), Chennai - 600 030, CP-26, pg. 53, ISBN: 978-93-85648-86-5, Published by Eswari Publishers and SLAA Publications Pvt. Ltd., Bangalore – 32.

127. M. Sumathi, A. Prakasam and P. M. Anbarasan “**Gaussian Charge-Transfer Properties of Oxadiazole Organic Dye-Sensitized Solar Cells**” Proceedings of the **International Conference on Modern Materials Research-2016 (ICMMR-2016)**, 19-20, December, 2016 organized by PG and Research Department of Physics, Sri Vidya Mandir Arts and Science College, Katteri, Uthangarai, Krishnagiri (District), Tamilnadu, India – 636 902, in Collaboration with Indian Spectrophysics Association (ISPA), Chennai - 600 030, CP-62, pg. 90, ISBN: 978-93-85648-86-5, Published by Eswari Publishers and SLAA Publications Pvt. Ltd., Bangalore – 32.
128. D. Krishnamoorthy, I. Ragavan, A. Prakasam and P. M. Anbarasan “**Efficient Of Organic Dye-Sensitized Solar Cells With 4-(4-Nitrostyryl)-1-Methoxybenzeneis Using Density Functional Theory**” Proceedings of the **International Conference on Modern Materials Research-2016 (ICMMR2016)**, 19-20, December, 2016 organized by PG and Research Department of Physics, Sri Vidya Mandir Arts and Science College, Katteri, Uthangarai, Krishnagiri (District), Tamilnadu, India – 636 902, in Collaboration with Indian Spectrophysics Association (ISPA), Chennai - 600 030, CP-63, pg. 91 ISBN: 978-93-85648-86-5, Published by Eswari Publishers and SLAA Publications Pvt. Ltd., Bangalore – 32.
129. A. Priyadharsan, A. Arunkumar, C. Vidya S. Shanavas, M. Prakasam and P. M. Anbarasan “**An Investigation Into the Photocatalytic and Antibacterial Activates Over ZnO/Fe<sub>2</sub>O<sub>3</sub>/RG Ternary Nanocomposites**” Proceedings of the **International Conference on Modern Materials Research-2016 (ICMMR-2016)**, 19-20, December, 2016 organized by PG and Research Department of Physics, Sri Vidya Mandir Arts and Science College, Katteri, Uthangarai, Krishnagiri (District), Tamilnadu, India – 636 902, in Collaboration with Indian Spectrophysics Association (ISPA), Chennai - 600 030, CP-6820, pg. 99, ISBN: 978-93-85648-86-5, Published by Eswari Publishers and SLAA Publications Pvt. Ltd., Bangalore – 32.
130. A. Arunkumar and P. M. Anbarasan “**Theoretical Design of D- $\pi$ - $\pi$ -A Derivatives as High Performance of DSSCs: A First Principle Study**” Proceedings of the **International Conference on Modern Materials Research-2016 (ICMMR2016)**, 19-20, December, 2016 organized by PG and Research Department of Physics, Sri Vidya Mandir Arts and Science College, Katteri, Uthangarai, Krishnagiri (District), Tamilnadu, India – 636 902, in Collaboration with Indian Spectrophysics Association (ISPA), Chennai - 600 030, CP-69, pg. 100, ISBN: 978-93-85648-86-5, Published by Eswari Publishers and SLAA Publications Pvt. Ltd., Bangalore – 32.
131. K.M. Prabu, C.Vanniarasu, M. Prakash, E. Elanchezhian and P. M. Anbarasan “**Synthesis and Characterization of Pure and ZnO doped TiO<sub>2</sub> Nanoparticle**” Proceedings of the **International Conference on Modern Materials Research-2016 (ICMMR-2016)**, 19-20, December, 2016 organized by PG and Research Department of

Physics, Sri Vidya Mandir Arts and Science College, Katteri, Uthangarai, Krishnagiri (District), Tamilnadu, India – 636 902, in Collaboration with Indian Spectrophysics Association (ISPA), Chennai - 600 030, CP-80, pg. 110, ISBN: 978-93-85648-86-5, Published by Eswari Publishers and SLAA Publications Pvt. Ltd., Bangalore – 32.

132. K.M. Prabu, P. Meganathan, S.Kanimozhi, G. Venkatesh and P. M. Anbarasan “**Study Of Geometrical , Electronic Structure Spectral And NLO Properties of Tectona Grandis For Improve Efficiency Of Solar Cells**” Proceedings of the **International Conference on Modern Materials Research-2016 (ICMMR-2016)**, 19-20, December, 2016 organized by PG and Research Department of Physics, Sri Vidya Mandir Arts and Science College, Katteri, Uthangarai, Krishnagiri (District), Tamilnadu, India – 636 902, in Collaboration with Indian Spectrophysics Association (ISPA), Chennai - 600 030, CP-81, pg. 111, ISBN: 978-93-85648-86-5, Published by Eswari Publishers and SLAA Publications Pvt. Ltd., Bangalore – 32.
133. K.M. Prabu, R. Sugunesh, G. Kalaiyan, P. Arachimani and P. M. Anbarasan “**Fabrication and Characterization of Vertically Aligned Zinc Oxide (ZnO) Nanowire**” Proceedings of the **International Conference on Modern Materials Research-2016 (ICMMR-2016)**, 19-20, December, 2016 organized by PG and Research Department of Physics, Sri Vidya Mandir Arts and Science College, Katteri, Uthangarai, Krishnagiri (District), Tamilnadu, India – 636 902, in Collaboration with Indian Spectrophysics Association (ISPA), Chennai - 600 030, CP-99, pg. 123, ISBN: 978-93-85648-86-5, Published by Eswari Publishers and SLAA Publications Pvt. Ltd., Bangalore – 32.
134. A. Nallathambi, T. Saravanan, A. Prakasam and P. M. Anbarasan “**Density Functional Theory Study with Stilbene Based Dye-Sensitized Solar Cells**” Proceedings of the **International Conference on Modern Materials Research-2016 (ICMMR-2016)**, 19-20, December, 2016 organized by PG and Research Department of Physics, Sri Vidya Mandir Arts and Science College, Katteri, Uthangarai, Krishnagiri (District), Tamilnadu, India – 636 902, in Collaboration with Indian Spectrophysics Association (ISPA), Chennai - 600 030, CP-138, pg. 206, ISBN: 978-93-85648-86-5, Published by Eswari Publishers and SLAA Publications Pvt. Ltd., Bangalore – 32.
135. K.M. Prabu, K. Akilab, G.Venkatesh, V. Panneerselvi and P. M. Anbarasan “ **Dye Extracted From Mangiferin Leaves for Improve Efficiency of Solar Cells**” Proceedings of the **International Conference on Modern Materials Research-2016 (ICMMR-2016)**, 19-20, December, 2016 organized by PG and Research Department of Physics, Sri Vidya Mandir Arts and Science College, Katteri, Uthangarai, Krishnagiri (District), Tamilnadu, India – 636 902, in Collaboration with Indian Spectrophysics Association (ISPA), Chennai - 600 030, CP-155, pg. 218, ISBN: 978-93-85648-86-5, Published by Eswari Publishers and SLAA Publications Pvt. Ltd., Bangalore – 32.
136. D. Sakthi, M. Prakasam and P. M. Anbarasan, “**Theoretical Study and Design of pheneoxazine-Based p-type Organic Dyes with Different  $\pi$ -linkers for Dyes-Sensitized Solar Cells**”, Proceedings of the **International Conference on Modern Materials Research-2016 (ICMMR-2016)**, 19-20, December, 2016 organized by PG and Research

Department of Physics, Sri Vidya Mandir Arts and Science College, Katteri, Uthangarai, Krishnagiri (District), Tamilnadu, India – 636 902, in Collaboration with Indian Spectrophysics Association (ISPA), Chennai - 600 030, CP-163, pg. 234, ISBN: 978-93-85648-86-5, Published by Eswari Publishers and SLAA Publications Pvt. Ltd., Bangalore – 32.

137. I. Ragavan, M.Sumathi A. Prakasam, **P. M. Anbarasan**, “**Improvement of the Efficiency of Thiophene Based Organic Dye Sensitizer Using Density Functional Theory (DFT) And Time-Dependent DFT Calculation**” **DST -SERB Sponsored National Conference on Computational and Experimental Physics of Functional Materials (NCCEPFM -2016)** held on 16 & 17 Dcember - 2016 organized by Department of Physics, KSR Arts and Science College, Thiruchengode, Namakkal (Dt). PP-67, page No. 40.
138. Ragavan, S. Padmanathan, A. Prakasam and **P. M. Anbarasan**, “**NBO, HOMO, LUMO Analysis and Vibrational Spectra (FT-IR and FT-Raman) of 3-Choloro-3'-Methoxystilbene using Ab initio HF and DFT Methods**” **National Conference on Advanced Materials (NCAM-2016)** held on 7<sup>th</sup> October - 2016, organized by Department of Physics, School of Physical Sciences, St. Joseph’s College, Tiruchirappalli – 620002, No: GK-2.
139. T. Saravanakumaran, A. Prakasam and **P. M. Anbarasan**, “**Theoretical Investigation of Dye (E) M2C4T Sensitizer for Highly Efficient Dye Sensitized Solar Cells: Using Density Functional theory**” **National Conference on Advanced Materials (NCAM-2016)** held on 7<sup>th</sup> October - 2016, organized by Department of Physics, School of Physical Sciences, St. Joseph’s College, Tiruchirappalli - 620002. No: GK-3.
140. D. Krishnamoorthy, A. Prakesam and **P. M. Anbarasan**, “**Optical and Photovoltaic Properties of the n Linker in Donor-n-Acceptor Organic Dyes for High-Performance Sensitized Solar Cells**” **National Conference on Advanced Materials (NCAM-2016)** held on 7<sup>th</sup> October - 2016, organized by Department of Physics, School of Physical Sciences, St. Joseph’s College, Tiruchirappalli – 620002, No: TF-4.
141. I. Ragavan, A. Arunkumar, S. Padmanathan, **A. Prakasam, P. M. Anbarasan**, “**Molecular Structure, Vibrational Spectra, First Hyperpolarizability And HOMO, LUMO Studies of Trans-4-Hydroxystilbene by Quantum Chemical Calculations**” **International Conference on Biomolecules and their Prospects (ICBP-2016)** held on 19-20, September – 2016, organized by Departmetn of Physics, Selvamm Arts and Science College, Namakkal, page No. 82
142. M. Prakasam, D. Sakthi, S. Sivakumar and **P. M. Anbarasan**, “**The Molecular Design of the Stilbene Based Organic Dye as Efficient Sensitizer for Dye-Sensitized Solar Cells: First Principle Study**” in the Proceeding of the **National Conference on “Chemistry of Heterogeneous Emerging Materials (CHEM – CaS)**” Organized by Royal Alfred Nobel Association, PG and Research Department of Chemistry, E.R.K Arts And Science College, Erumiyampatti, Dharmapuri Dt, Tamil Nadu, India, 19<sup>th</sup> August 2016, P. 13, ISBN: 9 78-93-80173-99-3

143. I. Ragavan, M. Arjunker, A. Prakasam and **P. M. Anbarasan**, “**Quantum Chemical Studies on Structural, Vibrational, MPA, NPA And NLO of P-Ethoxybenzonitrile**” in the Proceeding of the **National Conference on “Chemistry of Heterogeneous Emerging Materials (CHEM – CaS)”** Organized by Royal Alfred Nobel Association, PG and Research Department of Chemistry, E.R.K Arts And Science College, Erumiyampatti, Dharmapuri Dt, Tamil Nadu, India, 19<sup>th</sup> August 2016, P. 15, **ISBN: 9 78-93-80173-99-3**
144. A. Priyadharsan, S. Shanavas and **P. M. Anbarasan** “**Designed Synthesis of a Novel Cu<sub>2</sub>O/TiO<sub>2</sub>/RGO Ternary Nanocomposite and their Enhanced Photocatalytic Activity under Illumination with Visible Light**” in the Proceeding of the **National Conference on “Chemistry of Heterogeneous Emerging Materials (CHEM – CaS)”** Organized by Royal Alfred Nobel Association, PG and Research Department of Chemistry, E.R.K Arts And Science College, Erumiyampatti, Dharmapuri Dt, Tamil Nadu, India, 19<sup>th</sup> August 2016, P. 35, **ISBN: 9 78-93-80173-99-3**
145. I. Ragavan, A. Prakasam and **P. M. Anbarasan**, “**DFT and TD-DFT Study on Organic Dye Sensitizers 4, 4’-Dihydroxy-Azobenzene for Solar Cells**” **International Conference on & Inter-College Meet on Recent Advancements in Advanced Materials (IC&ICMRAAM-2016)** held on 8<sup>th</sup> July-2016 organized by Department of Physics, Ananda College, Devakottai - 630 303, Sivagangai (District), No. P5.
146. D. Sakthi, M. Prakasam, A. Prakasam and **P. M. Anbarasan**, “**Theoretical Investigations of 1,5-Diaminoanthraquinone Organic Dye Sensitizer for Dye Sensitizer Solar Cell**” in the Proceeding of the **National Conference On “Gravitate Applications In Nanotechnology” (GAIN‘16)** Organized by Albert Einstein Association, Department of Physics, E.R.K Arts And Science College, Erumiyampatti, Dharmapuri Dt, Tamil Nadu, India, 21<sup>st</sup> July 2016, P. 12, **ISBN: 9 789380 173566**
147. A. Priyadharsan, S. Shanavas and **P. M. Anbarasan** “**An Intriguing And Mechanistic Investigation Insight Into The Superior Photocatalytic Performance By Reduced Graphene Oxide (RGO)- Metal Oxides (TiO<sub>2</sub>/WO<sub>3</sub>) Based Ternarynanocomposite**” in the Proceeding of the **National Conference On “Gravitate Applications In Nanotechnology” (GAIN‘16)** Organized by Albert Einstein Association, Department of Physics, E.R.K Arts And Science College, Erumiyampatti, Dharmapuri Dt, Tamil Nadu, India, 21<sup>st</sup> July 2016, P. 13, **ISBN: 9 789380 173566**
148. K.M. Prabu, E. Elanchelian, P. Vijayalakshmi and **P. M. Anbarasan**, “**Bio-Synthesis And Characterization Of Silver Nanoparticles By Using Medical Plant Melia Dubia**” in the Proceeding of the **National Conference On “Gravitate Applications In Nanotechnology” (GAIN‘16)** Organized by Albert Einstein Association, Department of Physics, E.R.K Arts And Science College, Erumiyampatti, Dharmapuri Dt, Tamil Nadu, India, 21<sup>st</sup> July 2016, P. 19, **ISBN: 9 789380 173566**
149. I. Ragavan, M. Prakasam A. Prakasam and **P.M. Anbarasan**, “**Quantum Chemical Studies On Structural, Vibrational, MPA, NPA and NLO Of 4-Methylstilbene**” in the

Proceeding of the **National Conference On “Gravitate Applications In Nanotechnology” (GAIN’16)** Organized by Albert Einstein Association, Department of Physics, E.R.K Arts And Science College, Erumiyampatti, Dharmapuri Dt, Tamil Nadu, India, 21<sup>st</sup> July 2016, P. 67, ISBN: 9 789380 173566

150. S. Padmanathan, A. Arunkumar, A. Prakasam and **P. M. Anbarasan** **“Theoretical Investigations Of 4-Aminostilbene Organic Dye Sensitizer For Dye Sensitizer Solar Cell”** in the Proceeding of the **National Conference On “Gravitate Applications In Nanotechnology” (GAIN’16)** Organized by Albert Einstein Association, Department of Physics, E.R.K Arts And Science College, Erumiyampatti, Dharmapuri Dt, Tamil Nadu, India, 21<sup>st</sup> July 2016, P. 68, ISBN: 9 789380 173566
151. M. Prakasam, D. Sakthi and **P. M. Anbarasan**, **“Theoretical Design Of 4-Stilbenecarbaldehyde Based Organic Dyes With Different Hybrid Analysis For Dye-Sensitized Solar Cells”** in the Proceeding of the **National Conference On “Gravitate Applications In Nanotechnology” (GAIN’16)** Organized by Albert Einstein Association, Department of Physics, E.R.K Arts And Science College, Erumiyampatti, Dharmapuri Dt, Tamil Nadu, India, 21<sup>st</sup> July 2016, P. 69, ISBN: 9 789380 173566
152. D. Sakthi, M. Arjunker, A. Prakasam and **P. M. Anbarasan**, **“Molecular Structure, Vibrational Spectra, First Hyperpolarizability And HOMO, LUMO Studies On Trans-4-Chlorostilbene By Density Functional Theory”** in the Proceeding of the **National Conference On “Gravitate Applications In Nanotechnology” (GAIN’16)** Organized by Albert Einstein Association, Department of Physics, E.R.K Arts And Science College, Erumiyampatti, Dharmapuri Dt, Tamil Nadu, India, 21<sup>st</sup> July 2016, P. 70, ISBN: 9 789380 173566
153. S. Prabhu, M. Prakasam, A. Priyadharsan, A. Arunkumar and **P. M. Anbarasan**, **“Synthesis and Characterization of ZnO Nanoparticles for Photo Anode in DSSC Application”** in the Proceeding of the **National Conference On “Gravitate Applications In Nanotechnology” (GAIN’16)** Organized by Albert Einstein Association, Department of Physics, E.R.K Arts And Science College, Erumiyampatti, Dharmapuri Dt, Tamil Nadu, India, 21<sup>st</sup> July 2016, P. 72, ISBN: 9 789380 173566
154. D.Santhoshmani, M. Prakasam, A. Priyadharsan, A. Arunkumar and **P. M. Anbarasan**, **“A Simple Hydrothermal Synthesis On Ag-ZnO-SnO<sub>2</sub> Nanochainforphoto Anode In DSSC Application”** in the Proceeding of the **National Conference On “Gravitate Applications In Nanotechnology” (GAIN’16)** Organized by Albert Einstein Association, Department of Physics, E.R.K Arts And Science College, Erumiyampatti, Dharmapuri Dt, Tamil Nadu, India, 21<sup>st</sup> July 2016, P. 75, ISBN: 9 789380 173566
155. M. Prakasam, M. Arjunker, A. Prakasam and **P. M. Anbarasan**, **“4-(3-(Dimethylamino) Styryl) Benzoic Acid as Sensitizer for DSSCs : Quantum Chemical Calculation”** Presented at **National Conference on Frontier Areas in Applied Physics (NCFAAP-2016)** Organized by Engineering Physics, Faculty of Engineering and Technology (FEAT), Annamalai University, Annamalainagar - 608 002, Tamil Nadu, India,

on 27<sup>th</sup> April, 2016, pg. P-94, 65.

156. A. Ragavan, C. Arunkumar, A. Prakasam and **P. M. Anbarasan**, “**Vibrational Spectroscopic (FTIR And FT Raman) Studies, First Order Hyperpolarizabilities and HOMO, LUMO Analysis of 4-Isopropyl Benzene using Abinitio HF And DFT Methods**” Presented at **National Conference on Frontier Areas in Applied Physics (NCFAAP-2016)** Organized by Engineering Physics, Faculty of Engineering and Technology (FEAT), Annamalai University, Annamalainagar - 608 002, Tamil Nadu, India, on 27<sup>th</sup> April, 2016, pg. P-95, 65.
157. A. Pavithra, M. Prakasam, A. Priyadharsan, A. Arunkumar and **P. M. Anbarasan**, “**Quantum Chemical Investigation Of Azulene Dye As Sensitizer For Dssc Application**” **National Conference on Energy, Environment & Ethics (E<sup>3</sup> - 2016)** organized by Department of Engery Studies, Periyar University, Salem – 636 011, Tamilnadu & jointly organized by Centre for New and Renewable Energy Studies (CNRES), Periyar University, Salem – 636 011, Tamilnadu, during 28-29, March, 2016, pg. 16.
158. V. Karthika, M. Prakasam, A. Priyadharsan, A. Arunkumar and **P. M. Anbarasan**, “**Stilbene Modified Dye As A Sensitizer For Dssc: Quantum Chemical Calculations**” **National Conference on Energy, Environment & Ethics (E<sup>3</sup> - 2016)** organized by Department of Engery Studies, Periyar University, Salem – 636 011, Tamilnadu & jointly organized by Centre for New and Renewable Energy Studies (CNRES), Periyar University, Salem – 636 011, Tamilnadu, during 28-29, March, 2016, pg. 17.
159. I. Ragavan, M.S. Karthick, A. Prakasam, **P. M. Anbarasan** and M.Prakasam, “**Quantum Chemistry Calculations of 2- Aminopyrimidine-5-Carbonitrile Dye Sensitizer for Solar Cells**” **National Conference on Energy, Environment & Ethics (E<sup>3</sup> - 2016)** organized by Department of Engery Studies, Periyar University, Salem – 636 011, Tamilnadu & jointly organized by Centre for New and Renewable Energy Studies (CNRES), Periyar University, Salem – 636 011, Tamilnadu, during 28-29, March, 2016, pg. 37.
160. M. Arjun kumar, Arul kumar, A. Prakasam, **P. M. Anbarasan** and M.Prakasam “**Molecular Structure of 4-(1-3-Benzothiazol-2-Yl) Phthalonitril Dye Sensitizer for Solar Cells Applications via Density Functional Theory**” **National Conference on Energy, Environment & Ethics (E<sup>3</sup> - 2016)** organized by Department of Engery Studies, Periyar University, Salem – 636 011, Tamilnadu & jointly organized by Centre for New and Renewable Energy Studies (CNRES), Periyar University, Salem – 636 011, Tamilnadu, during 28-29, March, 2016, pg. 39.
161. C. Vidya, **P. M. Anbarasan** and A. Priyadharsan, “**Development of Solar Energy Towards A Destination In India**” **National Conference on Energy, Environment & Ethics (E<sup>3</sup> - 2016)** organized by Department of Engery Studies, Periyar University, Salem – 636 011, Tamilnadu & jointly organized by Centre for New and Renewable Energy Studies (CNRES), Periyar University, Salem – 636 011, Tamilnadu, during 28-29, March, 2016, pg. 46.

162. S. Shanavas, A. Priyadharsan and **P. M. Anbarasan**, “**Synthesis of CuO/TiO<sub>2</sub> Nanocomposite and Dye Extracts from Phyllanthus Niruri Leaves for Dye- Sensitized Solar Cell**” **National Conference on Energy, Environment & Ethics (E<sup>3</sup> - 2016)** organized by Department of Engery Studies, Periyar University, Salem – 636 011, Tamilnadu & jointly organized by Centre for New and Renewable Energy Studies (CNRES), Periyar University, Salem – 636 011, Tamilnadu, during 28-29, March, 2016, pg. 48.
163. D. Santhoshmani, A. Priyadharsan, S. Prabhu, A. Arunkumar, C. Vidhya & **P.M. Anbarasan**, “**Synthesis and Characterisation Ag-ZnOSnO<sub>2</sub> nanocomposite for the Applications of DSSC**” **National Conference on Energy, Environment & Ethics (E<sup>3</sup> - 2016)** organized by Department of Engery Studies, Periyar University, Salem – 636 011, Tamilnadu & jointly organized by Centre for New and Renewable Energy Studies (CNRES), Periyar University, Salem – 636 011, Tamilnadu, during 28-29, March, 2016, pg. 50.
164. T. Akashnarayana, A. Priyadharsan, S. Prabhu, A. Arunkumar, C.Vidhya, and **P. M. Anbarasan**, “**Microwave Synthesis of La-ZrO<sub>2</sub> Nanoparticle for DSSC Application**” **National Conference on Energy, Environment & Ethics (E<sup>3</sup> - 2016)** organized by Department of Engery Studies, Periyar University, Salem – 636 011, Tamilnadu & jointly organized by Centre for New and Renewable Energy Studies (CNRES), Periyar University, Salem – 636 011, Tamilnadu, during 28-29, March, 2016, pg. 50.
165. C. Indira Priyadharsini, A. Prakasam, A. Priyadharsan, C.Vidya & **P. M. Anbarasan**, “**DSSC as Third Generation Solar Cells for Energy Applications**” **National Conference on Energy, Environment & Ethics (E<sup>3</sup> - 2016)** organized by Department of Engery Studies, Periyar University, Salem – 636 011, Tamilnadu & jointly organized by Centre for New and Renewable Energy Studies (CNRES), Periyar University, Salem – 636 011, Tamilnadu, during 28-29, March, 2016, pg. 51
166. C. Vidya, **P. M. Anbarasan**, A. Priyadharsan & A. Elangovan, “**Solar Energy Crisis and Recent Progress of Renewable Energy in India**” **2<sup>nd</sup> International Conference on Corporate and Business Response to Climate Change (ICCBRCC 2016) - From Awareness to Adoption (Transcending the Boundaries)** Organized by Department of Commerce, Periyar University, Salem, Tamil Nadu, India, during 9-11, March 2016, pg. 69, PP-47
167. M. Arthi, M. Prakasam, A. Priyadharsan, A. Arunkumar & **P. M. Anbarasan**, “**Theoretical Investigation for the Acceptor Group Related Electronic Structure Properties of Organic Dye Sensitizers in DSSC**” **National Conference on Advanced Materials (NCAM – 2016)** Organized by Department of Physics School of Physical Sciences, Periyar University (Re- Accredited With ‘A’ Grade By NAAC) Periyar Palkalai Nagar Salem - 636 011, Tamilnadu held on 25-26<sup>th</sup> February, 2016, pg. 41.
168. S. Prabhu, M. Prakasam, A. Priyadharsan, A. Arunkumar and **P. M. Anbarasan**, “**Synthesis and Characterization of ZnO Nanoparticles for Photo Anode in DSSC Application**” **National Conference on Advanced Materials (NCAM – 2016)** Organized by Department of Physics School of Physical Sciences, Periyar University (Re- Accredited With

'A' Grade By NAAC) Periyar Palkalai Nagar Salem - 636 011, Tamilnadu held on 25-26<sup>th</sup> February, 2016, pg. 42.

169. K. M Prabu, **P. M. Anbarasan**, D. Venkatesan & E. Ramachandiran, **“Photovoltaic Properties of Melia Dubia Photo Sensitizer for Dye Sensitized Solar Cell Applications” International Conference on Recent Advances in Applied Sciences** organized by Science and Humanities Association, St. Peter’s University, Chennai & Indian SpectroPhysics Association (ISPA) Chennai, held on 11-13, February, 2016, Page 85.
170. S. Shanavas, A. Priyadharsan, and **P. M. Anbarasan**, **“Synthesis Of Graphene/Cu-TiO<sub>2</sub> Nanocomposite And Dye Extracts From Phyllanthus Niruri Leaves For Dye-Sensitized Solar Cell” National Conference on Advanced Materials (NCAM – 2016)** Organized by Department of Physics School of Physical Sciences, Periyar University (Re-Accredited With ‘A’ Grade By NAAC) Periyar Palkalai Nagar Salem - 636 011, Tamilnadu held on 25-26<sup>th</sup> February, 2016, pg. 89.
171. C. Indira Priyadharsini, C.Vidya, A. Priyadharsan, A. Prakasam and **P. M. Anbarasan**, **“A Study on Structural and Optical Properties of Mg Doped SnO<sub>2</sub> Nanocrystallites” National Conference on Advanced Materials (NCAM – 2016)** Organized by Department of Physics School of Physical Sciences, Periyar University (Re- Accredited With ‘A’ Grade By NAAC) Periyar Palkalai Nagar Salem - 636 011, Tamilnadu held on 25-26<sup>th</sup> February, 2016, pg. 95.
172. D.Santhoshmani, A.Priyadharsan, M. Prakasam, A. Arunkumar and **P. M. Anbarasan**, **“A Simple Hydrothermal Synthesis on Ag-ZnO-SnO<sub>2</sub> Nanochain for Photo Anode in DSSC Application” National Conference on Advanced Materials (NCAM – 2016)** Organized by Department of Physics School of Physical Sciences, Periyar University (Re-Accredited With ‘A’ Grade By NAAC) Periyar Palkalai Nagar Salem - 636 011, Tamilnadu held on 25-26<sup>th</sup> February, 2016, pg. 105.
173. A. Priyadharsan, **P. M. Anbarasan**, M. Prakasam and C. Vidya, **“Synthesis of TiO<sub>2</sub>-Graphene-SiO<sub>2</sub> nanocomposites for Efficient Dye Sensitized Solar Cells Applications” International Conference on Recent Advances in Applied Sciences** organized by Science and Humanities Association, St. Peter’s University, Chennai & Indian SpectroPhysics Association (ISPA) Chennai, held on 11-13, February, 2016, Page 31. ISBN: 978-93-5254-981-8, Publisher: Scientific Communications Research Academy.
174. **P. M. Anbarasan**, D.Sakthi and A. Prakasam, **“Quantum Chemistry Calculations of 2-Amino-6-Nitrobenzothiazole Dye Sensitizer for Solar Cells” International Conference on Recent Advances in Applied Sciences** organized by Science and Humanities Association, St. Peter’s University, Chennai & Indian SpectroPhysics Association (ISPA) Chennai, held on 11-13, February, 2016, Page 165. ISBN: 978-93-5254-981-8, Publisher: Scientific Communications Research Academy.
175. M. Prakasam, A. Priyadharsan and **P. M. Anbarasan**, **“Excited State Geometries, Energies of Solvated Dye for DSSC: A Theoretical Study” International Conference on Recent Advances in Applied Sciences** organized by Science and Humanities Association,

St. Peter's University, Chennai & Indian SpectroPhysics Association (ISPA) Chennai, held on 11-13, February, 2016, Page 350. ISBN: 978-93-5254-981-8, Publisher: Scientific Communications Research Academy.

176. M. Prakasam, V. Sangeetha, **P. M. Anbarasan**, “**DFT & TD-DFT Investigation of Organic Dye Sensitizers for DSSC: Effects of Different Acceptors**” **International Conference on Nanomaterials & Nanotechnology (NANO - 2015)**, Organised by Centre for Nanoscience & Technology (CNST), K.S.R College of Technology, Tiruchengode, Namakkal, Tamilnadu, in Colloboration with World Class University, South Korea, held during 7-10, December, 2015, P-874, Page. 178.
177. C. Mohanasundaram, K. Prabakaran, **P. M. Anbarasan** & K.B. Rajesh, “**Focal Shifting of Radially Polarised Laguerre Bessel Gaussian Beam using Cosine Phase Plate**” **International Conference on Latest Developments in the Applications of Laser Technology**, organized by Departments of Chemistry & Physics, PSGR Krishnammal College for Women, Coimbatore -641 004, Tamilnadu, held on 7.12.2015, Page No.15.
178. K. M. Prabu, **P. M. Anbarasan**, M. Vaanmathi & V. Punitha, “**Improved Peroformance of a Natural Dye-Sensitized Solar Cells (NDSSCs) Using Cardiospermum Halicacabum**” **National Conference on Solar Energy and Its Applications**, organized by Albert Einstein Association, Department of Physics, E.R.K Arts abd Science College, Erumiyampatti, Kokkarapatti (PO) – 636 903, Dharmapuri (District) held on 15.07.2015, Page No. 19.
179. **P. M. Anbarasan**, D. Nicksonsebastin, M. Prakasam, A. Priyadharshan and D. Sakthi, “**TPA Based on D-II-A System Organic Dye Sensitizers for Dye Sensitized Solar Cells: A Theoretical Study**” **National Conference on Solar Energy and Its Applications** organized by Albert Einstein Association, Department of Physics, E.R.K Arts abd Science College, Erumiyampatti, Kokkarapatti (PO) – 636 903, Dharmapuri (District) held on 15.07.2015, Page No. 20.
180. **P. M. Anbarasan**, A. Priyadharshan, A. Arunkumar, M. Praksam and D. Sakthi, “**Natural Dye Extracted from Barleria Cristata Leaf for Dye Sensitized Solar Cell Applications**” **National Conference on Solar Energy and Its Applications** organized by Albert Einstein Association, Department of Physics, E.R.K Arts abd Science College, Erumiyampatti, Kokkarapatti (PO) – 636 903, Dharmapuri (District) held on 15.07.2015, Page No. 21.
181. D. Narayanasamy, P. Kumaresan and **P. M. Anbarasan**, “**Effect of Swift Heavy Ion Irradiation on Dye Doped Thiourea – TGS Crystals for IR Detector and laser Applications**” **National Conference on Advanced Materials and Its Applications (NCAMA-2015)** held during 20-30, January - 2015, Organised by School of Applied Sciences, Department of Physics, Hindustan university, Chennai - 600 016, Tamilnadu, in Association with Materials Research Society of India, Chennai Chapter & Indian Association for Crystal Growth, , OP-02, Page - 48.

182. C. Ramesh, K. Maniysundar, S. Selvanandan and **P. M. Anbarasan**, “**Preparation and characteristics study on  $Mn_{0.3}Zn_{0.7}Ni_xFe_{2-x}O_4$  mixed ferrites**” **National Seminar on Laser and Its Applications** on 16<sup>th</sup> March, 2015 organised by Department of Physics, Jamal Mohamed College, Thiruchirappalli – 620 020, Tamilnadu, in commemoration with **International Year of Light and Light based Technologies (IYL-2015)**
183. **P. M. Anbarasan**, M. Prakasam, A. Priyadharsan and D. Nicksonsebastin, “**Molecular Design of Coumarin – 102 Dye for Efficient Dye – Sensitized Solar Cell**” **National Symposium on X-Ray Diffraction and Recent Advances in Crystallography (XDRAC – 2-15)** organized by Department of Physics, School of Sciences, Periyar University, Salem – 636011, Tamilnadu during 27 & 28<sup>th</sup> February, 2015, C-12.
184. D. Narayanasamy, P. Kumaresan and **P. M. Anbarasan**, “**Pyroelectric Studies on Dye Doped TGS Crystals for IR Detector and Laser Applications**” **International Conference on Crystal Growth and Biomolecular Crystallography (ICCGBC-2014)** held during 28-29, November- 2014, Organised by Electrical & Electronics Engineering and Chemical & Biotechnology, SASTRA University, Thanjavur – 613 401, Tamilnadu, India, P63, Page-93.
185. D. Narayanasamy, P. Kumaresan and **P. M. Anbarasan**, “**Thermal, Dielectric Studies on Pure and Dyes Doped TGS Single Crystals**” **International Conference on Crystal Growth and Biomolecular Crystallography (ICCGBC-2014)** held during 28-29, November- 2014, Organised by Electrical & Electronics Engineering and Chemical & Biotechnology, SASTRA University, Thanjavur – 613 401, Tamilnadu, India, P64, Page-94.
186. K. Suguna, **P. M. Anbarasan**, P. B. NagabalaSubramanian “**Geometries, Electronic Structures, Effect of Extracting Solvents, Vibrational Spectral Studies and Performances of Lawsonia Inermis (2-hydroxy-1,4-naphthoquinone) using Experimental and Quantum Calculations for Dye Sensitized Solar Cells**” **National Conference on Recent Advances in Molecular Spectroscopy (NCRAMS-2014)** 14<sup>th</sup> September, 2014 - Organized by Research Scholars of Prof. Dr. S. Mohan, in Association with Department of Physics, Tagore Arts College & K. M. Centre for P.G. Studies, Puducherry, 608 005, Page No-60-62.
187. **P.M. Anbarasan** et. al, “**Beam Shaping using Ti-Sa Laser**” in the **State Level Seminar on Laser & Spectroscopy (SLSLS-2014)** organized by the Department of Physics, Morappur Kongu College of Arts & Science, Morappur – 635 305 in collaboration with **Indian SpectroPhysics Association (ISPA)** on 28.08.2014.
188. **P. M. Anbarasan** et. al, “**Applications of Ti-Sa Laser**” in the **State Level Seminar on Laser & Spectroscopy (SLSLS-2014)** organized by the Department of Physics, Morappur Kongu College of Arts & Science, Morappur – 635 305 in collaboration with **Indian SpectroPhysics Association (ISPA)** on 28.08.2014.
189. K. M. Prabu, **P. M. Anbarasan**, J. Manikandan & C.Vijayakumar, “**Fabrication and Analysis of Dye- Sensitized Solar Cell Using Natural Dye from Clitoral Ternatea**” Proceedings of the **National Conference on Advanced Materials (NCAM-2014)**, 18-19,

July, 2014 organised by PG and Research Department of Physics, Sri Vidya Mandir Arts and Science College, Katteri, Uthangarai, Krishnagiri (District), Tamilnadu, India – 636 902, in Collaboration with Indian Spectrophysics Association (ISPA), Chennai - 600 030, CP-42, pg. 85.

190. S. Ranjitha, G. Rajarajan, V. Aroulmoji & **P. M. Anbarasan**, “**Optical Properties of Natural Dye Sensitizers for the Applications of Dye Sensitized Solar Cell**” Proceedings of the **National Conference on Advanced Materials (NCAM-2014)**, 18-19, July, 2014 organised by PG and Research Department of Physics, Sri Vidya Mandir Arts and Science College, Katteri, Uthangarai, Krishnagiri (District), Tamilnadu, India – 636 902, in Collaboration with Indian Spectrophysics Association (ISPA), Chennai - 600 030, CP-74, pg.108
191. K. M. Prabu, **P. M. Anbarasan**, V. Panneerselvi, P. Praveena & D. Sathy, “**Synthesis and Characterization of Natural Dye-Sensitized Solar Cell (NDSSC) from Portulaca Grandiflora Dye Extract**” Proceedings of the **National Conference on Advanced Materials (NCAM-2014)**, 18-19, July, 2014 organised by PG and Research Department of Physics, Sri Vidya Mandir Arts and Science College, Katteri, Uthangarai, Krishnagiri (District), Tamilnadu, India – 636 902, in Collaboration with Indian Spectrophysics Association (ISPA), Chennai - 600 030, CP-91, pg.122.
192. K. M. Prabu, **P. M. Anbarasan**, S. Janarthanan. D. Sithik Basha, S. Gobi & R. Ranjith kumar, “**Photovoltaic Performance Of Natural Dye Sensitized Solar Cell Using Opuntia Prickly Pear**” Proceedings of the **National Conference on Advanced Materials (NCAM-2014)**, 18-19, July, 2014 organised by PG and Research Department of Physics, Sri Vidya Mandir Arts and Science College, Katteri, Uthangarai, Krishnagiri (District), Tamilnadu, India – 636 902, in Collaboration with Indian Spectrophysics Association (ISPA), Chennai - 600 030, CP-119, Pg.146.
193. **P. M. Anbarasan** and A. Priyadharsan, “**Structural and Optical Properties of Ce Doped ZnO Thin Film for Solar Cell Applications**”, Proceedings of the **National Conference on Advanced Materials (NCAM-2014)**, 18-19, July, 2014 organised by PG and Research Department of Physics, Sri Vidya Mandir Arts and Science College, Katteri, Uthangarai, Krishnagiri (District), Tamilnadu, India – 636 902, in Collaboration with Indian Spectrophysics Association (ISPA), Chennai - 600 030, CP-122, Pg.155.
194. **P. M. Abarasan**, M. Prakasam and P. Senthilkumar, “**DFT and TD-DFT Calculations of Stilbene Derivative Fulleropyrrolidines for Dye Sensitized Solar Cell Applications**” Proceedings of the **National Conference on Advanced Materials (NCAM-2014)**, 18-19, July, 2014 organised by PG and Research Department of Physics, Sri Vidya Mandir Arts and Science College, Katteri, Uthangarai, Krishnagiri (District), Tamilnadu, India – 636 902, in

Collaboration with Indian Spectrophysics Association (ISPA), Chennai - 600 030, CP-123, Pg.156.

195. K. M. Prabu, P. M. Anbarasan, R. Ranjani, S. Gopi & G. Usha, “**Dye-Sensitized Solar Cell using Natural Dye Extracted from Curcuma Longa**” Proceedings of the **National Conference on Advanced Materials (NCAM-2014)**, 18-19, July, 2014 organised by PG and Research Department of Physics, Sri Vidya Mandir Arts and Science College, Katteri, Uthangarai, Krishnagiri (District), Tamilnadu, India – 636 902, in Collaboration with Indian Spectrophysics Association (ISPA), Chennai - 600 030, CP-126, Pg.158.
196. P. M. Anbarasan, P. Sakthivel, & A. Prakasam, “**Study of geometrical, Electronic Structure, Spectral and NLO Properties of 6-Chloro-2-Nitrobenzonitrile Dye For Efficient Organic Solar Cells**” Proceedings of the **National Conference on Advanced Materials (NCAM-2014)**, 18-19, July, 2014 organised by PG and Research Department of Physics, Sri Vidya Mandir Arts and Science College, Katteri, Uthangarai, Krishnagiri (District), Tamilnadu, India – 636 902, in Collaboration with Indian Spectrophysics Association (ISPA), Chennai - 600 030, CP-151, Pg.180.
197. P. M. Anbarasan, P. Sakthivel, D. Sakthi & A. Prakasam, “**Electronic Structure and Spectral Properties of 4-Methyl-3-Nitrobenzonitrile Dye for Efficient Organic Solar Cells**” Proceedings of the **National Conference on Advanced Materials (NCAM-2014)**, 18-19, July, 2014 organised by PG and Research Department of Physics, Sri Vidya Mandir Arts and Science College, Katteri, Uthangarai, Krishnagiri (District), Tamilnadu, India – 636 902, in Collaboration with Indian Spectrophysics Association (ISPA), Chennai - 600 030, CP-151, Pg.180.
198. P. M. Anbarasan, M. Prakasam and P. Senthilkumar, “**DFT And TD-DFT Calculations of Stilbene Substituted Methanofullerene for Dye Sensitized Solar Cell Applications**” in the Proceedings of the **National Conference in Advanced Materials and Its Applications (NCAMA-14)** organized by Engineering Physics Section, Faculty of Engineering and Technology, Annamalai University Annamalainagar - 608 002, Tamil nadu, India, 4th & 5th, April 2014, p. 789, ISBN-13, 978 - 81- 909240-9-2.
199. K. M. Prabu & P. M. Anbarasan, “**Dye Sensitized Solar Cell using Natural Dye Extracted from Hibiscus Sabdariffa Leaves**” in the Proceedings of the **National Conference on Recent Advances in New and Renewable Energy - 2014 (RANRE-2014)**, Organised by Centre for New & Renewable Energy Studies, Periyar University, Salem – 636 011 held on 27<sup>th</sup>, February, 2013, pg. 19-20.
200. C. Indira Priyadharsini, A. Prakasam and P. M. Anbarasan, “**Structural, Functional and Optical Properties of Mg Doped SnO<sub>2</sub> by Co-Precipitation Method**” **Seminar on Materials for Advanced Technology (SMAT-2014)** Organized by Department of Physics, Periyar University, Salem – 636011 on 21.2.2014, p.18, SMAT-24.

201. M. Prakasam , K.M. Prabu and **P. M. Anbarasan**, “**Dye-Sensitized Solar Cell Using Natural Dye Extracted from Piper Betel Leaves**” **National Conference On Advanced Materials - NCAM- 2014** organised by **Department of Physics and Electronics, PGP College of Arts and Science, Namakkal, Tamiladu**, on February 7, 2014
202. K. M. Prabu, **P. M. Anbarasan**, S. Gopi & P. Praveena, “**Dye Sensitized Solar Cell using Natural Dye Extracted from Clitoria Ternatea**” in the Proceedings of the **International Conference on Recent Advances in Physics 2013 (ICRAP-2013)**, held at PG & Research Department of Physics, Sri Vidya Mandir Arts & Science College, Uthangarai- 636902, Krishnagiri, Tamilnadu, in collaboration with Indian SpectroPhysics Association (ISPA), Chennai, during 12-13, August, 2013, pg. 169
203. M. Geetha & **P. M. Anbarasan**, “**Ni-TiO<sub>2</sub> Nanoparticles Sensitized with Rhodamine Dye for Improving the DSSC Performance**” in the Proceedings of the **International Conference on Recent Advances in Physics 2013 (ICRAP-2013)**, held at PG & Research Department of Physics, Sri vidya Mandir Arts & Science College, Uthangarai- 636902, Krishnagiri, Tamilnadu, in collaboration with Indian SpectroPhysics Association (ISPA), Chennai, during 12-13, August, 2013, pg. 170.
204. K. M. Prabu & **P. M. Anbarasan**, “**Dye Sensitized Solar Cell using Natural Dye Extracted from Mulberry Leaves**” in the Proceedings of the **International Conference on Recent Advances in Physics 2013 (ICRAP-2013)**, held at PG & Research Department of Physics, Sri vidya Mandir Arts & Science College, Uthangarai- 636902, Krishnagiri, Tamilnadu, in collaboration with Indian SpectroPhysics Association (ISPA), Chennai, during 12-13, August, 2013, pg. 185.
205. C. Indira Priyadharsini, A. Prakasam, **L. Arivuselvam** and P. M. Anbarasan, “**Enhanced Photoelectrical Performance Of DSSC by Co-Doped SnO<sub>2</sub> Nanoparticles**” Presented in the **National Conference on Recent Trends in Materials Science** organized by the Department of Physics, Vivekanandha college of Arts and Sciences for women, Elayampalayam, Tiruchengode, Namakkal on February 28<sup>th</sup>, 2013.
206. K. Lalithambigai, **P. M. Anbarasan** & K.B. Rajesh, “**Generation of Nano-scale Transversally Polarized Multiple Focal Spot using Complex Phase Filter**”, **Third National Conference on Multifunctional Nanomaterials and Nanocomposites (NCMNN-2013)** held at Bharathiar University, Coimbatore, Tamilnadu, India on February 25 & 26, 2013.
207. P. Ramu, **P. M. Anbarasan**, S. Aravindan, R. Ramesh, S. Ponnusamy And C. Muthamizhchelvan, “**Surfactant Free Synthesis of Ag+ Additive Added ZnO Nanostructures**”, **International Conference on Nanoscience & Nanotechnology**, (ICONN 2013), 18-20 March 2013, SRM University, Kattankulathur, Chennai, India.
208. K. Lalithambigai, **P. M. Anbarasan**, K.B. Rajesh, “**Generation of Nano-scale Transversally Polarized Multiple Focal Spot using Complex Phase Filter**” in **Third**

**National conference on Multifunctional Nanomaterials and Nanocomposites** (NCMNN-2013-Page.No-76) held at Bharathiar University, Coimbatore on Feb 25-26, 2013.

209. K. Lalithambigai, C. Mohana Sundaram and **P. M. Anbarasan**, “**Generation of Multi Ring focus by Non-diffracting Transversally Polarized beam with Complex Phase Filter**” in the **National conference on Recent Advances in Photonics** (Proceedings of NCRAP-2013-Page.No-89) held at Meenakshi College for women, Chennai on Feb, 8-9<sup>th</sup>, 2013.
210. M. Geetha, S. Shanmugapriya, K. Suguna and **P. M. Anbarasan**, “**Reducing Charge Recombination in DSSC using Ni-Doped Titania Nanoparticles on FTO Substrate**” **International Conference on Biological Inorganic Chemistry**, (ICBIC-2013) organized by Department of Chemistry, Periyar university, Salem – 11, during February, 20-23, 2013, pg.222.
211. K. M. Prabu, K. Suguna and **P. M. Anbarasan**, “**Comparative Analysis of Natural Sample and Synthesis of Silver Nanoparticles (NPs) using Medical Plant Strychnos Potatorum Seed**”, **International Conference on Biological Inorganic Chemistry**, (ICBIC-2013) organized by Department of Chemistry, Periyar university, Salem – 11, during February, 20-23, 2013, pg.269.
212. M. Geetha, S. Shanmugapriya, K. Suguna and **P. M. Anbarasan**, “**The Effects of Doped and Co-Doped TiO<sub>2</sub> Nanocrystalline Anode on the Performance of Dye-Sensitized Solar Cells**” **Second International Conference on Advances in Materials Processing and Characterization** (AMPC-2013) 6 - 8<sup>th</sup> Feb, 2013 - Organized by Department of Mechanical Engineering, College of Engineering, Guindy, Anna university, Chennai – 600 025, Page No- 1161
213. K. Suguna, M. Geetha, and **P. M. Anbarasan**, “**Effect of solvents in natural sensitizers on the performance of dye-sensitized solar cells**” **Second International Conference on Advances in Materials Processing and Characterization** (AMPC-2013) 6 – 8<sup>th</sup> Feb, 2013 - Organized by Department of Mechanical Engineering, College of Engineering, Guindy, Anna university, Chennai - 600 025, Page No-367
214. M. Geetha, S. Shanmugapriya, K. Suguna, **P. M. Anbarasan**, “**The Effects of Doped and Co-Doped TiO<sub>2</sub> Nanocrystalline Anode on the Performance of Dye-Sensitized Solar Cells**” **International Conference on Advances in Materials Processing and Characterization** (AMPC-2013), Anna University, to be held on 6-8 February 2013, Page No-368
215. கே. எம். பிரபு, பி. எம். அன்பரசன் மற்றும் முத்தராசு, "நேனோ தொழில் நுட்பத்தில் தேற்றாங் கொட்டை பதப்படுத்தலும் ஆய்வு செய்தலும்- ஆய்வு கண்ணோட்டம்" ஆய்வுக்கோவை, தமிழக அறிவியல் பேரவை, பன்னிரண்டாம் கருத்தரங்கம், பெரியார் பல்கலைக்கழகம், பெரியார் பல்கலை நகர், சேலம்- 636011, தமிழ்நாடு, 23 - 25, ஆகஸ்ட், 2012, இய-13, பக்கம் - 303, ISBN: 13-978-81-910508-5-1,

published by Periyar University, Publications, Printed by Kaandal Acchu Kalaiyagam, 19/3, Perumal Koil Street, Swarnapuri, Salem - 636004, Mobile: +91 99425 76060

216. கே. லலித்தாம்பிகை, பொ. மு. அன்பரசன் மற்றும் க. பா. ராஜேஷ், "முகட்டு இருவட்டை முனைவாக்கிய ஒளிக்கு கோளக பிழையினால் ஏற்படும் விளைவும் அதற்காக திருத்தமும்", ஆய்வுக்கோவை, தமிழக அறிவியல் பேரவை, பன்னிரண்டாம் கருத்தரங்கம், பெரியார் பல்கலைக்கழகம், பெரியார் பல்கலை நகர், சேலம்- 636011, தமிழ்நாடு, 23 - 25, ஆகஸ்ட், 2012, இய - 14, பக்கம் - 305, ISBN: 13-978-81-910508-5-1, published by Periyar University, Publications, Printed by Kaandal Acchu Kalaiyagam, 19/3, Perumal Koil Street, Swarnapuri, Salem - 636004, Mobile: +91 99425 76060
217. பி. எம் அன்பரசன், எம். கீதா, சி. இந்திரா பிரியதர்சினி மற்றும் எஸ். சண்முகப்பிரியா, "இயற்கை மற்றும் வர்த்தக சாயங்களை பயன்படுத்தி தயாரிக்கப்பட்ட டை-சோலார் செல்களின் மூலம் மின் உற்பத்தி" ஆய்வுக்கோவை, தமிழக அறிவியல் பேரவை, பன்னிரண்டாம் கருத்தரங்கம், பெரியார் பல்கலைக்கழகம், பெரியார் பல்கலை நகர், சேலம்- 636011, தமிழ்நாடு, 23 - 25, ஆகஸ்ட், 2012, இய-15, பக்கம் - 305, ISBN: 13-978-81-910508-5-1, published by Periyar University, Publications, Printed by Kaandal Acchu Kalaiyagam, 19/3, Perumal Koil Street, Swarnapuri, Salem - 636004, Mobile: +91 99425 76060
218. கே. எம். பிரபு, பி. எம். அன்பரசன், தனராசு, "அண்டபெருவெளியில் காலச்சக்கரம்", ஆய்வுக்கோவை, தமிழக அறிவியல் பேரவை, பன்னிரண்டாம் கருத்தரங்கம், பெரியார் பல்கலைக்கழகம், பெரியார் பல்கலை நகர், சேலம்- 636011, தமிழ்நாடு, 23 - 25, ஆகஸ்ட், 2012, இய - 16, பக்கம் - 306, ISBN: 13-978-81-910508-5-1, published by Periyar University, Publications, Printed by Kaandal Acchu Kalaiyagam, 19/3, Perumal Koil Street, Swarnapuri, Salem - 636004, Mobile: +91 99425 76060
219. இல. அறிவுச்செல்வம், சி. மோகனசுந்தரம் & பொ. மு. அன்பரசன், "அதிக திறன் கொண்ட டெராவாட் டைட்டானியம் மாசூட்டப்பட்ட நீலக்கல் லேசர் துடிப்புகளை அமுக்குதல் (OPCPA) முறையில் உருவாக்கல் முறையும் அதன் அமைப்பும்", ஆய்வுக்கோவை, தமிழக அறிவியல் பேரவை, பன்னிரண்டாம் கருத்தரங்கம், பெரியார் பல்கலைக்கழகம், பெரியார் பல்கலை நகர், சேலம்- 636011, தமிழ்நாடு, 23 - 25, ஆகஸ்ட், 2012, இய - 31, பக்கம் - 318, ISBN: 13-978-81-910508-5-1, published by Periyar University, Publications, Printed by Kaandal Acchu Kalaiyagam, 19/3, Perumal Koil Street, Swarnapuri, Salem - 636004, Mobile: +91 99425 76060

220. K. M. Prabu, **P. M. Anbarasan**, J. Arumugam & M. Arunprasad, “**Phytochemical analysis of Caesalpinia Bonducella and Identification of Functional Compounds Using GC-MS**”, **National Conference on Recent Advances in Physics** 2012, Organised by Department of Physics, Sri Vidya Mandir Arts & Science College, Uthangarai, in Collaboration with Indian SpectroPhysics Association (ISPA), during 20-21, July, 2012, pg. 39.
221. K. M. Prabu, **P. M. Anbarasan**, S. Viswanathan & M. Priya, “**Green Synthesis and Characteristics of Silver Nanoparticle Using Medical Plant Caesalpinia Bonducella Leaf**”, **National Conference on Recent Advances in Physics** 2012, Organised by Department of Physics, Sri Vidya Mandir Arts & Science College, Uthangarai, in Collaboration with Indian SpectroPhysics Association (ISPA), during 20-21, July, 2012, pg. 43.
222. K. Suguna, M. Geetha, C. Indra Priyadharsini & **P. M. Anbarasan**, “**Preparation of Dye Sensitized Solar Cells Using Natural Dye with TiO<sub>2</sub> Nanoparticles**”, **National Conference on Recent Advances in Physics** 2012, Organised by Department of Physics, Sri Vidya Mandir Arts & Science College, Uthangarai, in Collaboration with Indian SpectroPhysics Association (ISPA), during 20-21, July, 2012, pg. 69.
223. K. M. Prabu, **P. M. Anbarasan**, & R. Karthikeyan, “**Bio-Synthesis and Characterization of Medical Plant Caesalpinia Bonducella Seed**”, **National Conference on Recent Advances in Physics** 2012, Organised by Department of Physics, Sri Vidya Mandir Arts & Science College, Uthangarai, in Collaboration with Indian SpectroPhysics Association (ISPA), during 20-21, July, 2012, pg. 70.
224. K. M. Prabu, **P. M. Anbarasan**, S. Janarthana, N. V. Podhuma & R. Karthikeyan, “**Spectral Characterization of Medical Plant Caesalpinia Bonducella Seeds**”, **National Conference on Recent Advances in Physics** 2012, Organised by Department of Physics, Sri Vidya Mandir Arts & Science College, Uthangarai, in Collaboration with Indian SpectroPhysics Association (ISPA), during 20-21, July, 2012, pg. 78.
225. K. M. Prabu, **P. M. Anbarasan**, V. Gokul Kumar & A. Kaviyarasu, “**UV, FTIR, HPLC, TEM and EDX Spectral Characterization of Medical Plant Strychnos Potatorum**”, **National Conference on Recent Advances in Physics** 2012, Organised by Department of Physics, Sri Vidya Mandir Arts & Science College, Uthangarai, in Collaboration with Indian SpectroPhysics Association (ISPA), during 20-21, July, 2012, pg. 78.
226. K. M. Prabu, **P. M. Anbarasan**, “**Theoretical Study on Coupling between Laser Diode and Single Mode Fiber via Hemispherically Ended Graded Index**”, **National Conference on Recent Advances in Physics** 2012, Organised by Department of Physics, Sri Vidya Mandir Arts & Science College, Uthangarai, in Collaboration with Indian SpectroPhysics Association (ISPA), during 20-21, July, 2012, pg. 79.
227. K. M. Prabu, **P. M. Anbarasan**, K. Lakshmi Narayanan, “**Synthesis and Characterization of Nanopowder Abrus Pectorius Seed**”, **National Conference on**

**Recent Advances in Physics** 2012, Organised by Department of Physics, Sri Vidya Mandir Arts & Science College, Uthangarai, in Collaboration with Indian SpectroPhysics Association (ISPA), during 20-21, July, 2012, pg. 95.

228. M. Geetha, K. Suguna & **P. M. Anbarasan**, “**Photoanode Modification in a DSSC Using Chromium Doped TiO<sub>2</sub> Nanoparticles by Sol-Gel Method**”, **National Conference on Recent Advances in Physics** 2012, Organised by Department of Physics, Sri Vidya Mandir Arts & Science College, Uthangarai, in Collaboration with Indian SpectroPhysics Association (ISPA), during 20-21, July, 2012, pg. 98.
229. K. M. Prabu, **P. M. Anbarasan**, P. Saravani, “**UV, FTIR, XRD, SEM and EDX Spectral Characterizations of Medical Plant Casalpinia Bonducella Leaf**”, **National Conference on Recent Advances in Physics** 2012, Organised by Department of Physics, Sri Vidya Mandir Arts & Science College, Uthangarai, in Collaboration with Indian SpectroPhysics Association (ISPA), during 20-21, July, 2012, pg. 110.
230. K. Lalithambagai, R. C. Saraswathi, R. Chandraseker, K. B. Rajesh, & **P. M. Anbarasan**, “**Generation of Axially tunable sub wavelength focal hole and focal spot by tight focusing of phase modulated azimuthally polarized double ring shaped beam**” **National Conference on Nanomaterials** organized by Department of Physics, Mother Theresa University, Kodaikanal, Tamilnadu, during 21-23, February, 2012.
231. M. Geetha and **P. M. Anbarasan**, “**Contribution of Mg in TiO<sub>2</sub> Nanoparticles for Dye Sensitized Solar Cells**”, **International Conference on Recent Trends in Advanced Materials** (ICRAM-2012) organized by Vellore Institute of Technology University, Vellore, Tamilnadu, India, during 20-22, February, 2012, pg.176.
232. A. Prakasam and **P. M. Anbarasan**, “**Quantum Chemistry Calculations of 2-amino-5-nitrobenzonitrile for Nano-dye sensitizer solar cells**”, in the **National Conference on Advanced Nanomaterials** (ANM-2012) organized by Centre for Nanoscience and Nanotechnology, Periyar University, Salem during 6-7, February, 2012.
233. K. M. Prabu and **P. M. Anbarasan**, “**Synthesis and Characterization of Nano-Eclipta Prostrata Leaf Extraction for Medical Applications**” in the **National Conference on Advanced Nanomaterials** (ANM-2012) organized by Centre for Nanoscience and Nanotechnology, Periyar University, Salem during 6-7, February, 2012.
234. K. Suguna, M. Geetha, C. Indra Priyadharsini and **P. M. Anbarasan**, “**Absorption Spectra Analysis of Murraya Koenigii Dye for DSSC Applications**” in the **National Conference on Advanced Nanomaterials** (ANM-2012) organized by Centre for Nanoscience and Nanotechnology, Periyar University, Salem during 6-7, February, 2012.
235. M. Geetha, K. Suguna, S. Shanmugapriya and **P. M. Anbarasan**, “**Enhanced Energy Conversion Efficiency of Pristine and Al-doped TiO<sub>2</sub> Nanoparticles for DSSC Application**”, in the **National Conference on Advanced Nanomaterials** (ANM-2012)

organized by Centre for Nanoscience and Nanotechnology, Periyar University, Salem during 6-7, February, 2012.

236. K. Lalithambigai, K. Prabakaran, V. Ravi, Z. Jaroszewicz, K. B. Rajesh, **P. M. Anbarasan** and T.V.S. Pillai, “**Generation of Nanoscale Focal Hole with Extended Depth of Focus for Trapping Array of Nanoparticles**” **Frontiers in Optics and Photonics (FOP11) is thirty-sixth in the series of annual symposia of the Optical Society of India is being organized by the Indian Institute of Technology, Delhi**, during 3-5, December, 2011, pg. 180-183.
237. K. M. Prabu and **P. M. Anbarasan**, “**Spectral Characterization of Opuntia**” in the **International Conference on Advanced Materials (ICAM-2011)** organized by Department of Physics, PSG College of Technology, Coimbatore-641004, during December, 12-16, 2011, pg.1-4.
238. S. Varathan, R. Govindan, M. Geetha and **P. M. Anbarasan**, “**Synthesis and magnetism in Mn-doped ZnO nanoparticles prepared by wet-chemical precipitation method**” **National Conference on Nanoscience and Nanotechnology (NCNN-2011)** organized by **National Centre for Nanoscience and Nanotechnology**, University of madras, Chennai-600 025, held during 25-27, August, 2011, PP76, Page No.123.
239. V. Arun, R. Govindan, M. Geetha, **P. M. Anbarasan**, “**TiO<sub>2</sub> and Bi-TiO<sub>2</sub> nanomaterials: Structural and optical study**” **National Conference on Nanoscience and Nanotechnology (NCNN-2011)**, organized by **National Centre for Nanoscience and Nanotechnology** University of madras, Chennai-600 025, held during 25-27, August, 2011, PP82, Page No.148.
240. R. Govindan, M. Geetha, **P. M. Anbarasan**, “**Thermal Stability, Electrical Conductivity of N, Y Codoped TiO<sub>2</sub> Nanoparticles Synthesized by Sol-Gel Route**” **National Conference on Nanoscience and Nanotechnology (NCNN-2011)** organized by **National Centre for Nanoscience and Nanotechnology**, University of madras, Chennai-600 025, held during 25-27, August, 2011, PP56, Page No.122.
241. K. Lalithambigai, K. Prabakaran, Z. Jaroszewicz, K. B. Rajesh, **P. M. Anbarasan** & T.V.S. Pillai, “**Generation of Nanoscale Sub Wavelength Super-Long Dark Channel Using High NA Lens Axicon**” **National Conference on Nanoscience and Nanotechnology (NCNN-2011)** organized by **National Centre for Nanoscience and Nanotechnology**, University of madras, Chennai-600 025, held during 25-27, August, 2011, PP34, Page No.100.
242. K. M. Prabu, **P. M. Anbarasan** and P. Indumathi, “**Spectral characterization on Betel Nut**” in the **National Conference on Recent Advances in Molecular Physics** organized Department of Physics, Queen Mary’s College, Chennai, in Association with Indian Spectrophysics Association (ISPA) held during 10<sup>th</sup> & 11<sup>th</sup> February, 2011, pg. P-23.

243. K. B. Rajesh, Zbigniew Jaroszewicz, **P. M. Anbarasan** and N. Veerabagu Suresh “**All - Optical Magnetic Recording using High NA Lens Axicon**” **Photonics 2010 ~ International Conference on Fiber Optics & Photonics** organized by Department of Physics, Indian Institute of Technology Guwahati, India, held during December 11-15, 2010, PSM-108
244. S. Mohan and **P. M. Anbarasan**, “**Mode Scrambler for Reducing Node Dependence in Multi-Mode Optical Wave-Guides**”, **International Conference on Photonics, Nanotechnology and Computer Applications (ICOPNAC-2009)**, 25th – 28th February, 2009 Organized by Center For Research And Development, PRIST University, Thanjavour, Tamilnadu, India, during 25-28, February, 2009, Vol. II, page 117-118.
245. S. Mohan and **P. M. Anbarasan**, “**Bandwidth Modulations due to Harmonic Distortion in Single-Mode Optical Fibres**”, **International Conference on Photonics, Nanotechnology and Computer Applications (ICOPNAC-2009)**, Organized by Center For Research And Development, PRIST University, Thanjavour, Tamilnadu, India, 25-28, February, 2009, Vol. II, page. 119-120.
246. **P. M. Anbarasan** et al., **National Seminar & Exhibition on Non-Destructive Evaluation**, NDE-2009, December, 10-12, 2009, organized by BHEL and NIT, Tiruchirappalli, India.
247. P. Senthilkumar, K. Vasudevan, M. Geetha and **P. M. Anbarasan\***, “**Charge Transfer Interaction Study on Linear Organic Single Crystal Imidazole-Iodine Interface for Dye Solar Cells using DFT**” **Meghnad Saha Memorial Symposium on Emerging Trends in Laser & Spectroscopy and Applications** (MMSETLS-09) Organised by Department of Physics (U.G.C. Center of Advanced Study) University of Allahabad, Allahabad- 211 002, U.P, during March, 23-25, 2009.
248. P. Senthilkumar, K. Vasudevan, M. Geetha and **P. M. Anbarasan**, “**Interference Distribution of Optical Field Calculation for Multilayered Thin Film Solar Cells**” **Meghnad Saha Memorial Symposium on Emerging Trends in Laser & Spectroscopy and Applications** (MMSETLS-09) Organised by Department of Physics (U.G.C. Center Of Advanced Study) University of Allahabad, Allahabad- 211 002, U.P, during March, 23-25, 2009.
249. P. Senthilkumar, K. Vasudevan, M. Geetha and **P. M. Anbarasan**, “**Porosity Effects in the Design of Nanocrystalline Dye Sensitized Solar Cells using Constant and Variable overlap Methods**” **Meghnad Saha Memorial Symposium on Emerging Trends in Laser & Spectroscopy and Applications** (MMSETLS-09) Organised by Department of Physics (U.G.C. Center Of Advanced Study) University of Allahabad, Allahabad- 211 002, U.P, during March, 23-25, 2009.
250. P. Senthilkumar, K. Vasudevan, M. Geetha and **P. M. Anbarasan**, “**Stability Study on Different Electrolyte Compositions in Dye Solar Cells**” **Meghnad Saha Memorial Symposium on Emerging Trends in Laser & Spectroscopy and Applications** (MMSETLS-09) Organised by Department of Physics (U.G.C. Center Of Advanced Study) University of Allahabad, Allahabad- 211 002, U.P, during March, 23-25, 2009
251. K. B. Rajesh, V. Ravi and **P. M. Anbarasan**, “**Generation of Sub Wavelength and Longitudinal Polarized Non-Diffracting Beam by Tight Focusing of Double Ring**”

- Shaped Radially Polarized Beam Through High NA Lens Axicon” National Seminar on Photonic Materials** (NSPM-2009), Organised by Department of Optoelectronics, University of Kerala, Thiruvananthapuram, Kerala - 695 581, during February, 26-28, 2009.
252. K. B. Rajesh, V. Ravi and **P. M. Anbarasan**, “**Generation of Near Field Optical Virtual Probe using Solid Immersion Axicon (SIAX)**” **National Seminar on Photonic Materials** (NSPM-2009) Organised by Department of Optoelectronics, University of Kerala, Thiruvananthapuram, Kerala - 695 581, during February, 26-28, 2009.
253. **P. M. Anbarasan**, D. Deivasagayam and S. Moorthy Babu, “**Growth and Some Characteristics Studies on Nanocrystalline Silicon Thin Films for Solar Cells**”, **Joint ICTP-KFAS Workshop on Nanoscience for Solar Energy Conversion** 27 - 29 October 2008 (Miramare - Trieste, Italy), **The Abdus Salam International Centre for Theoretical Physics - Trieste, ITALY**.
254. **P. M. Anbarasan**, S. Manimegalai, M. Geetha, P. Senthilkumar and A. Prakasam, “**A Theoretical Comparative Study on Photo Energy Conversion Efficiency of Metal Free Organic Dye Sensitized Solid State Solar Cells**”, **Recent Advances in Metalloorganic Chemistry** (RAMC-2008), Organised by Department of Periyar University, Salem, Tamilnadu, during October, 16-17, 2008.
255. **P. M. Anbarasan** and K. B. Rajesh, “**Nano Scale Resolution Enhancement using Uniform Intensity Axicon for Higher Density Optical Recording**” **IEEE International Nanoelectronics Conference 2008, 24-27 March 2008, Shanghai, China**, IEEE & INEC 2008: Paper ID: conf124a799.
256. **P. M. Anbarasan**, R. Rengaiyan, A. Kalyanasundaram and S. Selvandanan, “**An Effective Light Trapping Scheme for Silicon Solar Cell with Low Order Aberration and High Throughput Microlenses**” **International Conference on Solar Cells (SOLACE-IC,2008)** Organised by Department of Physics, CUSAT, Cochin, during 21-23, January, 2008
257. **P. M. Anbarasan** and K. B. Rajesh, “**High Density Optical Recording using Solid Immersion Axicon**” Organised by **Indian SpectroPhysics Association** (ISPA), Pachaiyappa’s College, Chennai – 600 030, held during 1 & 2, February, 2008.
258. **P. M. Anbarasan** and K. B. Rajesh, “**The Role of Evanescent Bessel Beam In High Density Optical Recording**” Organised by **Indian SpectroPhysics Association** (ISPA), Pachaiyappa’s College, Chennai – 600 030, held during 1 & 2, February, 2008.
259. **P. M. Anbarasan** and K. B. Rajesh, “**High Density Far Field Optical Recording using Symmetrical Cubic Phase Plate**” Organised by **Indian SpectroPhysics Association** (ISPA), Pachaiyappa’s College, Chennai – 600 030, held during 1 & 2, February, 2008
260. R. Rengaiyan, **P. M. Anbarasan**, A. Kalyanasundaram and S. Selvanandan, “**Field Angle Variation Study on Conic Interconnect Lens System for Higher Coupling Efficiency**” Organised by **Indian SpectroPhysics Association** (ISPA), Pachaiyappa’s College, Chennai – 600 030, held during 1 & 2, February, 2008
261. A. Kalyanasundaram **P. M. Anbarasan**, R. Rengaiyan and S. Selvanandan, “**Aberration Study on Interconnect Lens System Through Huygens Optical Transfer Function and**

**Contour Wavefront Map**” Organised by **Indian SpectroPhysics Association** (ISPA), Pachaiyappa’s College, Chennai – 600 030, held during 1 & 2, February, 2008

262. M. K. Subramanian, **P. M. Anbarasan**, “**FT-IR, NIR-FT-Raman and gas phase infrared Spectra of 3-aminoacetophenone by Density Functional Theory and ab initio Hartree-Fock calculations**” **UGC sponsored National Seminar on Recent Advances in Material Science**” organized by Dept. of Physics, Sri Saradha College for Women (Autonomous), Salem, Tamilnadu, on 10.1.2008
263. A. Kalyanasundaram and **P. M. Anbarasan**, “**Power Coupling Efficiency Enhancement in Multi-Mode Step-Index Fiber using Refractive and Diffractive Microlenses**”. pg. 29, in the **National Conference on Recent Trends in Optoelectronics and Laser Technology** (NCOL- 2007), organized by Department of Optoelectronics, University of Kerala, April, 9 – 11, 2007
264. P. Senthil Kumar, S. Manimegalai and **P. M. Anbarasan**, “**Effective Light Trapping Scheme for Silicon Solar Cell with Texture Structures Using Tracing Method**” pg.37, in the **National Conference on Recent Trends in Optoelectronics and Laser Technology** (NCOL- 2007), organized by Department of Optoelectronics, University of Kerala, April, 9 – 11, 2007
265. V. Bernard Raja and **P. M. Anbarasan**, “**Photoelectric Transducer Based Automobile Speed Control Device**” pg.41, in the **National Conference on Recent Trends in Optoelectronics and Laser Technology** (NCOL- 2007), organized by Department of Optoelectronics, University of Kerala, April, 9 – 11, 2007
266. R. Rengaiyan and **P. M. Anbarasan**, “**A New and Simple Approach to Tolerance Analysis of Null Lens Using Zemax®**” pg.74, in the **National Conference on Recent Trends in Optoelectronics and Laser Technology** (NCOL- 2007), organized by Department of Optoelectronics, University of Kerala, April, 9 – 11, 2007
267. S. Selvanandan and **P. M. Anbarasan**, “**Design, Optical Study and Geometric Modulation Transfer Function Computation for Aplanatic Lens**” pg.79, in the **National Conference on Recent Trends in Optoelectronics and Laser Technology** (NCOL- 2007), organized by Department of Optoelectronics, University of Kerala, April, 9 – 11, 2007
268. K. B. Rajesh, **P. M. Anbarasan** and V. Ravi, “**Lens Axicons Illuminated by Gaussian Beams for Optical Microlithography**” pg.84, in the **National Conference on Recent Trends in Optoelectronics and Laser Technology** (NCOL- 2007), organized by Department of Optoelectronics, University of Kerala, April, 9 – 11, 2007
269. K. B. Rajesh and **P. M. Anbarasan**, “**Bessel Beam Using Annular Rings for Optical Microlithography**” pg.85, in the **National Conference on Recent Trends in Optoelectronics and Laser Technology** (NCOL- 2007), organized by Department of Optoelectronics, University of Kerala, April, 9 – 11, 2007
270. **P. M. Anbarasan**, K. Vasudevan, K. B. Rajesh, S. Selvanandan, A. Kalyanasundaram, & R. Rengaiyan “**A Light Trapping Scheme of Microlens to Silicon Solar Cells**”, pg.83 in the **International Conference On XXXII OSI Symposiums** – held at MS University of Baroda –Gujarat during 1-3 Mar. 2007

271. K. B. Rajesh and P. M. Anbarasan, “**Bessel Beam Analysis Using Annular Rings for Optical Microlithography**” pg. 183-184, in the **International Conference On XXXII OSI Symposiums** – held at MS University of Baroda –Gujarat during 1-3 Mar. 2007
272. P. M. Anbarasan, S. Selvanandan, K. B. Rajesh, A. Kalyanasundaram and R. Rengaiyan “**Microlenses Focused Beam on Silicon Solar Cells for High Efficient Light Trapping Scheme**” in the **International conference on Photonics - 2006** held at Hyderabad Central University during 13-16 Dec. 2006.
273. P. M. Anbarasan, S. Selvanandan and K. B. Rajesh, “**A Novel Study on Power Coupling Efficiency Enhancement in Multi-Mode Step-Index Fiber using Refractive and Diffractive Microlenses**”, in the **International conference on Photonics - 2006** held at Hyderabad Central University during 13-16 Dec. 2006.
274. P. M. Anbarasan, K. B. Rajesh, V. Ravi and K. Vasudevan “**Modeling of PMMA Microlenses Fabricated by Hot Embossing Process using Contact Stress Analysis**” in the **International Conference on Photonics - 2006** held at Hyderabad Central University during 13-16 Dec. 2006.
275. P. M. Anbarasan, K. B. Rajesh and K. Vasudevan “**An Analysis of Hot Embossed Microlens for the Effective Coupling of Single Mode Fiber**” in **International Conference on Materials for Advanced Technologies ICMAT - 2007**- held at Nanyang Technological University, Singapore during 1-6 July 2007
276. P. M. Anbarasan and K. Vasudevan, “**Light Trapping Scheme for Micromachined Silicon Solar Cells using High Throughput Microlenses**” in **International Conference on Materials for Advanced Technologies ICMAT- 2007**, held at Nanyang Technological University, Singapore during 1-6 July 2007
277. S. Selvanandan and P. M. Anbarasan, “**Design, Optical Study and Geometric MTF Computation for Aplanatic Lens using ZEMAX**” in **International Conference On Materials for Advanced Technologies ICMAT-2007**, held at Nanyang Technological University, Singapore during 1-6 July 2007
278. P. Kumaresan, S. Moorthy Babu and P. M. Anbarasan, ‘**Effect of Irradiation of Swift Heavy Ions on Dyes Doped KDP Crystals for Laser Applications**’, **International Conference on Crystal Growth - 15, 12 – 17, August, 2007, Salt Lake City, Utah, USA.**
279. P. M. Anbarasan, S. Selvanandan, K. B. Rajesh, A. Kalyanasundaram and R. Rengaiyan “**Microlenses Focused Beam on Silicon Solar Cells for High Efficient Light Trapping Scheme**” in the **International Conference on Photonics-2006** held at Hyderabad Central University during 13-16 Dec. 2006.
280. P. M. Anbarasan, S. Selvanandan and K. B. Rajesh “**A Novel Study on Power Coupling Efficiency Enhancement in Multi-Mode Step-Index Fiber using Refractive and Diffractive Microlenses**”, in the **International Conference on Photonics-2006** held at Hyderabad Central University during 13-16 Dec. 2006.
281. P. M. Anbarasan, K. B. Rajesh, V. Ravi and K. Vasudevan “**Modeling of PMMA Microlenses Fabricated by Hot Embossing Process Using Contact Stress Analysis**” in the **International Conference on Photonics-2006** held at Hyderabad Central University during 13-16 Dec. 2006.

282. S. Selvanandan, **P. M. Anbarasan**, A. Kalyanasundaram, R. Rengaiyan “**An Investigation on The Focal Performance of Cylindrical Microlenses in Dielectric Incident Space**”, pg. 61, in the **National Conference on Recent Advances in Materials Science** (NCMS-2006) held at Periyar University during Feb-16-17, 2006.
283. K. B. Rajesh, **P. M. Anbarasan**, V. Ravi and K. Vasudevan “**Experimental and Theoretical Investigation on the Effect of Various Parameters on the Surface Morphology of the Microlenses under Hot Embossing Process**”, pg. 62, in the **National Conference on Recent Advances in Materials Science** (NCMS-2006) held at Periyar University during Feb-16-17, 2006
284. **P. M. Anbarasan** and N. Shakthivel, “**Theoretical Study on Tunable Fresnel Lens Using Polymer Disperse Liquid Crystal**”, pg 153, in the **National Conference on Recent Advances in Materials Science** (NCMS-2006) held at Periyar University during Feb-16-17, 2006
285. **P. M. Anbarasan**, K. Subramani, K. B. Rajesh and S. Mohan “**A Comparative and IR Study of Single and Doped Crystal Of KDP and KAP**”, pg. 154, in the **National Conference on Recent Advances in Materials Science** (NCMS-2006) held at Periyar University during Feb-16-17, 2006,
286. K. B. Rajesh and **P. M. Anbarasan** “**Physical Modeling of Microlenses using Free Volume Theory by The Modified LIGA Process**”, pg. 155, in the **National conference on Recent Advances in Materials Science** (NCMS-2006) held at Periyar University during Feb-16-17, 2006
287. V. Ravi, K. Vasudevan, K. B. Rajesh and **P. M. Anbarasan** “**Theoretical Study on Optical Performance of Fast Imaging Microlenses Using Ray- Tracing Method**”, pg.175, in the **National Conference on Recent Advances in Materials Science** (NCMS-2006) held at Periyar University during Feb-16-17, 2006
288. K. Vasudevan, V. Ravi, K. B. Rajesh and **P. M. Anbarasan** “**Light Trapping Scheme of Microlens Array Focused Beam on Micro Machined Thin Crystalline Silicon Solar Cells**”, pg. 156, in the **National Conference on Recent Advances in Materials Science** (NCMS-2006) held at Periyar University during Feb-16-17, 2006
289. R. Rengaiyan, **P. M. Anbarasan**, A. Kalyanasundaram and S. Selvanandan, “**Tapered Microlenses-Ended Fibre for Medical Applications Using Laser-To-Fibre Coupling Theory**”, pg. 66, in the **National Conference on Recent Advances in Materials Science** (NCMS-2006) held at Periyar University during Feb-16-17, 2006
290. B. Shanmugavelu and **P. M. Anbarasan**, “**A Novel Study on Electrically Variable Focal Length Microlens,**” pg. 134, in the **National Conference on Recent Advances in Materials Science** (NCMS-2006) held at Periyar University during Feb-16-17, 2006
291. P. Kumaresan, S. Moorthy Babu and **P. M. Anbarasan**, “**Optical Properties in Dyes Doped KAP Single Crystals**” in the **International Conference on Crystal Growth**”, 10-15 February 2006, Crystal Growth Centre, Anna University, Chennai, India.

292. P. Kumaresan, S. Moorthy Babu and P. M. Anbarasan, “**Growth and Characterization of Dyes Doped KAP Crystals**’ in the **Workshop on Crystal Growth Methods**, 8-9 August 2006, SSN Engineering College, Chennai, India.
293. P. Kumaresan, S. Moorthy Babu and P. M. Anbarasan, “**Effect of Metal Ion and Amino Acid Doping on the Optical Performance of KDP Single Crystals**’, **Romanian Conference on Advanced Materials (ROCAM 2006)**, September 11-14 2006, Bucharest, Romania.
294. P. Kumaresan, S. Moorthy Babu and P. M. Anbarasan, “**Optical Properties in Dyes Doped KDP Single Crystals**’, **Sixth DAE-BRNS National Laser symposium (NLS-6)**, 5-8, December 2006, organized by **Raja Ramanna Centre for Advanced Technology (RRCAT)**, Indore, India.
295. P. Kumaresan, S. Moorthy Babu and P. M. Anbarasan “**Growth and Characterization of Dyes Doped KDP Crystals**’, **National Seminar on Crystal Growth**, 07-11 December 2006, SSN Engineering College, Kelampakkam, Chennai, India.
296. P. M. Anbarasan, E. James Jebaseelan Samuel and S. Mohan. “**A Novel Study on Coupling Property of Low Aberration with High Throughput Microlens**” **Fifth DAE-BRNS National Laser Symposium (NLS-5)**, December 7-10, 2005 at Vellore Institute of Technology, Vellore, Proceedings of the NLS-2005, Page No.52, 2005.
297. D. K. Gupta, G. Meenakshi, C. Thangaduraichy and P. M. Anbarasan, “**Molecular Interaction Analysis of Polar Liquids in Non-Polar Solvent Treated with Microwave Frequency**”, **International Conference on Spectrophysics** at Post Graduate & Research Department of Physics, Pachaiyappa’s College, Chennai – 30, (INCONS – 2005) Organised by Indian Spectrophysics Association, during 09 – 12 of February 2005
298. P. Kumaresan, S. Moorthy Babu and P. M. Anbarasan, “**Performance of Metal Thiourea Complex Doped on KDP Single Crystal**”, **34<sup>th</sup> National Seminar on Crystallography**, 10-12 January 2005, Gauhati University, Gauhati, India.
299. P. Kumaresan, S. Moorthy Babu and P. M. Anbarasan, “**Effect of Amino Acids on KDP Single Crystals**”, **DAE-BRNS 4<sup>th</sup> National Laser Symposium (NLS-4)**, **Bhabha Atomic Research Centre (BARC)**, 10-13 January 2005, Mumbai, India. ISBN: 8177647342 9788177647341, ICLC No. 60971111
300. P. Kumaresan, S. Moorthy Babu and P. M. Anbarasan, “**Metal Ions Doped KDP Single Crystals**”, **Crystal Growth Conference** 27-29, January 2005, Kongu Engineering College, Perudurai Erode, Tamil Nadu, India.
301. P. Kumaresan, S. Moorthy Babu and P. M. Anbarasan, “**Optical Properties of Amino Acid Doped KDP Crystals**”, **National Symposium on Crystal Growth and Characterization**, 29-30 September 2005, Department of Physics, Loyola College, Chennai, India.
302. P. Kumaresan, S. Moorthy Babu and P. M. Anbarasan, “**Optical Performance and Dyes Doped KDP Crystal**”, **3rd Asian Conference on Crystal Growth and Crystal Technology (ACGCT-3)**. Oct. 16-19, 2005, Beijing China

303. P. Kumaresan, S. Moorthy Babu and **P. M. Anbarasan**, “**Effect of Dyes Doped KDP Single Crystals**”, **Fifth-DAE NLS-5**, 07-10 December 2005, Vellore Institute of Technology, Vellore, Tamil Nadu, India.
304. **P. M. Anbarasan**, G. Meenakshi, G. Bhaskara Raju, K. Subramani and D. K. Gupta, “**Investigation on the Growth Kinetics for Preparing Low Aberration Microlens Using Electro-Epitaxy Technique**”, **National Symposium on Ferro Electrics and Ceramics**, Organised by Department of Physics, Meerut College, during April 08, 2004.
305. S. Moorthy Babu, **P. M. Anbarasan**, P. Kumaresan and P. Ramasamy, “**Role of Doped Metal Ion in KDP Single Crystal**”, **International Conference on Crystal Growth (ICCG-2004)**, **Grenoble, France, held on 11<sup>th</sup> – 15<sup>th</sup> August 2004**.
306. S. Moorthy Babu, **P. M. Anbarasan**, Geetha Chandrasekaran and P. Ramasamy “**Role of Doped Metal Ion in KAP Single Crystal**”, **International Conference on Crystal Growth (ICCG-2004)**, **Grenoble, France, held on 11<sup>th</sup> – 15<sup>th</sup> August 2004**.
307. **P. M. Anbarasan**, G. Meenakshi and D. K. Gupta, “**Investigation on the Growth Kinetics for Preparing High Throughput Microlenses using Electro-Epitaxy Technique**”, **UGC Sponsored National Seminar on Modern Trends in Applied Spectroscopy** (NASMTAS – 2004), Organised by Physics section, Faculty of Engineering and Technology, Annamalai University, Chidambaram, during 25<sup>th</sup> and 26<sup>th</sup> of March 2004.
308. D. K. Gupta, V. Varalakshmi, G. Meenakshi and **P. M. Anbarasan**, “**Dielectric Relaxation Mechanism of Some Polar Molecules in Benzene**”, **National Symposium on Ferro Electrics and Ceramics**, Organised by Department of Physics, Meerut College, during April 08, 2004.
309. **P. M. Anbarasan**, K. Subramani and G. Meenakshi, “**A Comparative IR Study on Single and Doped Crystals of KDP And KAP**”, **National Conference on Perspectives in Engineering Optics and Spectroscopy**, Organised by Department of Physics, CCS University, Meerut, during April 05 – 07, 2004.
310. D. K. Gupta, G. Meenakshi and **P. M. Anbarasan**, “**Behaviour of Polar Liquids in Different Solvents at Microwave Frequency**”, **National Conference on Perspectives In Engineering Optics And Spectroscopy**, Organised by Department of Physics, CCS University, Meerut, during April 05 – 07, 2004.
311. P. Kumaresan, S. Moorthy Babu and **P. M. Anbarasan**, “**Participated in International Workshop on Crystal Growth and Characterization of Technological Important Materials**”, February 24-28, 2004, Crystal Growth Centre, Anna University, Chennai, India.
312. P. Kumaresan, S. Moorthy Babu and **P. M. Anbarasan**, “**Effect of Amino Acids and Metal Ions Doped KDP Single Crystals**”, **ICCG-14, 9-13 August 2004, Alpes Congress, Grenoble, France**.
313. P. Kumaresan, S. Moorthy Babu and **P. M. Anbarasan**, “**Participated in Indo-Japan Workshop on Crystal Growth and Applications of Advanced Materials for Optoelectronics**”, December 7-10, 2004, Crystal Growth Centre, Anna University, Chennai, India.
314. P. Kumaresan, S. Moorthy Babu and **P. M. Anbarasan**, “**Non-Linear Optical Materials-KDP**”, **DAE-BRNS National Laser symposium**, 14-16 November, 2002,

Collaboration with University of Kerala, Tiruvananthapuram, organized by Shri Chitra Tirunal Institute for Medical Sciences & Technology, Tiruvananthapuram, India.

315. P. Kumaresan, S. Moorthy Babu and P. M. Anbarasan, “**Quantum Size Effect Lasers**”, **DAE-BRNS National Laser symposium**, 14-16 November, 2002, Collaboration with University of Kerala, Tiruvananthapuram, organized by Shri Chitra Tirunal Institute for Medical Sciences & Technology, Tiruvananthapuram, India, pg.448.
316. P. Kumaresan, S. Moorthy Babu and P. M. Anbarasan, “**Epitaxial Growth of II-VI Compounds**”, **DAE-BRNS National Laser symposium**, 14-16 November, 2002, Collaboration with University of Kerala, Tiruvananthapuram, organized by Shri Chitra Tirunal Institute for Medical Sciences & Technology, Tiruvananthapuram, India, pg. 449.
317. P. M. Anbarasan, B. Karthikeyan and S. Mohan, “**Theoretical Analysis of Line Width Enhancement Factor of 1.5  $\mu\text{m}$  BIG-DBR-DSM (Bundle-Integrated-Guide Distributed-Bragg-Reflector-Dynamic-Single-Mode) Laser**” **Australasian Conference on Optics and Laser Spectroscopy**, during 3-6, December 2001, Organised by University of Queen Land, Brisbane, Queen Land, Australia, ACOLS-2001.
318. P. M. Anbarasan, B. Karthikeyan, E. James Jebaseelan and S. Mohan, “**Theoretical Analysis of High Speed Heterojunction npn Transistor using Electron - Wave Diffraction**” **International Conference on Materials for Advanced Technologies, Symposium N: Materials for Optoelectronics and High frequency Electronics Applications**, held 1-6 July 2001, organized by the **Materials Research Society of Singapore, National University of Singapore, Singapore**. Proceedings published in a special issue of Materials Science in Semiconductor Processing (*Elsevier Publication*), ICMAT-2001, Page 433, N, 2001.
319. P. M. Anbarasan, B. Karthikeyan, K. S. P. Durairaj and S. Mohan, “**Estimation of Permissible Optical Input Power in a Semiconductor Optical Switch/Modulator using Electric Field Induced Refractive Index Variation**”, **International Conference on Materials for Advanced Technologies, Symposium N: Materials for Opto-electronics and High frequency Electronics Applications**, held 1-6 July 2001, organized by the **Materials Research Society of Singapore, National University of Singapore, Singapore**. Proceedings published in a special issue of Materials Science in Semiconductor Processing (*Elsevier Publication*), ICMAT-2001, Page 483, N, 2001.
320. P. M. Anbarasan, B. Karthikeyan and S. Mohan, “**Estimation of Transfer Function of Mode Coupled Graded – Index Multimode Optical Fibres by Algebraic Methods**” **National Symposium on Photonics and Spectroscopy**, 14-16, March, 2001, Raman School of Physics, Pondicherry University, Pondicherry. Proceedings of NSPS-2001, Page 38, 2001.
321. B. Karthikeyan, P. M. Anbarasan and S. Mohan, “**A Novel Study on Propagation Properties of the Cylindrical Fibre with Short Coupling Time and Accuracy by Matrix Method**” **National Symposium on Photonics and Spectroscopy**, 14-16, March, 2001, Raman School of Physics, Pondicherry University, Pondicherry. Proceedings of NSPS-2001, Page 40, 2001.
322. B. Karthikeyan, P. M. Anbarasan and S. Mohan, “**Wave Analysis of Broadband Multimode Optical Fibres with Optimum Refractive Index Distribution by Perturbation Method**” **National Symposium of Photonics and Spectroscopy**, 14-16,

March, 2001, Raman School of Physics, Pondicherry University, Pondicherry. Proceedings of NSPS-2001, Page 42, 2001.

323. **P. M. Anbarasan** and S. Mohan, “**Theoretical Analysis of Electric-Field-Induced-Refractive Index change in InGaAsP/InP MQW structure using Density Matrix Theory**”, **International Conference on “Lasers and Their Applications”** (INCOLA - 2000), March 1-4, 2000, St. Joseph’s College, Trichy. Proceedings of INCOLA - 2000, Page No. 108, P-22, 2000.
324. **P. M. Anbarasan** and S. Mohan, “**Theoretical Analysis of Possibility of Subpicosecond Response of Electron Devices using Metal-Insulator Heterostructure**”, **National Conference on Recent Advances in Material Science**, Sep. 29-30, 2000, P.G. Dept. of Applied Physics, Nehru Memorial College, Puthanampatti, Trichy, NCMS-2000, Page 56, 2000.
325. **P. M. Anbarasan**, K. Sonamuthu and S. Mohan, “**Raman Scattering Studies on Bi<sub>2</sub>Sr<sub>2</sub>CaCu<sub>2</sub>O<sub>8</sub>**” **II National Conference on Spectro-Physics**, 9-11, Aug. 2000, ISPA and Pachaiyappa’s College, Chennai. Proceedings of NCONS - 2000, Page 341 - 351, 2000.
326. P. Nallasamy, **P. M. Anbarasan** and S. Mohan, “**Vibrational Spectra and Assignment of Cis- and Trans-1, 4-Polybutadiene**”, **3th Mediterranean Basin Conference on Analytical Chemistry (MBCAC-III)**, Antalya, Turkey – June 4-9, 2000
327. **P. M. Anbarasan**, N. Puviarasan and S. Mohan, “**FTR and FTIR study of 5 - Aminoindole and 1 - Aminoindane**”, **International Conference on “Lasers and their Applications”** (INCOLA - 2000), March 1-4, 2000, St. Joseph’s College, Trichy. Proceedings of INCOLA - 2000, Page No. 128, P-33, 2000.
328. **P. M. Anbarasan**, S. Periandy and S. Mohan, “**Theoretical Aspects of Surface Emitting Room Temperature Injection Laser**” **8<sup>th</sup> National Laser Symposium** organised under **National Laser Programme of Department of Atomic Energy** at School of Physics, University of Hyderabad, Hyderabad, December 15-17, 1999. Proceedings of the NLS ’99, Page No. 253, LSC – 3, 1999.
329. **P. M. Anbarasan**, N. Puviarasan and S. Mohan, “**Spontaneous Emission Factor of Injection Lasers**” **8<sup>th</sup> National Laser Symposium** organised under National Laser Programme of Department of Atomic Energy at School of Physics, University of Hyderabad, Hyderabad, December 15-17, 1999. Proceedings of the NLS ’99, Page No. 251, LSC – 2, 1999.
330. **P. M. Anbarasan**, V. Arjunan and S. Mohan, “**Modulation Limit of Semiconductor Lasers by Some Parametric Modulation Schemes**”, **8<sup>th</sup> National Laser Symposium organised under National Laser Programme of Department of Atomic Energy** at School of Physics, University of Hyderabad, Hyderabad, December 15-17, 1999. Proceedings of the NLS ’99, Page No. 249, LSC – 1, 1999.
331. **P. M. Anbarasan**, S. Mohan, “**2-D arrayed Distributed-Index Planar Microlens**” **ICLMD ’99 International Conference on Laser Materials and Devices** - December 8-10, 1999 at Defence Science Centre, Delhi. Proceedings of the ICMLD ’99, Page No. 437-445, 1999, *Allied Publishers Limited*, Delhi.

332. N. Puviarasan, P. M. Anbarasan, P. Saravanan and S. Mohan, “**FTIR and FTRaman Spectral Investigation on 4 - Aminoquinoline and 5 - Aminoquinoline**” **One day Seminar on Recent Trends in Chemical Physics**, 17, April - 1999, Department of Physics, Annamalai University, Chidambaram, Abstract, P-1, 1999.

**III. Resource Person/Guest/Invited Talk/Special Lecture/Keynote Address/Endowment Lecture/Presentation, etc. Delivered at Various Institutions on Invitation:**

**Chief Guest & Resource Person:** Delivered a talk on “**Paradoxes in Life and its Solutions through Scientific Approach**” in the **Inaugural Function** organised by Department of Physics, Namakkal Kavignar Ramalingam Government Arts College for Women, Namakkal – 637 001 held on 30.09.2024

1. **Resource Speaker:** Delivered on “**NANO OPTICS**” in a **Six Day International Faculty Development Program (Online)** entitled “**Nano Innovations: Shaping the World of Tomorrow (NISWT'24)**” organized by Department of Humanities and Basic Sciences, held from 09.09.2024 to 14.09.2024 at Sri Indu College of Engineering and Technology, Sheriguda, Hyderabad, Telangana State, India.
2. **Resource Person:** Lecture series conducted by **Institution’s Innovation Council** (Ministry of Education Initiative), Govt. of India, delivered on “**Systematically Understanding Paradox in Society Through Innovative Scientific Approach**” in the Amrita Vishwa Vidyapeetham, Amrita School of Engineering, Amritapuri - Kollam - 690 525, Kerala, India, on 27-08-2024
3. **Chief Guest and Delivered** on “**Indigenous Technologies for Virshit Bharat**” **National Science Day Celebration** held on 28.02.2024, organised by Departments of Physics and Chemistry, Sona College of Arts and Science, Salem, Tamil Nadu.
4. **Dr. Sr. Rosamma Endowment Lecture** Delivered on “**Tight Focusing Properties of Laser and Sun Light**” organized by Department of Physics, Holy Cross College (Autonomous) Nagercoil, Kanyakumari District, Tamil Nadu, on 8.12.2023, INDIA - 629 004
5. **Chief Guest and Invited Talk:** on “**Technologically Important Metamaterials for Seismic Wave Protection**” **One Day National Conference on Emerging Materials and Computational Techniques - 2023 (NCEMCT - 2023)** organised by the Department of Physics, Dr. Kalaignar M. Karunanidhi Government Institute for Post Graduate Studies and Research, Karaikal, sponsored by Innovative Spectro Physics Association (ISPA), Puducherry held on 29.09.2023, IT-01.
6. **Chief Guest and Invited Talk:** on “**Scientific Animations for Understanding of Physics**” **National Seminar on Recent Trends in Physical Science and its Applications (NSRTPSA-2023)** organised by Department of Physics and Chemistry, Marutam Nelli Jayam Arts & Science College, Nallanur, Dharmapuri, held on 27.09.2023, YouTube link: <https://www.youtube.com/watch?v=6ePw29fqbxQ&t=1936s>, IT-01.
7. **Invited Talk:** Delivered a talk on “**Manmade Metamaterials: From Fiction to Fact**” in the

Proceeding of **3rd International Conference on Light Applications in Science and Engineering Research (LASER - 2023)** held during 14 – 16, September - 2023 organised by Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, in Association with Indian Spectrophysics Association (ISPA), Chennai, Tamil Nadu, India, IT-14, Pg. 14-20, ISBN: 978-81-1982-108-2

8. **International Webinar Series** on “**Roll of Manmade Metamaterials in Nano-Optics: From Fiction To Fact**” as a part of the series of **Distinguished International Webinars organized by Prof. Roberto Acevedo** and the electronic journal **Revista INGLOMAYOR. Santiago (CHILE)**, held on Friday Mar 31, 2023 · 17:00 – 18:30 (India Standard Time - Kolkata, YouTube link: <https://www.youtube.com/watch?v=NTBtQGorymg>)
9. **Chief Guest & Resource Person:** Delivered a talk on “**Nano-optics and its Applications**” in the Lectures series on “**Recent Development in Nanotechnology**” organised by Department of Physics, Pachamuthu College of Arts & Science for Women, Dharmapuri, on 25.02.2023
10. **Invited Talk:** Delivered a talk on “**Fascinate Plasmonic Metamaterials: Theory, Optical Design, Analysis and Applications**” **National Conference on Science of Materials and its Advancements in Recent Trends (NCSMART - 2023)** organised by Periyar University Centre for Post Graduate and Research Studies, Dharmapuri, Tamil Nadu, in Association with Indian Spectrophysics Association, Chennai, held during 23-24, February, 2023, IT-3, page: 5-7, ISBN - 978-93-81992-15-9
11. **Dr. S. Gunasekaran Endowment Lecture - III (2022-2023)** delivered Special Lecture through video conference (google meet) with hybrid mode on “**Focal Engineering in Solar Energy System**” in the Department of Physics, St. Joseph College (Autonomous), Trichy, held on 28.09.2022
12. **Invited Talk:** Delivered a talk on the topic “**Advanced Laser Beam Shaping Optics for Nuclear Waste Management**” in the **International Virtual Conference on Light Applications in Science and Engineering Research (LASER-2022)** in commemoration of Remembrance of **Prof. S. Mohan**, Organised by Department of Physics & Research Forum of Department of Chemistry, St. Peter’s Institute of Higher Education and Research, Avadi, Chennai – 600 054, in Association with Indian Spectrophysics Association (ISPA) Chennai, India, held on 14.09.2022, September, 2022, IT-3.
13. **Invited talk** delivered on “**Solar Cells (Comparative Performance of Silicon and Dye Sensitized Solar Cells)**” in the **National Webinar on Energy Storage Materials (NWESM - 2022)** Organized by Department of Physics, The Gandhigram Rural Institute – Deemed to be University, Dindigul, Tamilnadu, India – 624 302, held on 14<sup>th</sup>, July, 2022.
14. **Chief Guest and Resource Person:** Delivered Chief Guest address and a talk on the topic “**Nanomaterials Research and its Applications in Various Interconnected Fields**” in the **National Science Day-2022** held on 05.03.2022 Organised by Department of Physics, Avvaiyar Government College for Women, Karaikal (Govt. of Puducherry) – 609 602.

15. **International Webinar Series** on “**Focal Engineering in Solar Cells**” as a part of the series of Distinguish International Webinars organized by **Prof. Roberto Acevedo** and the electronic journal **Revista INGLOMAYOR**. Santiago (CHILE), August 06, 2021, at 9.00 am GMT(UST)-3, IST 5.30 pm)  
<https://www.youtube.com/watch?v=RIN7haZWX94&t=4184s>,
16. **Invited talk** delivered on “**Interaction of Extreme Laser Radiation with Radioactive Hazardous Materials**” **International Virtual Conference on Physics of Emerging Materials and Molecules (IVCPMM -2021)** Organized by PG & Research Department of Physics, Sri Vidya Mandir Arts and Science College, (Autonomous) Uthangarai, Krishnagiri, Tamilnadu, India – 636902, in Collaboration with Indianspectrophysics Association (ISPA), Chennai, India, held on 4 -5, March, 2021,  
<https://us02web.zoom.us/j/81807230948?pwd=ZE1JdVQ2b2dIbWlVNHd6c09pbFN3QT09>, Meeting ID: 818 0723 0948, Passcode: 359463, Youtube Link - Day 1: <https://youtu.be/qZGXcwIdhH0>
17. **International Webinar Series** on “**Sophisticated Lasers for Nuclear Waste Management**” organised by Distinguished **Prof. Roberto Acevedo** and **Revista INGLOMAYOR (ingeniera Global Mayor)** conducted at **Chile** on 21.11.2020 at 9.00 am GMT(UST)-3, IST 5.30 pm)  
<https://us02web.zoom.us/j/89846167444?pwd=QXVjdGorcDhJZDBiVkN6c1VZWjJPQT09>,  
<https://www.youtube.com/watch?v=jSBP65epGHE&t=2628s>
18. **Invited Talk:** Delivered a talk on “**Giant Laser as a tool for Nuclear Waste Management**” in **International Webinar** on “**Materials for Current Trends and Future Challenges**” (**MCTFC 2K20**) at PG Department of Physics, Government Arts College for Women Salem – 636 008, Tamil Nadu, India, held on 15.07.2020, Time: 10.30 am – 12.00 pm, google meet <https://meet.google.com/nra-wmbc-img>, youtube link: <https://youtu.be/Zc3v7SxOYQs>,  
<https://www.youtube.com/watch?v=jSBP65epGHE&t=2628s>
19. **Invited Talk:** Delivered a talk in **Commemoration of International Day of Light (IDL) & 60 Years of Laser Innovation:** A Webinar Lecture on “**Boosting Laser Pulses to Extreme Light Intensities Through Optical Parametric Chirped Pulse Amplification (OPCPA) Technique**” at PG and Research Department of Physics, TBML College, Poraiyar – 609307, Tarnquebar (Taluk) Tamilnadu. Held on 12.06.2020, Time: 10.30 am – 12.00 pm, google meet: <https://meet.google.com/xjt-dnai-erd>, youtube link: <https://www.youtube.com/watch?v=-nRrIaIjRE4>
20. **Chief Guest and Resource Person:** Delivered on the Topic “**Clean, Green and Renewable Energy Technologies Through Advanced Materials**” in the **TNSCHE Sponsored International Conference on Advanced Materials Processing (ICAMPAT-2020)** on 6<sup>th</sup> and 7<sup>th</sup> March, 2020 organised by PG & Research Department of Physics, Arignar Anna Government Arts College, Villupuram, Tamilnadu, India - 605 602, pg. 1-3.

21. **Chief Guest and Resource Person:** Delivered Chief Guest address and a talk on the topic “**Science for the People, People for the Science**” and Sub-Title: “**Superstition and Modern Science**” in the **National Science Day & Inauguration of Physics Association** held on 28.02.2019 Organised Department of Physics, Avvaiyar Government College for women, Karaikal (Govt. of Puducherry) – 609 602.
22. **Invited Talk:** Delivered a talk on the topic “**Recent Trends in Laser Development and Multidisciplinary Applications to Science and Industry**” in the **National Conference on Recent Trends in Advanced Material Science** (NCRTAMS - 2018) held on 5<sup>th</sup> February, 2018 organised at Department of Physics, Selvamm Arts and Science College (Autonomous), Namakkal, Tamilnadu, page. 4
23. **Keynote Address & Invited Talk:** Delivered a keynote address and a talk on the topic “**Road Map to Graphene: From Noble Prize to Surface Plasmon Resonance Application**” in the **International Conference on Recent Trends in Material Science and Technology (ICRTMST-2018)** held during 19 -20<sup>th</sup> January, 2018 organised by PG & Research Department of Physics, Sri vijay Vidyalaya College of Arts and and Science College, Nallampalli – 636 807, Dharmapuri (Dt.), Tamilnadu, pg. 4.
24. **Keynote Address & Invited Talk:** Delivered a keynote address and a talk on the topic “**Environmental Based Advanced Graphene Nanomaterials for Photovoltaic, Supercapacitor & Sensor Applications**” in the **4<sup>th</sup> National Conference on Nanotechnology for Environmental Applications** held on 5<sup>th</sup> January, 2018 organised by Albert Einstein Association & Department of Physics, E.R.K Arts and Science College, Erumiyampatti – 636 905, Kokkarapatti (PO), Pappireddipatti (TK), Dharmapuri (Dt.),Tamilnadu.
25. **Keynote Address & Invited Talk:** Delivered a keynote address and a talk on the topic “**Graphene Based Advanced Materials for Photocatalytic, Photovoltaic and Supercapacitors**” in the **National Conference on Advancing Materials for Photovoltaic and Supercapacitors** held on 23<sup>rd</sup> November, 2017 at Department of Physics, Mahendra Engineering College (Autonomous), Mahendrapuri, Mallasamudram, Tiruchengodu, Namakkal, 637501, Tamilnadu.
26. **Keynote Address & Invited Talk:** Delivered a keynote address and a talk on the topic “**Advanced Materials in Energy and Environmental Applications**” in the **One Day Research Conference on Advancing Materials Research** held on 21<sup>st</sup> August, 2017 at PG & Research Department of Physics, Mahendra Arts and Science College, Kalippatti, Tiruchengodu, Namakkal, 637501, Tamilnadu.
27. **Keynote Address & Invited Talk:** Delivered a talk on the topic “**Spectroscopy of Solar Energy Conversion**” in the **National Seminar on Spectroscopy and Its Applications** held on 16<sup>th</sup> August, 2017 at Department of Physics, Sri Kailash Women’s College, Thalavivasal, Attur, Salem - 636 112, Tamilnadu.

28. **Invited Talk:** Delivered a talk on the topic “**Latest Development in Science and Technology**” in the **Two Day Orientation programme on ‘Recent Trends in Science and Technology’ (RTIST’2017) Sponsored by Tamil Nadu State Council for Science and Technology (TNSCST)** held on 6<sup>th</sup> and 7<sup>th</sup> July, 2017 at Department of Physics, Chikkaiah Naicker College, Erode – 638 004, Tamilnadu.
29. **Guest Lecture:** Delivered on the Topic “**The Recent Advancements of Science in Engineering**” in the **Annual National Level Technical Symposium SARIIE 2K17.2**” organized by the Department of Science and Humanities, Jayalakshmi Institute of Technology, Thoppur – 636 352, Tamilnadu, Indian on 4.3.2017.
30. **Invited Talk:** Delivered on the Topic “**The Role of Nanoscience & nanotechnology in the Sustainable Livelihood**” in the “**National Conference on Nanoscience and Nanotechnology in the Livelihood Enhancement of Common Man (NSLECM-2017)** sponsored by **BRNS, Mumbai & TNSCTC, Chennai**, organized by Department of Physics, Arul Anandar College (Autonomous), DST – FIST Sponsored College, Karumathur – 625 514, Madurai District, Tamilnadu, India, during 8-9, February, 2017
31. **Invited Talk:** Delivered on the Topic “**Animations for Understanding of Solar Energy to the Socially Downtrodden Students**” in the **Career Guidance and Counselling Program on Solar Power Generation for SC/ST Students** jointly organized by Department of Energy Studies & Rajiv Gandhi National Institute of Youth Development (RGNIYD), Chennai, held at Periyar University, Salem, Tamilnadu, India, during 6-10, February, 2017
32. **Keynote Address & Invited Talk:** Delivered on the Topic “**The Role of LASER and SASER in Optoelectronics Applications**” in the **National Conference on Recent Trends in Materials Science - 2017 (NCRMTS - 2017)** held 25<sup>th</sup> January, 2017 organized by PG & Research Department of Physics, Thiruvalluvar Govt. Arts College, Rasipuram – 637 401, Tamilnadu, India.
33. **Keynote Address & Invited Talk:** Delivered on the Topic “**Tight Focusing Methods for Optoelectronic Applications**” in the **International Conference on Recent Trends in Materials Science and Applications - 2017 (RTMSA - 2017)** held 6th January, 2017 organized by Department of Physics, Sri Meenakshi Govt. Arts College for Women (A), Madurai 625 002, Tamilnadu, India.
34. **Invited Talk:** Delivered on the Topic “**Laser Beam Shaping Techniques for Efficient Solar Cell Manufacturing**” in the **National Conference on “Material Science and Technology: Recent Trends And Future Prospects (NCMST:RTFP-2016)”** on 29.12.2016 organised by PG & Research Department of Physics, Arignar Anna Government Arts College, Villupuram, Tamilnadu, India - 605 602, pg. 2-3.
35. **Invited Talk:** Delivered on the Topic “**Tight Focusing Techniques for Optoelectronic Devices**” in the **International Conference on Modern Materials Research - 2016 (ICMMR- 2016)**, 19-20, December, 2016 organized by PG and Research Department of Physics, Sri Vidya Mandir Arts and Science College, Katteri, Uthangarai, Krishnagiri

(District), Tamilnadu, India – 636 902, in Collaboration with Indian Spectrophysics Association (ISPA), Chennai - 600 030, IT-02, pg. 08-09, ISBN: 978-93-85648-86-5, Published by Eswari Publishers and SLAA Publications Pvt. Ltd., Bangalore – 32.

36. **Invited Talk:** Delivered a Lecture on the Topic “**Parallel Methods Guided by Theory and Computation to Design and Discovery for Materials Science Applications**” in the **State Level Seminar on Materials Science and Its Applications** organized by PG & Research Department, Sir Vijay Vidyalaya College of Arts & Science, Dharmauri – 636807 on 24<sup>th</sup> September, 2016, pg. 1-2.
37. **Keynote Address &** Delivered a Talk on the topic “**Nano-Optics for Gravitating Applications in Nanotechnology**” in the **National Conference on Gravitating Applications in Nanotechnology (GAIN’ 2016)** Jointly organized by Albert Einstein Association & Department of Physics, E.R.K Arts and Science College, Erumiyampatti – 636 905, Kokkarapatti (PO), Pappireddipatti (TK), Dharmapuri (Dt.),Tamilnadu on 21.7.2016, pg.3-5.
38. **Keynote Address &** Delivered a Talk on the topic “**Light-Trapping Schemes and Nanomaterials to Boost Efficiency of Solar Cells**” in the **National Conference on Energy, Environment & Ethics (E<sup>3</sup> - 2016)** organized by Department of Engery Studies, Periyar University, Salem – 636 011, Tamilnadu & jointly organized by Centre for New and Renewable Energy Studies (CNRES), Periyar University, Salem – 636 011, Tamilnadu, during 28-29, March, 2016
39. **Invited Talk:** Delivered a Talk on the topic, “**கிராமப்புற மாணவர்களும் அறிவியலும்**” in the **National Service Scheme – (NSS Unit I & II) Special Camp** organized by Govt. Arts College for Women, Salem - 8 held (during 21.3.2016 – 27.03.2016) at Govt. School, Kondappanaickanpatti– 636 008 on 23.3.2016.
40. **Invited Talk:** Delivered a Lecture on the topic, “**Light-Trapping Nanomaterials to Boost Efficiency of Solar Cells**” in the “**National Seminar on Advanced Materials and Applications**’ organized by Department of Physics, Karpagam University, Coimbatore on 11<sup>th</sup> and 12<sup>th</sup> of March, 2016
41. **Invited Talk:** Delivered a talk on the topic “**Nanomaterials for Renewable Energy Production**” in the **National Conference on Recent Trends in Nanomaterials** organized by Department of Physics, AVS College of Arts & Science, Attur main Road, Ramalingapuram, Salem – 636 106, Tamilnadu on 19<sup>th</sup> February, 2016.
42. **Invited Talk:** Delivered a talk on the topic “**Laser Beam Shaping Technique for Efficient Solar Cell Manufacturing**” in the **International Conference on Recent Advances in Applied Sciences** organized by Science and Humanities Association, St. Peter’s University, Chennai & Indian SpectroPhysics Association (ISPA) Chennai, held on 11-13, February, 2016, IT-40, Page 75-76.

43. **Invited Talk:** Delivered a talk on the topic “**Nano-Optics for Biologists**” in the **National Workshop on Nanotechnology for Biologists** organized by Department of Zoology, School of Life Sciences, Periyar University, Salem – 636011, Tamilnadu, held on 6-8, January, 2016.
44. **Invited Talk:** Delivered a talk on the topic “**Light at Extreme Intensities – Titanium Sapphire Laser & Its Applications**” in the **International Conference on Latest Developments in the Applications of Laser Technology**’ organized by Departments of Chemistry & Physics, PSGR Krishnammal College for Women, Coimbatore - 641 004, Tamilnadu, held on 7.12.2015, Page No.15.
45. **Invited Talk:** Delivered a talk on the topic “**Laser Beam Shaping for Efficient Solar cells Manufacturing**” in the **National Workshop on Recent Developments in Energy Materials** held at Dept. of Physics, Shri Sakthi Kailassh Women’s College, Military Road, Ammapet, Salem – 636 003 held on 12.09.2015, Page No.6-8.
46. **Invited Talk:** Delivered a talk on the topic “**Nano-optics for Efficient Solar cells**” in the **National Conference on Nano-optics for Solar Cells** held at Dept. of Physics, Kailash Women’s College, Mamarathu Bus Stop, Tharamangalam-Nangavalli Main Road, Periyasoragai (PO), Nangavalli, Salem – 636 502 held on 20.07.2015.
47. **Resource Person:** Delivered a Key note address and lecture on “**Nano-optics for Efficient Harvesting of Solar Energy**” in the **National Conference on Solar Energy and Its Applications** held at Dept. of Physics, E.R.K Arts and Science College, Erumiyampatti, Kokkarapatti (PO) – 636 903, Dharmapuri (District) held on 15.07.2015, Page No. 14.
48. **Special Lecture:** Delivered a talk on the topic “**Renewable Energy Sources**” in the **One Day UGC Sponsored Special Lecture Series** organized by the PG & Research Department of Physics, Thiruvalluvar Govt. Arts College, Rasipuram, Namakkal – 637 401 on 05.02.2015.
49. **Invited Talk:** Delivered a talk on the topic “**Spectroscopic, Microscopic & Nanoscopic Characterization of Materials**” in the **One Day State Level Seminar on Recent Advanced Spectroscopy Methods in Research (RASMR-2014)** organized by the PG & Research Department of Physics, Mahendra Arts & Science College, Kalippatti, Namakkal – 637 501 on 10.10.2014.
50. **Institutional Seminar:** Delivered a special lecture on the topic “**Interaction of Laser with Nanomaterials**” organized by the Department of Physics, Muthayammal Memorial College of Arts & Science College, Kakkaveri (Post), Rasipuram, Namakkal (Dt.) Tamilnadu, during **Physics Association Inauguration function & Guest Lecture Programme** on 11.09.2014.
51. **Key Note Address** & Delivered a Special Lecture on the topic “**Ti-Sa Laser & Its Applications**” in the **State Level Seminar on Laser & Spectroscopy (SLSLS-2014)**

organized by the Department of Physics, Morappur Kongu College of Arts & Science, Morappur – 635 305 in collaboration with **Indian SpectroPhysics Association (ISPA)** on 28.08.2014.

52. **Inaugural Address:** Delivered as a Chief Guest in the “**Workshop on Optics**” sponsored by **Tamil Nadu State Council for Science and Technology (TNSCST)** organized by Department of Physics, Chikkanna Government Arts & Science College, Tiruppur, Tamilnadu – 641 602 on 13.08.2014.
53. **Invited Talk:** Delivered a Special Lecture on the topic “**Ti-Sa Laser System for Laser-Matter-Interactions at Extreme Irradiance**” in the **National Conference on Advanced Materials (NCAM-2014)** organized by the PG & Research Department of Physics, Sri Vidya Mandir Arts & Science College, Uthangarai – 636 902 in collaboration with **Indian SpectroPhysics Association (ISPA)** on 18.07.2014.
54. **Invited Talk:** Delivered a Special Lecture on the topic “**Role of Nano-Optics in Efficient Solar Cells**” **UGC Sponsored Programme** organized by the Department of Physics, Kanchi Mamunivar Centre for P.G & Research Studies (Govt, of Puducherry), Airport Road, Lawspet, Puducherry - 605 008 on 24-03-2014
55. **Institutional Seminar:** Delivered a special lecture on the topic “**Nano-Materials for Photonic Applications**” a seminar organized by the Department of Physics, Periyar University, Salem -636 011, Tamilnadu on 19.03.2014
56. **Key Note Address &** delivered on the topic “**Theoretical and Simulation Methods & Nanotechnology Applications in Solar Cells**” in the one day **National Level Seminar on Nanomaterials in Solar Cell Applications** organized by the Department of Physics, Velalar College of Engineering and Technology, Erode – 638 012, Tamilnadu, held on 14.03.2014.
57. **Key Note Address &** Delivered a talk on the topic “**Recent Developments in Materials Science**” in the **National Level Seminar on Advances in Materials Science** organized by the Department of Physics, ERK of Arts and Science College for Women, Erumiyampatti, Kokkarapatti - 636 905, Dharmapuri District, Tamilnadu held on 22.02.2014.
58. **Invited Talk:** Delivered a Special Lecture on the topic “**Research & Method - How to Write a Research Paper**” for Science Faculty Members at A.V.S Arts and Science College, Salem-636 106, Tamilnadu on 29-10-2013
59. **Institutional Seminar:** Delivered a special lecture on the topic “**Physics and its Applications in day-to-day Life**” organized by the Department of Physics, Kandasamy Kandar College, Paramatti Velur, Namakkal ( Dist.), Tamilnadu on 04.09.2013.
60. **Invited Talk:** Delivered a special Lecture on the topic “**Comparison Performance of Silicon and Dye Sensitized Solar Cells**” in the **International Conference on Recent**

**Advances in Physics (ICRAP-2013)** collaboration with **Indian SpectroPhysics Association (ISPA)** organized by the Department of Physics, Sri Vidya Mandir Arts & Science College, Uthangarai – 636 902 on 13.08.2013.

61. **Institutional Seminar:** Delivered a key note address & special lecture on “**Renewable Energy Resources - SOLAR CELLS**” held on 28-02-2013, at the **One day Seminar on Renewable Energy Resources and Celebration of National Science Day** organized by Department of Physics, Pachamuthu College of Arts & Science for Women, Erode, Dharmapuri, Tamilnadu.
62. **Institutional Seminar:** Delivered a Special lecture on “**Renewable Energy Resources - SOLAR CELLS**” held on 14-02-2013, at the **Inauguration of Function of One Day Special Lecture** organized by Department of Physics, Vellalar College of Arts & Science for Women, Erode, Tamilnadu.
63. **Institutional Seminar:** Delivered a Special lecture on “**Recent Trends in Harnessing of Renewable Energy Resources - SOLAR CELLS**” held on 14-09-2012, at the inauguration of function of **One day State level Seminar on Recent Trends in Harnessing of Renewable Energy Resources** organized by Department of Physics, Gonzaga College of Arts & Science for Women, Elathagiri, Krishnagiri, sponsored by TNSCST & NCSTC, Tamilnadu.
64. **Invited Talk:** Delivered a Special lecture on “**Production of High Power TeraWatt Ti-Sa Laser by OPCPA Method and its Applications**” at **Tamil Science Conference organised by Sudhesi Tamil Movement, Karaikudi & Periyar University**, Salem, during 23-25, August, 2012.
65. **Institutional Seminar:** Delivered a lecture on “**Light at Extreme Intensities**” held on 18-08-2012, at the **Inauguration Function of Physics Association** organized by Department of Physics, Karpagam University, Coimbatore, Tamilnadu.
66. **Institutional Seminar:** Delivered a lecture on “**Role of Physics in Engineering**” held on 26-03-2012, at the **Inauguration of function of Science and Humanities Association** organized by Department of Physics, Ganesh College of Engineering, Salem, Tamilnadu.
67. **Invited Talk:** Delivered a lecture on “**Nano-Optics for Advanced Optical Storage**” held on 14-03-2012, at the **Workshop on Functional Materials (WFM-2012)** organized by Department of Physics, Periyar University, Salem-11, Tamilnadu.
68. **DST - ASPIRE programme for (+1) H. Sc. Student:** Delivered a lecture on “**Physics - Nano-Optics**” held on 10-02-2011, at the **Jayam College of Engineering**, Dharmapuri, Tamilnadu, organized by Department of Science and Technology, Govt. of India.
69. **Institutional Seminar:** Delivered a lecture on “**Nano-Optics: Materials, Designs & Applications**” held on 22-12-2011, at the **Inauguration of Function of Physics Association** organized by Department of Physics, KSR College of Arts and Science, Tiruchengode, Tamilnadu.

70. **Institutional Seminar**: Delivered a lecture on “**Nano-Optics: Materials, Designs & Applications**” held on 1-10-2011, **One day Seminar Organized by the Einstein Society of Physics** organized by the Department of Physics, ERK of Arts and Science College for Women, Erumiyampatti, Kokkarapatti - 636 905, Dharmapuri District, Tamilnadu.
71. **Institutional Seminar**: Delivered a lecture on “**Nano-Optics: Materials, Designs & Applications**” held on 12-8-2011, **One Day State Level Seminar on Recent Developments in Advanced Materials and Its Applications**, organized by the Department of Physics, Mahendra Engineering College, Namakkal, Tamilnadu.
72. **Resource Person - Refresher Course in Physics** – Delivered Lecture on “**Emerging Trends in Nano-Optics and Modern Spectroscopy**” UGC-Academic Staff College, Bharathiar University, Coimbatore, on 17-06-2011.
73. **Invited Talk**: Delivered a Lecture on “**Spectral and Morphological Studies of Nanocrystalline Silicon Thin Films Synthesized By PECVD Method for Solar Cells**” held on 30-01-2010 organised by the Department of Physics and Electronics, K.S.R. College of Arts and Science, Thiruchengodu, Namakkal, Tamilnadu.
74. **Invited Talk**: Delivered a lecture on “**Light at Extreme Intensities – TeWaTi Laser**” held on 27-01-2010, **Workshop on Recent Trends in Physics and Electronics**, Organised by the Department of Physics and Electronics, Salem Sowdeswari College, Salem, Tamilnadu.
75. **Institutional Seminar**: Delivered a lecture on “**Emerging Trends in Nano-Optics and Modern Spectroscopy**”, held on 09.10.2009, during 14-15 hours in Fröhlich room, Department of Optics and Quantum Electronics, University of Szeged, HUNGARY.
76. **Institutional Seminar**: Delivered a lecture on “**Academic Education in India**”, held on 08.10.2009, during 12-14 hours in Fröhlich room, Department of Optics and Quantum Electronics, University of Szeged, HUNGARY.
77. **Invited Talk**: delivered a lecture on “**Generation of Needle of Longitudinal Polarized Non Diffracting Beam using High NA Lens Axicon**” International Conference LEI-2009, Light at Extreme Intensities, Scientific Opportunities and Technological issues of the Extreme Light Infrastructure, 16-21. October, 2009, Brasov, ROMANIA.
78. **Invited Talk**: Delivered a lecture on “**Emerging Trends in Nanooptics and Modern Spectroscopy spotlighting Light Trapping Scheme of Microlenses for Solar Cells**” in the **National Seminar on Modern Optics and Spectroscopy**, held on August 13-14, 2008, Organized by Department of Physics, All Saints’ College, Trivandrum.'
79. **Invited Talk**: Delivered a lecture on “**Some Characteristics Study on Nanostructured Thin Silicon Films for Solar Cells**” in the **National Conference on Emerging Trends in Engineering and Technology spotlighting Nanomaterials, Nanotechnology & Embedded Systems** on 24<sup>th</sup> & 25<sup>th</sup> April, 2008 organised by Channabasaveshwara Institute of Technology, Tumkur, Karnataka.

80. **Key Note Address** & Delivered on the topic “**Recent Trends in Micro Optics**” in the **Seminar organized by the Einstein Society of Physics OPT ‘O’ FEST ’07** at the Department of Physics, Sri Vidya Mandir Arts & Science College, Uthangarai, on 28.9.2007.
81. **Key Note Address** & Delivered a Special Lecture on the topic, “**Optics to Microoptics**”, in the **Science and Humanities celebration day** Organised by Department of Physics, Annai Madha Ammal Sheella Engineering College, Erumapatti, Namakkal on 2.8.2007.
82. **Key Note Address** & Delivered a Special Lecture on the topic “**Recent Trends in Modern Physics**” in the **Seminar organized by the Department of Physics during Science day Celebration**, Govt. Arts College, Salem-7, on 28.2.2007.
83. **Resource Person - Refresher Course in Physics – UGC- Academic Staff College, University of Kerala**, delivered lecture on “**Microoptics and Optical Design using ZEMAX Software**” during 20-2-2007 to 21-2-2007
84. **Resource Person:** Delivered a a Special Lecture on the topic “**Emerging Trends in Optics**” in the **National Conference on Emerging trends in Physics and Electronics** on 7<sup>th</sup> and 8<sup>th</sup> Feb – 2007, Department of Physics and Electronics, P.G.P college of Arts and Science , Namakkal.
85. **Key Note Address** & Delivered a Special Lecture “**Emerging Trends in Nano-Optics**” in **Dr. A. P. J. Abdul Kalam Association Inaugural Function** organized by the Department of Physics, Harur Muthumasi Arts and Science College, Harur on 18.8.2006.
86. **Key Note Address** & Delivered on the topic “**Traditional Physics to Modern Physics**” in the **One Day Seminar** organized by the Department of Physics, Thiruvalluvar Govt. Arts College, Rasipuram on 2.3.2006.
87. **Resource Person - Refresher Course in Physics – Academic Staff College, Bharathidasan University, Tiruchirappalli**, delivered lecture on “**Microlenses in Microoptics**” during 18-1-2006 to 7-2-2006 (19.01.2006)
88. **Resource Person:** Delivered a lecture on “**Macro-Optics to Micro-Optics**” in the **Workshop on Recent Trends in Physical Sciences Research** held at Dept. of Physics, Periyar University, Salem on 29 & 30, August 2005.

**IV. Details of Various Workshops Attended/Delivery Talks: Names of Institutions, Titles Etc.**

Sl. No.	Organisation	Period		Title of workshop
		From	To	
1	A.V.C. College, Mannampandal, Mayiladuturai	14-5-1993	7-6-1993 (25 days)	Workshop on Microprocessor and its Applications

2	A.V.C. College, Mannampandal, Mayiladuturai	6-1-1994	8-1-1994 (3 days)	Workshop on PCB Fabrication and its Applications
3	A.V.C. College, Mannampandal, Mayiladuturai	27-1-1995	28-1-1995 (Two days)	Workshop on Recent Trends in Crystal Growth
4	Crystal Growth Centre, Anna University, Chennai – 25.	7-12-2004	10-12-2004 (4 days)	Workshop on Crystal Growth and Applications of Advanced Materials for Opto-Electronics
5	Dept. of Physics, Periyar University, Salem-11	29-8-2005	30-8-2005 (Two days)	Workshop on Recent Trends in Physical Sciences Research
6	National Institute of Technology, Tiruchirappalli and Collaborated with WRI, BHEL, Trichy	9-1-2007	10-1-2007 (2 days)	Workshop on Laser Materials Processing
7	Dept. of Physics, Periyar University, Salem-11	31-3-2008	(One day)	One day workshop on Recent Developments in Nanomaterials Research
8	ICTP, ITALY	27-10-2008	30-10-2008 (4 days)	Workshop on Nanoscience for Solar Energy Conversion
9	Dept. of Physics, Periyar University, Salem-11	12-3-2009	(One day)	Workshop on Recent Developments in Photonic Materials Research
10	Centre for Nanoscience and Nanotechnology Periyar University Salem-11	13-8-2012	14-8-2012 (Two days)	National Science Academies' Lecture workshop on 'Modern Trends in Chemistry'
11.	Department of Zoology School of Life Sciences Periyar University Salem-11	06-01.2016	08-01.2016 (Three Days)	National Workshop on Nanotechnology for Biologist

**V. Titles of the theses/projects for each degree, students name and the year of the award of the degree.**

**(a). The following Ph.D Scholars under my guidance at Perivar university & Name of External Examiners conducted viva-voce examniations:**

1. **Dr. R. Rengaiyan, (1PHY) “A Novel Study on Light Trapping Scheme for Thin Silicon Solar Cells using Microlenses”- (03-12-2008) - Name of External Examiner - Prof. K. Tamilmaran, Bharathidasan University**
2. **Dr. S. Selvanandan, (2PHY) “A Modern Lens Design and Its Characteristics Study for Free Space Optical Interconnections”- (30-01-2009) Name of External Examiner – Prof. S. Barathan, Annamalai University.**
3. **Dr. M. K. Subramanian, (3PHY) “Spectroscopic Studies of Some Polyatomics” – (09-04-2009) - Name of External Examiner – Prof. R. Jayavel, Anna University, Chennai.**
4. **Dr. K. B. Rajesh, (4PHY) “A Theoretical Study on Sub-wavelength and Super-resolution Non-diffracting Beam for High Density Optical Recording”- Full Time (29-04-2009) - Name of External Examiner – Dr. A. R. Ganesan, IIT (M).**
5. **Dr. A. Kalyanasundaram, (5PHY) “An Investigation to Enhance the Coupling Efficiency between Laser Diode and Single Mode Fibre via Microlens in Microoptics”- (28-09-2009) – Name of External Examiner - Dr. T. K. Parasuraman, Boompuhar College.**
6. **Dr. K. Vasudevan, (6PHY) “Study of Geometrical, Electronic Structure, Spectral and NLO Properties of Some Phthalonitrile Dye Sensitizers for Solar Cells”- (26-11-2010) - Name of External Examiner – Prof. S. Moorthy Babu, Anna University, Chennai.**
7. **Dr. S. Manimegalai - (06PHP0220) - “Quantum Chemical Calculations of Some Modified Phthalocyanine Dye Sensitizers for Solar Cell Applications” – (27-04-2012) - Name of External Examiner Prof. P. Vickraman, Gandhigram Rural Deemed Central University.**
8. **Dr. N. Sakthivel - (05PHP0342) - “Growth, Characterization and Theoretical Investigations on Some Organic Crystals” – (10-12-2012) - Name of External Examiner – Prof. K. Srinivasan, Bharathiar University.**
9. **Dr. V. Ravi - (05PHP0330) - “Focus on Engineering with Vector Diffraction Theory for Nanometer Scale Applications” – (11-01-2013) – Name of External Examiner - Dr. L. Senthilkumar, Bharathiar University.**
10. **Dr. A. Prakasam - (10PHY) “Structural and Electronic study of Some Nitrile Dye Sensitizers for Solar Cell Applications via Density Functional Theory” – (12-04-2013) - Name of External Examiner - Prof. P. Vickraman, Gandhigram Rural Deemed Central University.**
11. **Dr. M. Geetha - (09PHF0466) - “Preparation, Characterization and Photovoltaic Performance of Modified TiO<sub>2</sub> Nanoparticles by Sol-Gel Technique” - Full Time, Rajiv Gandhi Fellow - (16-09-2013) Name of External Examiner – Dr. S. Anandan, Associate**

**Professor, Nanomaterials & Solar Energy Conversion Lab., Department Of Chemistry,  
National Institute Of Technology, Trichy - 620 015**

12. **Dr. P. Senthilkumar - (12PHY)- DOJ: ( 7.1.2009) - “Quantum Chemical Investigations of Some Stilbene Derivatives for Dye Sensitized Solar Cell - Full Time, UGC, Project Fellow – (07-03-2014) Name of External Examiner – Prof. P. Kulandaivel, Bharathiar University.**
13. **Dr. L. Arivuselvam - (10PHP0618) - Photovoltaic Performance Study on Comparison of Dye Sensitized and V-Grooved Silicon Solar Cells - (26-03-2010) - Thesis Submitted on 23-05-2014 – Viva-Voce Examination on 04.09.2014 - Name of External Examiner – Dr. R. Kannan, Associate Professor, Anna University College of Engineering, Dindigal.**
14. **Dr. K. Lalithambigai - (11PHF0742) - (R11PHY01) DOJ: (02-03-2011) as Full Time, UGC, Non-SAP, Fellow - Synopsis “Vectorial Approach on the Investigation of Tightly Focused Azimuthally Polarized Beam for Optical Trapping Applications” Thesis Submitted on 23-05-2014, Viva-voce Examination on 12.05.2015 - Name of External Examiner – Prof. V. Ramasamy, Annamalai University.**
15. **Dr. K. Suguna - (10PHP0787) - Theoretical and Experimental Analysis of Solvent Effect in Natural Sensitizer for DSSC Applications - (11-01-2010) – Thesis Submitted on 24-12-2014. Viva-Voce Examination on 21.08.2015 - Name of External Examiner – Prof. K. Ramamurthy, SRM University.**
16. **Dr. P. Ramu - (10PHP0853) - Synthesis of Various Surfactant Assisted Nano-ZnO and Investigations on the Influence of Additives in its Property Modifications - (20-01-2010) - Part time Scholar- Synopsis Submitted on 25.09.2014. Thesis Submitted on 12.05.2015, Viva-Voce Examination on 20.11.2015 - Name of External Examiner - Dr. T. C. Sabari Girisun, Bharathidasan University**
17. **Dr. K. M. Prabhu - (11PHP0884) - Improved Performance of Natural Dye Sensitized Solar Cell Using Modified TiO<sub>2</sub> Nanoparticles by Sol-Gel Technique – Synopsis Submitted on 23.05.2014 – Jointed on (12-01-2011) as a Part time Scholar - Thesis Submitted on 12-11-2014, Viva-Voce Examination on 18.01.2016 - Name of External Examiner – Dr. K. B. Rajesh, Chikkanna Govt. Arts & Science College, Tiruppur.**
18. **Dr. P. Sakthivel - (12PHP0964) - Quantum- Chemical Study of Structure and Spectral Properties of Some Organic Nitrile Dye Sensitizers for Dye Sensitized Solar Cells Applications - (12-09-2012) - Part time Scholar – Synopsis Submitted on 26.06.2015, Thesis Submitted on 27.01.2016, Viva-Voce Examination on 27.07.2016 - Name of External Examiner - Dr. M. Sivakumar, Associate Professor, Department of Science, Amirta Vishwa Vidyapeetham University, Ettimadai, Coimbatore.**
19. **Dr. D. Sakthi - (12PHP1024) - Geometrical, Electronic Structure, Spectral And NLO Properties of Some Nitrile Dye Sensitizers For Solar Cells Using Quantum Chemical Calculations - (10-12-2012) - Part Time Scholar - Synopsis Submitted on 03.12.2015,**

Thesis Submitted on 31.05.2016 - Viva-Voce Examination on 7.10.2016 - Name of External Examiner – Dr. S. Chandra, Annamalai University.

20. Dr. M. Prakasam - (14PHF1294) - (R14PHY05) - DOJ: (06.11.2014) - “Efficiency Improvement of Some Organic Sensitizer for NLO and Dye-Sensitized Solar Cells Application: A First Principle Study”- Full Time Scholar - (06.11.2014) - Synopsis Submitted on 28.11.2016, Thesis Submitted on 03.03.2017, Viva-Voce Examination on 12.10.2017 - Name of External Examiner – Dr. K. Ramachandran, UGC-FRP, Bharathiar University.
21. Dr. C. Mohanasundaram - (11PHP1316) - Investigation on Generation and Manipulation of Transversely Polarized Focal Fields using Vector Diffraction Theory - (31-01-2011) - Part time Scholar - Synopsis Submitted on 18.08.2016 – Thesis Submitted on 30.01.2017, Viva-Voce Examination on 10.11.2017, Name of External Examiner - Prof. K. Tamilmaran, Bharathidasan University.
22. Dr. A. Priyadharsan - (R14PHY04) – Multifunctional Reduced Graphene Oxide Based Nanocomposite for Environmental Remediation: Clean Water and Antibacterial Activity (15-10-2014) – Full Time Scholar - Synopsis Submitted on 15.02.2018 – Thesis Submitted on 10.01.2019, Viva-Voce Examination on 3.10.2019, Name of External Examiner - Prof. Suresh Mathew, Mahatma Gandhi University, Kottayam, Kerela.
23. Dr. A. Arunkumar - (16PHF2028)– Analysis of the Electronic Transport and NLO Properties of Some Organic Dye Sensitizers for Optoelectronic Applications – Quantum Chemical Assessment (08-02-2016) – Full Time Scholar - Synopsis Submitted on 30.04.2019 – Thesis Submitted on 27.08.2019 - Viva-Voce Examination on 28.10.2020, Name of External Examiner – Dr. L. Senthilkumar, Professor of Physics, Bharathiar University, Coimbatore, Tamilnadu.
24. Dr. S. Shanavas - (17PHF2206) – Investigation on RGO Based Nanocomposites for Efficient Photocatalytic Degradation of Organic Pollutants in Wastewater - (26-07-2017) – Full-time Scholar, Synopsis Submitted on 19.10.2020 - Thesis Submitted on 11.02.2021- Viva-Voce Examination on 30.03.2021 - Name of External Examiner – Dr. C. Sekar, Professor Head, Department of Bioelectronics and Biosensors, Alagappa University, Karaikudi - 630 003, Tamil Nadu, India.
25. Dr. C. Indira Priyadharshini - (15PHP2202)– Electrochemical Analysis of Ternary and Binary Nanomaterials for Supercapacitor Applications - (23-11-2015) – Part time Scholar – Synopsis Submitted on 02.09.2020– Thesis Submitted on 19.01.2021 - Viva-Voce Examination on 31.03.2021 - Name of External Examiner – Dr. G. Anbalagan, Professor of Physics, Department of Nuclear Physics, Madras University, Chennai - 6, Tamilnadu.
26. Mr. I. Ragavan - (R17PHY03) - Computational and Experimental Spectroscopic Investigations on Some Bioactive Organic Molecules for Anticancer Treatment - (11-10-2017) – Full-time Scholar - Synopsis Submitted on 9.10.2023 - Thesis Submitted on

**29.02.2024, Viva-voce Examination on 22.04.2024 - Name of External Examiner – Prof. N. Sundaraganesan, Dept. of Physics (FEAT), Annamalai University, Chidambaram, Tamil Nadu.**

27. **Ms. C. Vidya – (R15PHY04) - Quantum Chemical and Experimental Investigations on Some Organic Single Crystals for Nonlinear Optical Applications - (23-11-2015) – Full time Scholar - Synopsis Submitted on 8.12.2023 - Thesis Submitted on 28.03.2024, Viva-voce Examination on 04.09.2024 - Name of External Examiner Prof. P. Vickraman, Gandhigram Rural Deemed Central University.**
28. **Mr. S. Arun Kumar - (R21PHY04) - Reg. No: PUUJ200410225 - Investigation on Hybrid Supercapacitor by Employing Binder-Free Metal Oxide Electrodes for Energy Storage Application - (07.07.2021) – Full time Scholar - Synopsis Submitted on 8.4.2024 - Thesis Submitted on 5.07.2024 - Viva-voce Examination on 01.10.2024 - Name of External Examiner Prof. G. Velraj, College of Engineering, Anna University, Chennai – 25 - (Through online).**
29. **Mrs. Sarasamreen I – (PUUD190410111) - Novel Engineering of Metal Sulfides with Carbon Composite Electrodes for Energy Storage Application - 30.09.2020 - Full time Scholar - Synopsis Submitted on 15.4.2024 - Thesis Submitted on 26.07.2024 - Viva-voce Examination on 23.09.2024 - Name of External Examiner Prof. G. Muralidharan, Gandhigram Rural Deemed Central University (Through online).**
30. **Mrs. S. Aadheeswari -[Reg. No: PUUJ200410194]-(07.07.2021)-Part-time-PU04124000457)**
31. **Mr. J. Chandrasekaran – [Reg. No. PUUD210410437] – (4.7.2022) - Part-time**
32. **Mrs. A. Vinnarasi - [Reg. No. PUUD220410653] - (23.06.2023) - Full Time**
33. **Ms. A. Durganandhini - [Reg. No. PUUD220410721] - (25.07.2023) - Full Time**

~~Mrs. A. Nisha – (23-01-2017) – Full time Scholar – Cancelled~~

~~Mr. K. Dharmaboopathi – (14-07-2017) – Part time Scholar – Cancelled~~

#### Co-Guidance for the Following Ph. D Candidates:

1. **Dr. D. Rajeswari, Title: “Development of Mineralized Hydroxyapatite Conducting Polymer Composite Coatings on Electron Beam Treated Surgical Grade Stainless Steel for Orthopedic applications” - (Supervisor: Dr. L. Kavitha) – Thesis Submitted on 23.06.2016, Vova-Voce Examination on 15.11.2016 - External Examiner - Dr. D. Ravishankaran, National Centre for Nanoscience and Nanotechnology, University of Madras, Guidy Campus, Chennai – 25.**
2. **Dr. E. Parasuraman, Title: Wave Instability and Dynamics of Nonlinear Localized Modes in Nanotubes with Higher Order Interactions” - (Supervisor: Dr. L. Kavitha) – Vova-Voce Examination on 20.07.2017 - External Examiner - Prof. Dr. K. Thamilmaran, Professor & Head, Centre for Nonlinear Dynamics, School of Physics, Bharathidasan University, Tiruchirappalli – 620 024.**

3. **Dr. C. Lavanya**, Title: **Nonlinear Localized Excitations in Magnetized and Unmagnetized Multicomponent Plasma**” - (Supervisor: **Dr. L. Kavitha**) - **Vova-Voce Examination on 21.07.2017** - External Examiner – **Prof. Dr. Manoravi**, Scientific Officer ‘G’, **Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam – 603 102.**
4. **Dr. V. Senthil Kumar**, Title: **“Propagation of Electromagnetic Soliton and Localized Magnetization Dynamics in the Nanoscale Magnetic Systems”** - (Supervisor: **Dr. L. Kavitha**) – Thesis Submitted on **20.06.2016**, **Vova-Voce Examination on 20.10.2017**, External Examiner – **Prof. K. Jayakumar**, **Gandhigram Rural Deemed Central University, Dindigul.**
5. **Dr. R. Ravichandran**, Title: **Non-linear Modeling of Pulse Solidary Wave Propagation in Cardiovascular Systems”** (Supervisor: **Dr. L. Kavitha**) – Thesis Submitted on **20.06.2016**, **Vova-Voce Examination on 24.11.2017**; External Examiner – **Dr. D. Ravishankaran**, **National Centre for Nanoscience and Nanotechnology, University of Madras, Guidy Campus, Chennai – 25.**
6. **Dr. Mrs. D. Seetha**, Title: **Characterization of Archaeological Artifacts Through Spectroscopic and Chemometric Analyses**, (Supervisor: **Dr. G. Velraj**) Thesis Submitted on **20.06.2016**, **Vova-Voce Examination on 24.11.2017**; External Examiner – **Prof. Dr. P. Vickraman**, **Department of Physics, Gandhigram Rural Institute (Deemed University) Gandhigram, Dindigul, - 624 302**
7. **Dr. R. Priya** Title: **Nonlinear Localized Excitations and Discrete Breathers in Neuronal Microtubules and Nerve Axons** (Supervisor: **Dr. L. Kavitha**) – **28.09.2021** ; External Examiner: **Prof. Vincent Mathew**, **Central Univesity of Kerela – 671 320**
8. **Dr. G. Sowmya** Title: **Spectroscopic Studies of Some Conducting Polymers with Nano Metal and Metal Oxide Composites** (Supervisor: **Dr. G. Velraj**) - **23.02.2022**; Name of External Examiner – **Dr. L. Senthilkumar**, **Professor of Physics, Bharathiar Univesity, Coimbatore, Tamilnadu.**

**(b) Other University Ph.D. Public Viva-Voce Examinations Conducted by Invitation:**

Sl. No.	Name of Candidate	Name of Supervisor(s)	Title of Thesis	Place held / University	Date of Viva Exam. Conducted
1.	<b>Dr. K. Thiruppathi</b>	<b>Prof. S. Barathan</b>	<b>Studies on the Role of Mineral Admixture and Different Curing Media in Type V Cement Admixture Paste</b>	<b>Annamalai University</b>	<b>27.07.2009</b>

2.	Dr. Mrs. R. Vasumathi	Dr. P. Neelamegam	Evaluation of Chloride using Embedded System Based Analyser and Artificial Neural Network Computation in Biological and Environmental Samples	A.V.V.M Sri Pushpam College, Bharathidasan University	11.09.2012
3.	Dr. P. Sutharsan	Dr. C. Manoharan	Spectroscopic, Thermal and Mechanical Analysis of Alluvial and Red Clay Materils from Tamilnadu for Industrial Applications	Annamalai University	08.08.2013
4.	Dr. G. Srinivasan	Dr. R. Palani	Ultrasonic and Spectroscopic Studies of Ternary Mixtures of Liquids and Glasses	Annamalai University	03.10.2013
5.	Dr. K. Santhosh Kumar	Dr. C. Manoharan	Spray Deposition of Undoped and Doped (Indium, Antimont) Tin Sulphide Thin Films for Photovoltaic Applications	Annamalai University	27.03.2014
6.	Dr. S. Sivananthan	Dr. N. Neelakanda	Studies on Pure and ZnS Added Mixed Single Crystals of $\text{NaCl}_x\text{Br}_{(1-x)}$ Grown from Aqueous Solutions	M.S.University, Tirunelveli	11.04.2014
7.	Dr. Ms. P. N. Nirmala	Dr. G. Suresh	Synthesis and Characterization of Some Alkaline Earth Metal Oxide Thin Film Grown By Chemical Bath Deposition	Annamalai University	03.09.2014
8.	Dr. N. G. Joby	Dr. P. Venkatachalam	Enhancement of Photocurrent Efficiency of Dye Sensitized Solar Cells by Incorporating Novel Photoanode Structures, New Organic Sensitizers Proficient Electrolytes and Competent Counter Electrodes on Fabrication	Annamalai University	09.10.2014
9.	Dr. P. Praveen	Dr. G. Viruthagiri	Synthesis and Characterization of Multi-Metal Elements Doped $\text{TiO}_2$ Nanoparticles by Sol-gel Technique	Annamalai University	14.10.2014

10.	Dr. Mrs. K. Praba	Prof. V. Ramasamy	Synthesis and Study of Structural, Morphological, Optical and Thermal Properties of Nickel Doped ZnS Nanoparticles Using Effective Surfactants	Annamalai University	14.10.2014
11.	Dr. Ms. R. Paramajothi	Prof. S. B. Kalyana Raman	Ultrasonic Instrumentation, Evaluation of Structural Parameters of Tricomponent Phosphovandate Glasses and Molecular Interaction Studies in Binary Systems of Anilines	Mother Teresa Women's Univesity, Kodaikanal	20.10.2014
12.	Dr. Mrs. I. Kalaiaras	Prof. V. Ramasamy	Spectroscopic and Thermoluminescence Dosimetric Analysis of Natural Barite	Annamalai University	08.01.2015
13.	Dr. M. Sundarajan	Prof. V. Ramasamy	Spectroscopical Characterisation and Radiological Hazardous Nature of Recently Excavated Beach Sediments, Kerala, India	M.S. University, Tirunelveli	23.01.2015
14.	Dr. Ms. H. Adline Mahiba	Dr. S. Akilandeswari	Spectroscopic Studies of Heavy Mentals on Greens And Analysis of Soil and Water Through Modelling Technique	N.M.C. College, Marthandam, M.S. University, Tirunelveli	26.03.2015
15.	Dr. Mrs. P. Girija	Dr. S. Parthiban	Studies on Crystal Growth, Structure and Charactersation of Some NLO Materials	Dept. of Chemistry, Annamalai University	24.04.2015
16.	Dr. Mrs. K. Amudhavalli	Dr. N. Neelakanda Pillai	Development of Novel Metal Oxide Thin Film for Solar Energy Harvesting Application	St. Xavier College, Palayamkottai, M.S. University, Tirunelveli	02.06.2015
17.	Dr. K. Navamani	Dr. K. Senthil Kumar	Charge Carrier Dynamics in Few II-Stacked Organic Molecules	Bharathiar University	18.09.2015
18.	Dr. I. Joseph Panneerdoss	Dr. S. Johnson Jeyakumar &	Deposition, Charcterization and Theoretical Analysis of Industrially Important In <sub>2</sub> O <sub>3</sub> and TiO <sub>2</sub> Thin Films	TBML College, Porayar, Bharathidasan University	29.10.2015

19.	Dr. P. C. Rohmingli ana	Prof. R. K. Thapa & Dr. Zoliana	Indoor and Outdoor Radon and Thoron Monitoring in Mizoram with Special Reference to Lunglei, Serchhip and Mamit Districts	Mizoram University (Central University)	17.11.2015
20.	Drs. M. N. Thanuja	Dr. N. Neelakanda Pillai	Growth and Characterization of $\text{Na}_x\text{K}_{(1-x)}\text{Br}$ Single Crystals from Aqueous Solution	S.T. Hindu College, Nagercoil, M.S. University, Tirunelveli	18.02.2016
21.	Dr. A. Rejo Jeice	Dr. K. S. Joseph Wilson & Dr. Sr.	Investigation on Various Optical Properties of Low Dimensional Systems	Holy Cross College, Nagercoil, M.S. University, Tirunelveli	21.03.2016
22.	Dr. Mrs. P. Peula Kumari	Dr. (Mrs.) Rachel Oommen	Synthesis and Characterisation of Iron and Silver Nanoparticles for Biological Applications	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore	28.03.2016
23.	Dr. A. Chandra sekaran	Dr. R. Ravishankar	Spectroscopic Studies to Assess Quality Pollution and the Associated Radiological Hazards of Soil in Yelagiri Hill with Stsatisitcal Approach	P.G. and Research Department of Physics, Govt. Arts College, Thiruvannamalai, Thiruvalluvar University, Vellore	10.08.2016
24.	Dr. R. Jothimugan	Prof. K. Thamilmaran	Investigations of Chaos, Beats and Resonances in Certain Non-linear Electronic Systems	Bharathidasan University	29.07.2016
25.	Dr. Mrs. G. Therese Anita	Dr. K. B. Rajesh & Dr.	Effect of Spherical Aberration, Coma and Astigmatism in Tight Focusing of Lser Beam	Anna University College of Engineering Nagercoil	19.08.2016
26.	Dr. Ms. G. Jayaranjani	Dr. S. Bakkialakshmi	A Spectroscopic Investigation on the Inclusion Complexes of two natural Polyphenols with $\beta$ -Cyclodextrin and one of its Derivatives in Aqueous Solution	Department of Physics, Annamalai University	22.08.2016

27.	Dr. Mrs. M. N. Audline Jini	Dr. A. Dickson Benjamin	Vibrational Spectral Analysis of Materials Used in Self Assembled Monolayers and Formation Dynamics	N.M.C College, Marthandam, M.S. University, Tirunelveli	29.08.2016
28.	Dr. K. Suresh	Prof. K. Thamilmaran	Oscillation Quenching and Reviving of Oscillations in Coupled Nonlinear Oscillators	Bharathidasan University	7.12.2016
29.	Dr. Ms. A. Manopriya	Prof. L. Senthil Kumar	Understanding the Reaction Mechanism of Volatile Organic Compounds using Theoretical and Experimental Methods	Bharathiar University	21.12.2016
30.	Dr. Mrs. T. Vasuki	Dr. M. Saroja	Investigations on Sol-gel Spin Coated TiO <sub>2</sub> and ZnO Doped TiO <sub>2</sub> Crystalline Thin Films for Photocatalytic Degradation of methylene Blue	Erode Arts and Science College, Erode, Bharathiar University	22.12.2016
31.	Dr. D. Prakash Babu	Dr. H.B. Ramalingam	Low Temperature Synthesis, Characterization and Luminescence Studies of Undoped and Doped Zirconia Nanoparticles	Govt. Arts College, Udumalpet, Bharathiar University	17.04.2017
32.	Dr. P. Soundhirarajan	Dr. S. Sivakumar	Preparation, Characterizations and Application Oriented Antibacterial Activity of Pure and Various Transition Metals Doped BaSO <sub>4</sub> Nanoparticles via Chemical Precipitation Method	Dept. of Physics, Annamalai University	19.04.2017
33.	Dr. Mrs. V. Pouchaname	Dr. A. Tinabaye & Dr. R. Madivanane	Quantum Mechanical Comoutational And FTIR & FTRaman Spectral Analysis of Vibrational Modes of Certain Biologically Important Organic Molecules	Dept. of Chemistry, Dravidian University, Kuppam	04.05.2017
34.	Dr. Arul Teen, Y.P	Dr. T.V.S. Pillai & Dr. K. Rajesh, External Examiner: Prof.	Analysis of Beam Propagation Characteristics and Different Modulation Techniques in Turbulent Atmosphere for Free Space Optical Communication	Faculty of Information and Communication Engineering, University College of Engineering, Nagercoil	12.05.2017

35.	<b>Dr. Mrs. Rani K. Pillai</b>	<b>Dr. P. J. Jojo &amp; Dr. K. Madhuku</b>	<b>Study of Gross Gamma Activity in the Indoor Atmosphere along the South West Coastal Region of Kerela</b>	<b>Fatima Mata National College, Kollam, University of Kerela</b>	<b>12.07.2017</b>
36.	<b>Dr. B. Balachander</b>	<b>Dr. M. Saroja</b>	<b>Synthesis, Characteristizaation and Solar Photocatalytic Properties of Undoped and Transition Metals (Mn &amp; Ni) Doped ZnS Nanomaterials</b>	<b>Erode Arts and Science College (Autonomous), Erode, Bharathiar University, Coimbatore</b>	<b>05.09.2017</b>
37.	<b>Dr. Ms. V. Revathy</b>	<b>Dr. K. S. Joseph Wilson</b>	<b>A Study of Non-Linear Optical Effects in Nanomaterials</b>	<b>Arul Anandar College (Autonomous) Karumathur -625 514 Madurai</b>	<b>27.09.2017</b>
38.	<b>Dr. D. Aravinthan</b>	<b>Prof. M. Daniel</b>	<b>Effect of Interlayer Coupling and Biasing on Spin Transfer Torque Switching in Ferromagnetic Nanopillars</b>	<b>Centre for Nonlinear Dynamics, School of Physics, Bharathidasan University, Tiruchirappalli</b>	<b>19.10.2017</b>
39.	<b>Dr. Antony Dominic Christonhe</b>	<b>Dr. N. Neelakanda Pillai &amp; Dr. Sr.</b>	<b>Growth and Characterization of L-Threonine NLO Single Crystals Doped with Zn Ions</b>	<b>Holy Cross College, Nagercoil, M.S. University, Tirunelveli</b>	<b>6.12.2017</b>
40.	<b>Dr. J. Chandra Mohan</b>	<b>Dr. R. Ravisankar</b>	<b>Spectroscopic Characterization of Coastal Sediment Samples along East Coast of Tamilnadu</b>	<b>P.G. and Research Department of Physics, Govt. Arts College, Thiruvannamalai, Thiruvalluvar University, Vellore</b>	<b>12.02.2018</b>
41.	<b>Dr. L. Gobinathan</b>	<b>Dr. K. Boopathy</b>	<b>Synthesis, Crystal Growth and Characterization of Hydrochloride, Cobalt Chloride and Barium Chloride Based Glycine Complexes</b>	<b>Govt. College of Engineering, Dharmapuri</b>	<b>13.02.2018</b>

42.	Dr. Mrs. E. Nirmala	Dr. I. Kartharinal Punitha	Synthesis and Characterisation of nanoparticles for Gas Sensor Applications	TBML College, Porayar, Bharathidasan University	13.02.2019
43.	Dr. Mrs. A. Irene Sobia	Dr. A. Dickson Benjamin	A Study on the Evolution of Solar Magnetic Field in the Heliosphere	N.M.C College, Marthandam, M.S. University, Tirunelveli	11.04.2019
44.	Dr. B. Muthulakshmi	Dr. S. Johnson Jeyakumar	A Study of Ground Level Ozone & NO <sub>2</sub> Concentrations and Their Related Physical Processes.	TBML College, Porayar, Bharathidasan University	28.06.2019
45.	Dr. B. S. Benila	Dr. S. Mary Delphine	Growth and Characterisation of L-Alanine Based Nonlinear Optical Crystals.	Holy Cross College, Nagercoil, M.S. University, Tirunelveli	05.07.2019
46.	Dr. K. Umamaheswari	Dr. U. Sankar & Dr. A. Moses	Dielectric Studies of Molecular Interaction of Polar-Polar Mixtures	Scott Christian College, Nagercoil, M.S. University, Tirunelveli	29.08.2019
47.	Dr. J. Thennarasu	Dr. G. Meenakshi	Molecular Interaction Studies in certain Binary and Ternary Liquid Systems exposed to Ultrasonic Frequency	Dravidian University, Kuppam, Andhra Pradesh	07.11.2019
48.	Dr. B. Arunkumar	Dr. S. Johnson Jeyakumar	A Study on Antibacterial Activity of CuO Nanoparticles Synthesized through Chemical and Biological Routes	TBML College, Porayar, Bharathidasan University	11.12.2019
49.	Dr. M. Sathishkumar	Dr. M. Saroja	Synthesis, Characterization and Antimicrobial Properties of Biosynthesized ZnS Nanoparticles and Cu, Al Doped ZnS Thin Films	Erode Arts and Science College, Erode, Bharatiar University	19.12.2019
50.	Dr. G. Anushya	Dr. T. H. Freeda	Effects of Siddha and Allopathic Medicines on the Formation of Urinary Stones Crystals	S.T. Hindu College, Nagercoil, M.S. University, Tirunelveli	13.02.2020

51.	Dr. R. Arunkumar	Dr. D. Benny Anburaj	Crystal Growth and Characterization of Technologically Important Crystals (Webinar/virtual/video Viva-voce conducted)	D.G.G.A College, Mayiladuturai - 609001	10.06.2020
52.	Dr. Mrs. S. Arunima	Dr. P. J. Jojo	Study of Ingestion Dose Due to Primordial Radionuclides Through Food Stuff in the High Background Radiation Areas of Kerala	Fatima Mata National College, Kollam, University of Kerela	23.09.2020 F.N
53.	Dr. Mrs. R. Lekshmi	Dr. P. J. Jojo	Study of Primeval Radio-Isotopes in Soil and the External Radiation Dose to the Human Beings in the Coastline Villages of Southern Kerala	Fatima Mata National College, Kollam, University of Kerela	23.09.2020 A.N
54.	Dr. D.Selleswari	Dr.P.Meena	Synthesis and Characterization of CuO and SnO <sub>2</sub> Nanoparticles for diode and CuO/SnO <sub>2</sub> Nanocomposites for Diode and Photocatalytic Applications	Department of Physics, PSGR Krishnammal College for Women, Coimbatore – 641004, Bharatiar University	03-12-2020 FN
55.	Dr.H.Jude Leonard Hilary	Dr. P.C.Jobbe Prabakar	Synthesis, Characterization and Computational Analysis of some Nonlinear Optical Crystals.	TBML College, Porayar, Bharathi -dasan University	13.02.2021 FN
56.	Dr. K. Jayasheela	Dr. S. Periandy	Molecular Docking Investigation and Spectral Analysis of Certain Pharmaceutically Active Compounds Using DFT Methods	KMGIPSR, Puducherry Pondicherry Unive	05.03.2021 FN

57.	Dr. S. Meena	Dr. N. Neelakanda Pillai &	Growth and Characterization of Novel NLO Materials $Zn_xMg_{1-x}TS$	S.T. Hindu College Nagercoil, M.S. Uni.	10.03.2021 AN
58.	Dr. J. William Charles	Dr. K. B. Rajesh	Investigation on Focal Properties of Azimutally Polarized Beam Based on Vector Diffraction Theory	Chikkanna Govt. Arts College, Bharathiar Uni.	28.04.2021
59.	Dr. A. Beta Daniel	Dr. D. Arul Dhas	Theoretical and Experimental Spectroscopic Study on anti-Cancer drugs.	N.M. Christian College, Marthandam M.S.Uni.	17.05.2021
60.	Dr. S. Sebastiammal	Dr. A. Lesly Fathima	Green and Chemical Synthesis of Monovalent and Divalent Metal Ion doped nano HydroxyApatite (nHAP): Remediation Towards Human Pathogens and Cancer Cells.	Holly Cross College, Nagercoil M.S. Uni.	11.06.2021
61.	Dr. A. Ameer Baig	Dr. R. Vadamar	Growth and Characterization of Nanomaterials	Muthurangam Govt. Arts College Vellore TUV	28.06.2021
62.	Dr. A. Victor Babu	Dr. S. Murugan	A Novel approach to enhance the Quality of Stannic Oxide ( $SnO_2$ ) Thin Films Towards Assorted Applications	A.V.C College Mannampandal Bharathidasan Uni	23.08.2021 A.N
63.	Dr. J. Prince Richard	Dr. I. Kartharinal Punitha	A Study on the Influence of Transition Metal Dopings in the Photocatalytic Behaviour of ZnO Nanorods	TBML College, Porayar, Bharathidasan University	24.11.2021
64.	Dr. I. Jeya Sheela	Dr. N. Neelakanda Pillai	Growth and Characterization of MTC Single Crystals Doped With Zinc Chloride		02.02.2022

65.	Dr. M. Sankar	Dr. M. Jothibasu	Characteristic study on multi metal doped Cadmium sulfide nanoparticles for Photocatalytic Applications	TBML College, Po Bharathidasan Uni	17.02.2022
66.	Dr. J. Vasudevan	Dr. S. Johnson Jeyakumar	A Study on Optical and Magnetic Properties of ZnO Nanoparticles Synthesized through Solid-State Method	TBML College, Po Bharathidasan Uni	24.02.2022
67.	Dr. J. Gobinath	Dr. P. Gowthaman	Preparation, Characterization and Photocatalytic application of Undoped, Üu and Al doped CdS thin films	Erode Arts and Sci College (Autonomous) Erode, Bharathiar University, Coimba	04.03.2022
68.	Dr. S. Thambidurai	Dr. P. Gowthaman	Synthesis and characterization of transition metal oxide nanocomposites for Đolar energy conversion and antibacterial applications	Erode Arts and Sci College (Autonomous) Erode, Bharathiar University, Coimba	04.03.2022
69.	Dr. J. R. Sheeba	Dr. S. Radhika	A Study on Synthesis, Structure and Properties on SnO <sub>2</sub> Nano Crystals Doped with Some Transition Metals.	Poineer Kumaraswamy College Nagercoil	11.03.2022
70.	Dr. A. Zaheetha Banu	Dr. S. K. Joseph Wilson	A Study on Left-Handed Materials and Their Applicatons	Arul Anandar College (Autonomous) Karumathur -625 514 Madurai	24.03.2022
71.	Dr.M. Kumaresan	Dr. M. Venkatachalam	Design of high-performance resistive type gas sensor based TiO <sub>2</sub> and its various composite films for detection of hydrogen and carbon dioxide gases	Erode Arts and Sci College (Autonomous) Erode, Bharathiar University, Coimba	29.03.2022
72.	Dr. K. Subramanian	Dr. M. Venkatachalam	Implementation of Clock Gating Techniques Based Asic Design for Low Power Optimization in VLSI Technology	Erode Arts and Sci College (Autonomous) Erode, Bharathiar University, Coimba	09.05.2022

73.	Dr. P. Karthik	Dr. P. Gowthaman	Design and Fabrication of Resistive Gas Sensor Prepared on TiO <sub>2</sub> /Carbonaceous Hybrid Composite Thin Films for Detection of Various Toxic Gases	Erode Arts and Science College (Autonomous) Erode, Bharathiar University, Coimbatore	28.05.2022
74.	Dr. Shyama Muralidharan, K. P.	Prof. L. Senthilkumar	Theoretical Studies on Molecular Properties of Amino Acid Based Ionic Liquids	Department of Physics Bharathiar University, Coimbatore	16.06.2022
75.	Dr. S. Aslin	Dr. D. Usha	Application of Spectroscopic Investigations for Identification and Determination (NLO, NBO, HOMO-LUMO) of Some Organic Compounds	Department of Physics Women's Christian College, Nagercoil M. S. University	20.07.2022
76.	Dr. S. Mahalakshmi	Prof. P.P. Vijaya	Evaluation of <i>In-vitro</i> Genotoxicity, Biocompatibility, Anticancer and Wound healing behaviors of Green and Chemically Synthesized Zinc oxide, Iron Oxide ( $\alpha$ -Fe <sub>2</sub> O <sub>3</sub> ) and Fe/Zn oxide Nanocomposites – A Comparative study	Department of Nanoscience and Technology Bharathiar University, Coimbatore	11.08.2022
77.	Dr. R. Radhika	Dr. Venugopal	Flavonoids and Betalain Mediated TiO <sub>2</sub> Spherical Nanoparticles for Dye Sensitized Solar Cell Applications	Department of Physics Gobi Arts and Science College, Gobichettipalayam – 638 453	15.09.2022
78.	Dr. D. Sivayogam	Dr. I. Kartharinal Punithavathi	A Study on the Properties and Applications of Metal-Oxide Nanoparticles Synthesized Through Soft Chemical Method	TBML College, Porayar, Bharathidasan University	02.11.2022

79.	<b>Dr. D. Abila Darling</b>	<b>Dr. S. E. Joema</b>	<b>Crystallization and Characterization Studies on Chiral Aromatic Amino Acid Family of Single Crystals</b>	<b>N.M. Christian College, Marthandam M. S. Uni.</b>	<b>04.11.2022</b>
80.	<b>Dr. Towseef Ahmad Haiam</b>	<b>Dr. H. Saleem</b>	<b>Spectroscopic Analysis And Molecular Docking Studies Of Some Organic Compounds: A Quantum Chemical Approach</b>	<b>Department of Physics, Annamalai University</b>	<b>19.12.2022</b>
81.	<b>Dr. V. George Fernandez</b>	<b>Dr. B. Rajamannan</b>	<b>Docking, Spectral and Quantum Computational Analysis on the Biological Impact of Acetyl, Carboxylic, Furan and Amino Groups on Phenyl Rings</b>	<b>Department of Physics, Annamalai University</b>	<b>07.02.2023</b>
82.	<b>Dr. V. Gayathri</b>	<b>Dr.R. Balan</b>	<b>Synthesis and Characterization of Novel Polymer Blends for Tissue Engineering and Anti-Cancer Applications</b>	<b>Chikkanna Govt. Arts Gollege, Tirupur</b>	<b>15.02.2023</b>
82.	<b>Ms. M. Vinitha</b>	<b>Dr. G. Velraj</b>	<b>Synthesis and Characterisation of Metal Oxides and Mixed Metal Oxides PolyPyrrole Nanocomposites</b>	<b>Department of Physics, Anna University</b>	<b>03.03.2023</b>
84.	<b>Dr. C. U. Bhadra</b>	<b>Dr. D. Henry Raja</b>	<b>Fabrication and Characterisation of TiO<sub>2</sub> Nantube Arrays for Hydrogen Generation</b>	<b>Dept. of Physics, Scott Christian College (A), Nagercoil</b>	<b>28.08.2023</b>
85.	<b>Dr. R. Udayakumar</b>	<b>Dr. K. Gurusamy</b>	<b>Biosynthesis of Cadmium Oxide (CdO) and Calcium Oxide (CaO) Nanoparticles via Sesbania grandiflora L. leaf extract: Characterization and Potential Application as Antimicrobial and Anticancer Agents</b>	<b>Department of Physics, Annamalai University</b>	<b>04.09.2023</b>

86.	Dr. J. manonmani	Dr. S. Bakkialakshmi	Study of Molecular Interactions and Biomedical Applications of Berry Phenolic Acids with Globular Proteins	Department of Physics, Annamalai University	26.09.2023
87.	Dr. M. Jini Pramila	Dr. D. Arul Dhas	Crystal Growth, Structural, Spectroscopic and Computational Investigations of NLO Compounds	Nesamony Memorial Christian College, Marthandam.	20.10.2023
88.	Dr. S. Virgin Jeba	Dr. A. Lesly Fathima	Development of Novel Morphologies on Nickel Oxide Nanostructures Electrochemical Applications	Holy Cross College (A), Nagercoil	08.12.2023
89.	Dr. S. Thangabalu	Dr. N. Senthil Kumar	Systematic Investigation of Rare Earth (RE: Sm <sup>3+</sup> , Eu <sup>3+</sup> AND Gd <sup>3+</sup> ) Metals Doped WO <sub>3</sub> Nanoparticles for Dual Applications in Photocatalytic and Antibacterial Activities	Kongunadu Arts and Science College, Coimbatore	21.12.2023
90.	Dr. S. S. Monisha	Dr. S. Jeslin Sunitha Bai	Investigation on Certain Creatinine Based Bioactive Single Crystals using Computational and Spectroscopic Techniques	Nesamony Memorial Christian College, Marthandam.	05.01.2024
91.	Dr. M. Joseph Salethraj	Dr. D. Govindarajan	Electrochemical Performance of Pure and RGO Decorated CoS, CoP and Co <sub>3</sub> O <sub>4</sub> Nanoparticles for Supercapacitor Applications	Department of Physics Annamalai University Chidambaram	09.01.2024
92.	Dr. A. Sindhya	Dr. S. Johnson Jeyakumar	Preparation and Characterization of Nanohydroxyapatite and its Polymeric Composites using Natural Precursors and their In-Vitro Studies	TBML College, Porayar, Bharathidasan University	10.01.2024

93.	Dr. Aanie P .S	Dr. P .H Sudharin Paul &	Thermal Analysis and Characterization of Solar Heating Systems with Nano based Integral components	Nesamony Memorial Christian College, Marthandam	19.01.2024
94.	Dr. H. Lincy	Dr. M. Jothibasu	Enhanced Gas Sensing Properties of Some Metal Doped Tungsten Trioxide Nanoparticles	TBML College, Porayar, Bharathidasan University	13.06.2024
95.	Dr. R. Prasanna Devi	Dr. N. Krishnakumar	Flavonoid-mediated Synthesis of Graphene-Based Noble Metal Nanocomposites with Enhanced Photocatalytic, Electrochemical and Anticancer Performance	Physics, Annamalai University	18.06.2024
96.	Dr. S. Arul Vathana	Dr. Amudhavalli	Opto-Structural Morphological Analysis of Green Synthesized Transition Metal Nanoparticles and their Photocatalytic Acitivity	V.O.C College Thoothugudi	18.07.2024
97.	Dr. T. L. Annusha	Dr. A. S. Jebamalar	Investigation on the Growth and Characterization of Certain Amino Acid Related Single Crystals	Nesamony Memorial Christian College, Marthandam	19.07.2024
98.	Dr. Soumya Menon P	Dr. D. Sajan	Synthesis and Characterization of Transition Metal Oxide Nano Structures and Application in Nonlinear Optical Studies	Department of Physics Bharathiar University, Coimbatore & Department of Physics Bishop Moore College, Mavelikkara, Kerala	14.08.2024
99.	Dr. Bindiya Dey	Prof. C. Manoharan	Enhancing the Efficacy of Magnetic, Electrochemical and Gas Sensing Properties of Nickel Ferrite Nanoparticles Through Transition Metal Dopants and Annealing	Deptment of Physics, Annamalai University	30.08.2024

100.	Dr. A. Suba	Dr. P. Selvarajan & Dr. J. Jebaraj Devadasan	Physical, Chemical and Biological Characterization of Undoped and Doped Magnesium Oxide Nanomaterials Manufactured by Green Method	Aditanar College of Arts and Science, Tiruchendur, Tamil nadu, & Pope's College, Sawyerpuram, Tuticorin District	10.12.2024
101.	Dr. E.S. Ashlin	Dr. G. Edwin Sheela	An Experimental and Theoretical Study of Fungicidal Compounds with Structural Analysis	Muslim Arts College, Thiruvithancode.	09.01.2025
102.	Dr. Gabriya L R	Dr. Darlin Mary	A Study on the Influence of Different Organic Dyes on Amino Acids Doped Potassium Di-Hydrogen Orthophosphate Single Crystals	Annai Velankanni College, Tholayavattam - 629157, Kanyakumari District.	07.04.2025
103.		Dr. N. Senthil Kumar		Kongunadu Arts and Science College, Coimbatore	24.04.2025
104.	Dr. P. Ponnarasi	Dr. G. Mahalakshmi	Green Synthesis of Metal Oxide Nanoparticles, Characterizations and their Environmental Applications	Department of Physics, Government Arts College (Autonomous), Karur-05	28.04.2024

105.	Dr. G. Manikandan	Dr. D. Dhanalakshmi	“Investigation of Spin-Dependent Transport in Organic Semiconductors	Spintronics and Functional Materials Laboratory, Department of Applied Sciences, PSG College of Technology, Coimbatore, 641004, India	30.04.2025
106.	Dr. Prabula S S	Dr. C. Hentry	Biosynthesis of Metal and Metal Oxide Nanoparticles and Their Potential Applications to Dye Degradation	Department of Physics, St. Jude’s college, Thoothoor, K.K. Dist.	22.05.2025

**(c) Other University Ph.D. Thesis Evaluated by Invitation:**

Sl. No.	Name of Candidate	Name of Supervisor	Title of Thesis	Name of University
1.	Dr. Nirdesh Kumar Singh	Dr. S. K. Sharma	Optical Structural and Thermal Properties of Indium Chalcogenide $In_2Se_3xTe_{(1-x)}$	Ch. Charan Singh University, Meerut (11.05.2010)
2.	Dr. Lalmuanpuia	Prof. R. K. Thapa	Study of the Optical Properties of Solids by using Full Potential Linear Augmented Plain Waves (LAPW) Methods	Mizoram University (Central University) (08.05.2011)
3.	Dr. Rosangliana	Prof. R. K. Thapa	Theoretical Study of Surface Effect in Photoassisted Field Emission	Mizoram University (Central University) (08.05.2011)
4.	Dr. Sandeep	Prof. R. K. Thapa	Study of Rare Earth Elements with Emphasis on Magnetism and Electronic Band Structures	Mizoram University (Central University) (11.05.2011)
5.	Dr. S. Balakrishnan	Dr. G. Meenakshi	Ultrasonic Studies on Molecular Interactions of Three Component Systems of Electrolytes and Non-	Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya,

			electrolytes	Kanchipuram, TN (31.08.2011)
6.	Dr. Jitendra Kumar Pathak	Prof. Onkar Prasad	Study of Phase Transition in Polymers and Structural Analysis of Indium and its Derivative	University of Lucknow (22.11.2011)
7.	Dr. Vijay Narayan	Prof. Dr. Leena Sinha	DFT Studies of Small Molecules/Cluster	University of Lucknow (13.03.2013)
8.	Dr. Naveen Kumar	Prof. Onkar Prasad	Study of Electronic Structure of Small molecules using First Principles	University of Lucknow (13.03.2013)
9.	Dr. Amit Bhagubhai Patel	Dr. N.K Bhat	Comprehensive Study of Liquid Polyvalent Metals Using Pseudopotential Theory	Sardar Patel University, Gujarat (02.07.2014)
10.	Dr. Alok Kumar Sachan	Prof. Dr. Leena Sinha	Applications of <i>ab Initio</i> Quantum Chemistry to Small Organic Molecules	University of Lucknow (20.06.2015)
11.	Dr. Mrs. Y. Sheena Mary	Dr. K. Raju	Vibrational Spectra and DFT Computational Study of Certain Bioactive Molecules	University of Kerela (28.01.2016)
12.	Dr. Vikas Kumar Shukala	Prof. Dr. Leena Sinha	Vibrational Analysis and Electronic Structure Calculations of Small Organic Molecule using First Principles	University of Lucknow (01.02.2016)
13.	Dr. J. Thennarasu	Dr. G. Meenakshi	Molecular Interaction Studies in Certain Binary and Ternary Liquid Systems exposed to Ultrasonic Frequency	Dravidian University, Kuppam, Andra Pradesh (10.03.2016)
14.	<del>Dr. Vikas Kumar Shukala</del>	<del>Prof. Dr. Leena Sinha</del>	<del>Vibrational analysis and electronic structure calculations of small organic molecule using first principles</del>	<del>University of Lucknow</del> (23.03.2016) <b>Sl. No. (12) Second Time Evaluated the Thesis</b>
15.	Dr. Shilendra Kumar Pathak	Prof. Leena Sinha	Vibrational Analysis and Non-linear Optical Properties of Organic Molecules using Quantum Chemistry	Lucknow University (19.05.2017)
16.	Dr. Benzon	Dr. Hema	Vibrational Spectroscopic	University of Kerela

	K.B	Tresa Varghese	Investigations of Certain Azatricyclo and Imidazole Derivatives	(02.06.2017)
17.	Dr. Patel Hiral Timin	Dr, P. R. Vyas	A Comparative Study of Physical Properties Some Simple and Non-simple Metals by using an Effective and Local Pseudo Potential	Gujarat University Navrangpura, Ahmedabad -380009 (31.01.2020)

(d). The following M. Phil Scholars under my guidance:

S.No	Name	Title	University
1	Mr. L. Leo Sebasty (2001)	Spectroscopic studies on high temperature superconductor mixtures $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8$	Manonmaniam Sundaranar University
2	Mr. D. Prakash Babu (2002)	Structural Elucidation of Calcium oxalate monohydrate and calcium phosphate present in urinary calculi by spectroscopic methods	Directorate of Distance education, Annamalai Uni.
3.	Mr. V. Harikrishnan (2003)	Thermal aspect of laser- Based measurement and ultra fast Laser processing of Dielectric materials	Center for Distance Edn. Bharathidasan Uni.
4.	Mr. V. Arun (2004)	A comparative study on Focal performance of fiber ended microlens and Axicon for optical recording application	Center for Distance Edn. Bharathidasan Uni.
5.	Mr. B. Shanmugavelu (2005)	Theoretical study on coupling between laser diode and microlens ended single mode fiber using ABCD matrix method.	Periyar University
6.	Mr. Raja Ratnam (2006)	Generalized beam propagation factor of hard-edged circular apertured diffracted Bessel-Gaussian beams	PRIDE Periyar University
7	Mr. K. Velmurugan (2006)	Direct electron beam writing of kinoform micro-axicon for generation of propagation-invariant beams with long non-diffracting distance	PRIDE Periyar University
8	Mrs. B. Annapoorni (2006)	Desinging uniform intensity Axicons for micro drilling applications	PRIDE Periyar University

9	Mr. A. Prakasam (2006)	Axicon Microlens for high resolution optical coherence tomography	PRIDE Periyar University
10	Mrs. S. Amaravathi (2006)	Focal shift and focal switch of Bessel-Gaussian beams passing through a lens system with or without aperture	PRIDE Periyar University
11	Mr. P. Jagadesan (2006)	A theoretical study on axial intensity distribution of axicons	PRIDE Periyar University
12	Mr. L. Arivuselvam (2006)	DOE generating Bessel Beam for Optical Recording	PRIDE Periyar University
13	Mr. K. Harisankar (2006)	Designing Axicons for Microdrilling	PRIDE Periyar University
14	Mr. K. M. Prabhu (2005)	Desiring uniform intensity Axicons for micro drilling applications	PRIDE Periyar University
15	Mr. M. Dharma Poopathy (2006)	Axilenses for optical recording applications	PRIDE Periyar University
16	Mrs. A. Karpagam (2006)	Analysis of free space optical interconnects based on non-diffracting beams	PRIDE Periyar University
17	Mrs. G. Poornima (2006)	Focal shift and focal switch of Bessel-Gaussian beams passing through a lens system with or without aperture	Center for Distance Edn. Bharathidasan Uni.
18	Mrs. S. Meenakshi (2006)	Dynamically reconfigurable optical trap created with a combination of Axicons	Center for D. Edn. Bharathidasan Uni.
19	Mr. K. Uma Maheswaran (2006)	Narrow polymer fibers obtained as a combination of photopolymerization and non-diffracting beams	Directorate of Distance Edn. Annamalai Uni.
20	Mr. C. Mohanasundaram (2006), Gold Medalist	Non-diffracting beam for optical recording applications	Periyar University
21	Mr. P. Senthilkumar (2006)	Light trapping scheme of high throughput and low aberration Microlens for Silicon Solar cell	Periyar University
22	Mr. N. Thangaraja (2006)	Scanning microscopy with extended depth of focus	PRIDE Periyar University

23	Mr. Mrityunjai Kumar Singh (2007)	Habit Modification Study on Non-linear Single Crystal KDP Doped Dyes for Laser Applications	PRIDE Periyar University
24	Mr. S. V. Satyanarayana (2007)	Molecular Structure, Vibrational Spectroscopic Studies and NBO Analysis of 7-Amino-4-Trifluoromethylcoumarin	PRIDE Periyar University
24	Miss. M. Geetha (2007)	Design, Optical Study and Light Trapping Scheme of Low Order Aberration Microlens for Micromachined Silicon Solar Cells	Periyar University
26	Mr. J. Chandrasekaran (2007)	A Study on Adjustable Generation of High Resolution Near Field Optical Virtual probe Using Diffractive Axicon.	Periyar University
27.	Ms. M. Jothimani (2008)	A study on field distribution behind an Axicon illuminated by an Azimuthally polarized beam.	Periyar University
28.	Ms. K. Lalithambigai (2008)	A Theoretical study on Vectorial field distribution by linearly polarized Gaussian beam passing through an Axicon	Periyar University
29.	Ms. K. Leelavathi (2008)	A study on Vectorial analysis of radially polarized Gaussian beams using an Axicon.	Periyar University
30.	Ms. M. Vasanthi (2008)	A Novel study on Near-field optical recording by Solid Immersion Axicon	Periyar University
31.	Mr. K. Vasudevan (2009)	Charge Transfer Interaction Study on Linear Organic Single Crystal Imidazole-Iodine Interface for Dye Solar Cells using DFT.	Madurai Kamaraj University
32.	Mr. Debkumar Bhadra Shore Point, Bamboo flat South Andaman – 744107 (2009)	DFT Study on Modified Phthalocyanine Derivatives for Efficient Near-IR Sensitization of Nanostructured TiO <sub>2</sub> Electrode in Dye Sensitized Solar Cells	Madurai Kamaraj University
33.	Mr. R. Govindan (2010) - Gold Medalist	Theoretical Study of 4-(Phenylthio)-1,2-benzenedicarbonitrile Dye for Dye-Sensitized Solar Cells	Periyar University
34.	Mr. G. Karthik (2010)	Theoretical study of Dye Sensitized Solar Cell	Periyar University
35.	Mr. V. Arun (2011)	Preparation and characterization of Co-doped ZnO thin film by Sol-Gel process	Periyar University

36.	<b>Mr. S. Varathan (2011)</b>	<b>Metal doped TiO<sub>2</sub> thin film: Preparation and characterization</b>	<b>Periyar University</b>
37.	<b>Ms. C.Indira Priyadharsini (2012)</b>	<b>Enhanced Photoelectrical Performance of DSSC by Co-doped SnO<sub>2</sub> Nanoparticles</b>	<b>Periyar University</b>
38.	<b>Ms. S. Shanmugapriya (2012)</b>	<b>A comparative Study of Synthetic and Natural Dyes for the Application of DSSC using Co- doped TiO<sub>2</sub> as Photo Anode</b>	<b>Periyar University</b>
39.	<b>Mrs. G. Suguna (2012)</b>	<b>Quantum Chemical Calculations of 4-Amino-3-Nitrobenzonitrile for Solar Cell Applicatons</b>	<b>Periyar University</b>
40.	<b>Mr. M. Kumaresan (2013)</b>	<b>The Role of Solvent Effects in Natural Sensitizer for DSSC Applications</b>	<b>Periyar University</b>
41.	<b>Mr. C. Rajesh (2013)</b>	<b>Synthesis and Characterization of ZrO<sub>2</sub> Nanoparticles for Solar Cell Applications</b>	<b>Periyar University</b>
42.	<b>Mr. R. Surendiran (2013)</b>	<b>Structural, Optical and Morphological Study on Titanium Dioxide (TiO<sub>2</sub>) Nanoparticles for Enhancing Light Absorption</b>	<b>Periyar University</b>
43.	<b>Ms. S. Keerthanadevi (2014)</b>	<b>Investigation of Azimuthally Polarized Beam for Multiple Optical Trapping Applications</b>	<b>Periyar University</b>
44.	<b>Ms. K. S. Kokila (2014)</b>	<b>An Analysis in Structural and Optical Properties of ZnO Nanoparticles by Microwave Method</b>	<b>Periyar University</b>
45.	<b>Mr. M. Prakasam (2014)</b>	<b>DFT and TD-DFT Calculations of Stilbene Substituted Methanofullerene for Dye Sensitized Solar Cell Applications</b>	<b>Periyar University</b>
46.	<b>Mr. A. Arunkumar (2015)</b>	<b>DFT and TD-DFT study of (E)- 3-(5-(anthracen-3-yl) hexahydrothieno [3,4-b][1,4]dioxin- 7-yl) - 2-cyanoacrylic acid dye for Dye Sensitized Solar Cell Application</b>	<b>Periyar University</b>
47.	<b>Mrs. R. Divya Bharathi (2015)</b>	<b>Methyl – Modified TPA dyes for Dye Sensitized Solar Cell: Theoretical Study</b>	<b>Periyar University</b>
48.	<b>Mr. D. Nickson Sebastin (2015)</b>	<b>Theoretical Investigations of Different Donor Groups in Organic Dyes for Dye Sensitized Solar Cell Applications</b>	<b>Periyar University</b>

49.	<b>Mrs. V. Sangeetha (2015)</b>	<b>DFT and TD-DFT Investigations of Organic Dye Sensitizers for DSSC: Effects of Different Acceptor</b>	<b>Periyar University</b>
50.	<b>T. Akash Narayana (2016) M15PHY101</b>	<b>Microwave Assisted Rapid Synthesis and Characterization of Tetragonal Structured Lanthanum doped Zirconium Oxide (ZrO<sub>2</sub>) Nanoparticles</b>	<b>Periyar University</b>
51.	<b>Ms. M. Arthi (2016) M15PHY104</b>	<b>A Computational Investigation of Triphenylamine Based Organic Dye for Highly Efficient Dye-Sensitized Solar Cells</b>	<b>Periyar University</b>
52.	<b>Mr. S. Prabhu (2016) M15PHY119</b>	<b>Optical and Structural Characterizations of Cu and Fe doped SnO<sub>2</sub> Nanoparticles via Co-precipitation Method</b>	<b>Periyar University</b>
53.	<b>Mr. D. Santhoshmani (2016) M15PHY121</b>	<b>Synthesis of Hexagonal Shaped Ag-SnO<sub>2</sub>-ZnO Nano Composite via Hydrothermal Method and their Characterization</b>	<b>Periyar University</b>
54.	<b>Ms. G. Usha (2016) M15PHY124</b>	<b>Creation of Super long Transversely Polarized Optical Needle and Multiple Focal Spots Using Phase Modulated Polarized Doughnut Gaussian Beam</b>	<b>Periyar University</b>
55.	<b>Mr. M. Kaliyappan (2017) M16PHY107</b>	<b>A Perovskite SrTiO<sub>3</sub> Nanoparticles Synthesis by Hydrothermal methods For Solar Cell Applications</b>	<b>Periyar University</b>
56.	<b>Ms. V. Karthika (2017) M16PHY109</b>	<b>Synthesis of rGO supported with WO<sub>3</sub>/Fe<sub>2</sub>O<sub>3</sub> Nanoparticles for Visible-light Photocatalytic Application</b>	<b>Periyar University</b>
57.	<b>Ms. A. Pavithra (2017) M16PHY115</b>	<b>Quantum Chemistry Calculations of Coumarin Dye Sensitizer For Solar Cells</b>	<b>Periyar University</b>
58.	<b>Mrs. S. Vennila (2017) M16PHY127</b>	<b>A Spacer For Enhance Light Absorption Of Organic Dye-Sensitized Solar Cells And Influences On Charge Transfer Dynamics: A Computational Study</b>	<b>Periyar University</b>
59.	<b>Mr. M. Alagesan (2018)</b>	<b>Synthesis and Characterization of Piperidinium-4-Nitrophenolate Organic crystal with Hygroscopic nature for Nonlinear Optical</b>	<b>Periyar University</b>

		Application	
60.	<b>Ms. M. Vinitha (2018)</b>	<b>Theoretical Studies on Organic D-<math>\pi</math>-A Sensitizer with Carbazole Donor and Different <math>\pi</math>-Linkers for Dye Sensitized Solar Cells</b>	<b>Periyar University</b>
61.	<b>Ms. M. Deepana (2018)</b>	<b>First Principle Study of Highly Efficient Organic Dye Sensitized Solar Cell Based on D-<math>\Pi</math>-A Architecture With Different Spacer Units</b>	<b>Periyar University</b>
62.	<b>Mrs. Sinthuja (2022)</b>	<b>Construction of 3D-MnCo<sub>2</sub>O<sub>4</sub>  3D-Bi<sub>2</sub>WO<sub>6</sub> as an Electrode Materials for Efficient Energy Storage Device</b>	<b>Periyar University</b>

**(e). M.Sc. Project:**

1. **Mr. N. Thangaraja**, “An Investigation of Effective Coupling of Tapered Lens Single Mode Fibres with Diode Lasers using ABCD Matrix” (2005)
2. **Mr. S. Vijayanath**, “Theoretical Study on Non Diffractive Laser Beam Produced using Annular Rings” (2005)
3. **Miss. B. Manitha**, “A Study on Non Diffractive Beam for Optical Microlithography” (2005)
4. **Miss. S. Revathi**, “Theoretical Study on AC Parameter of Gaas/Ge Solar Cells for Space Applications using Impedance Spectroscopy” (2005)
5. **Miss. R. Radha** “A Comparative Study on Optical Feedback and Reflectivity in Laser – to – Fiber Coupling Techniques (2006)
6. **Mr. P. Velayutham** “A Theoretical Investigation on the Coupling Performance of the Hot Embossed Microlens under Various Embossing Parameters” (2006)
7. **Mr. K. M. Prabhu** “Theoretical Study on Coupling between Laser Diode and Single Mode Fiber via Hemispherically Ended Graded Index Fiber” (2006)
8. **Mr. R. Ramesh** “A Theoretical Study on Unstable Bessel Beam Resonator” (2006)
9. **Miss. M. Geetha** “Light Trapping Scheme of Silicon Solar Cell using High Throughput Microlens” (2007)

10. **Miss. M. Jothimani**, “**Optical Feedback and Reflectivity Study of Laser to Fibre Coupling with Different Techniques**” (2007)
11. **Miss. K. Lalithambigai**, “**Microfabrication and Drilling using Diffraction-Free Pulsed Laser Beam Generated with Axicon Lens**” (2007)
12. **Miss. K. Leelavathi**, “**Characteristics of Beam Profile of Gaussian Beam Passing Through an Axicon**” (2007)
13. **Mr. S. Suresh**, “**Intensity Distribution in Non-Diffracting Beams Propagating in a Nonlinear Medium**” (2008)
14. **Miss. M. Vasanthi**, “**Generation of Partially Coherent Diffraction-Free Fields with Tunable Geometry**” (2008)
15. **Miss. C. Hemambigai**, “**A Numerical Study on Sub-Wavelength Super Resolution Non-Diffractive Beam Generated by Lens Axicon**” (2009)
16. **Miss. K. Premalatha**, “**Numerical Analysis on Diffraction Field Behind an Axicon Using Vector Interference Theory**” (2009)
17. **Miss. R. Premalatha**, “**An Analysis on Near Field Optical Virtual Probe Generated by Solid Immersion Axicon (SIAX)**” (2009)
18. **Miss. U. Banunandhini**, “**A Study on the Role of Polarization and Phase in Solid Immersion Lens (SIL) System**” (2009)
19. **Ms. M. Nira**, “**DFT And TD-DFT Study on Silicon Dioxide Substituted Phthalocyanine for Dye Sensitized Solar Cells**” (2010)
20. **Ms. A. Vetriselvi**, “**Comparative Analysis of Crystalline Silicon and Amorphous Silicon Solar Cell Models using Spectral Converter Methods**” (2010)
21. **Mr. E. Asmath Ragamath**, “**Progressive Addition Lens Design, Optimization and Performance Analysis Using ZEMAX**” (2010)
22. **Ms. G. Amutha**, “**Preparation and characterization of Calcium doped TiO<sub>2</sub> thin films**” (2011)
23. **Ms. S. Keerthanadevi**, “**Preparation and Structural Characterization of Non-Metal Doped ZnO Thin Films**” (2011)
24. **Mr. M. Vasanth**, “**Synthesis and Optical Properties of Calcium Doped ZnO Thin Films**” (2011)

25. **Mr. M. Karuppaiya**, “Preparation and characterization of Metal Incorporated TiO<sub>2</sub> thin films” (2011).
26. **Ms. K. Devi**, “Study of Magnetic Properties of Transition Metal Doped Zinc Oxide Nanopowder by Mechanical Mixing Method” (2012)
27. **Mr. R. Govindaraj**, “Synthesis, Structural, Optical and Thermal Analysis of RE Metal Doped TiO<sub>2</sub> Nanoparticles” (2012)
28. **Mr. M. Ayyanar**, “Preparation and Photoelectrical Studies on S-Doped TiO<sub>2</sub> Nanoparticles for DSSC Application” (2012)
29. **Mr. R. Surendiran**, “Morphological Study of ZnS Nanocrystals with Influence of Capping Agents” (2012)
30. **Ms. S. Poorani**, “Analysis of Structural and Morphological Study of Pure Zirconium using Microwave Method” (2013)
31. **Mr. M. Prakasam**, “Theoretical Study of 2-Ethylbenzonitrile Dye Sensitizer for Solar Cells Using Quantum Chemical Calculations” (2013)
32. **Ms. S. Sathya**, “Influence of Solvent Effects using Natural Sensitizer for Dye Solar Cells” (2013)
33. **Mrs. G. Divya**, “Analysis of Structural and Optical Properties of Natural Sensitizer (Spinacia Oleracea) for High Performance DSSC” (2014)
34. **Mr. M. Gobikrishnan**, “Molecular Modelling of 1,4 Phenylendiacetonitrile (1,4 PAN) Dye Sensitizer for Solar Cells using Quantum Chemical Calculations” (2014)
35. **Ms. R. Karthika**, “Performance Study of Photoanode in DSSC with Cr Doped ZnO Nanoparticles by Precipitation Method” (2014)
36. **Ms. Sathiyavani**, “Structural and Optical Analyses of Natural Sensitizers with Various Solvent Medium” (2014)
37. **Ms. E. Savitha**, “Photocatalytic Activity Study of Yttrium Doped Titanium Dioxide Nanoparticles By Sol-Gel Method” (2014)
38. **Mr. G. K. Deepakraj**, “Theoretical Investigation of Coumarin-102 for Dye Sensitized Solar Cell Application Based on DFT Calculations” (2015)
39. **Ms. R. Kalaiselvi**, “Tight Focusing Properties of Cylindrically Polarised Annular Multi-Gaussian Beam” (2015)

40. **Ms. G. Usha**, “**Generation of Multiple Focal Spot and Hole Segment using Phase Modulated Cylindrically Polarised Annular Multi-Gaussian Beam**” (2015)
41. **Mrs. S. Vennila**, “**Preparation and Characterisation of Natural Sensitizer (Solanum Torvum) for High Performance DSSC** (2015)
42. **Mr. M. Alagesan**, P14PHY1001, **Synthesis and Characterization of Perovskite Type BaSnO<sub>3</sub> Nanopowder through Co-Precipitation Method** (2016)
43. **Mr. M. Kaliyappan**, P14PHY1005, **Natural Dye Extract from Calotropis Cigantea Leaves by Solvent Effect for Dye Sensitized Solar Cell** (2016)
44. **Ms. V. Karthika**, P14PHY1008, **Stilbene Modified Dye as a Sensitizer for DSSC: A Theoretical Study** (2016)
45. **Ms. A. Pavithra**, P14PHY1012, **Effect of Ce Doping on Microstructural and Optical Properties of ZrO<sub>2</sub> Nanoparticles** (2016)
46. **Ms. A. Pavithra**, P14PHY1013, **Quantum Chemical Investigation of an Azulene Dye as Sensitizer for DSSC Application** (2016)
47. **Ms. M. Priyadarshini**, P14PHY1015, **Studies on Halo Coronal Mass Ejections (CMEs) during 24<sup>th</sup> Solar Cycle** (2016)
48. **Mr. A. Arulvel**, P15PHY1003, **Synthesis and Characterization of Cu<sub>2</sub>O/ZnO/rGO Nanocomposite using Hydrothermal Technique** (2017)
49. **Ms. M. Deepana**, P15PHY1007, **Methyl Group Modified in TPA Dyes for Dye Sensitized Solar Cells: Quantum Chemical Assessments** (2017)
50. **Ms. R. Gnanadeepam**, P15PHY1009, **Influence Donor at D- $\pi$ -A Based Dyes toward More Efficient Sensitizers for Dye-Sensitized Solar Cells: A First Principle Study** (2017)
51. **Mr. M. Rajalingam**, P15PHY1020, **Effects of the Bridge Unit in D- $\pi$ -A Architecture to Improve Electron Injection Rate and Regeneration Energy in DSSCs: A Quantum Chemical Study** (2017)
52. **Mr. S. Shanavas**, P15PHY1025, **An Investigation on Photocatalytic Activity of Metal Oxides Coupled Graphene Nanocomposite for Enhanced Degradation of Organic Dyes** (2017)
53. **Ms. S. Brindha** – P16PHY1005 – **Green Treated Hydrothermal Synthesis of Cu<sub>2</sub>O-Cds-rGO Ternary Nanocomposites using Azadirachta Indica Leaf Extract** - (2018)

54. **Ms. G. M. Dhiviyaa** - P16PHY1007 – **Sensitivity Enhancement of Copper with the use of Transition Metal Dichalcogenides (TMDCs) in Surface Plasmon Resonance Biosensor** - (2018)
55. **Ms. R. Karthika** – P16PHY1015 – **Synthesis of Tungsten Trioxide (WO<sub>3</sub>) Nanoparticles and its Optical Property** - (2018)
56. **Ms. P. Ponezhil** - P16PHY1025 – **Structural, Optical and Electrical Properties of Sn Doped ZnO-rGO Nanoparticles using Hydrothermal Technique** - (2018)
57. **Ms. M. Hazeena** - P16PHY1011 – **Synthesis, Growth and Characterization of Non-Linear Optical Organic Piperidinium-4-Nitrophenolate Crystal by Slow Evaporation Solution Growth Technique** - (2018)
58. **Ms. P. Ezhilarasi**, P17PHY1005 – **Investigation of Photophysical Properties of Quantum Dots Rare-earth Tungstate Nanohybrids** – Co-Supervisor - Dr. T. Palanivel - (2019)
59. **Ms. P. Kowsalya**, P17PHY2012 – **Investigation on the Removal of Reactive Blue Dye from Aqueous Solution by Adsorption using Iron Oxide-hydroxyapatite Nanocomposite** – Co-Supervisor - Dr. E. K. Girija (2019)
60. **Ms. S. Ranchini**, P17PHY1026 – **Glutamic based Urchin Microsphere Structure Metal Organic Framework for Sorption and Al<sup>3+</sup> Ion Sensing Applications** - Co-Supervisor – Dr. J. Kalyan Sundar - (2019)
61. **Ms. S. Valarmathi**, P17PHY2036 – **Hierarchical Nickel Zinc Selenide Complex Spheres for Hybrid Supercaps** – Co-Supervisor - Dr. T. Palanivel - (2019)
62. **Ms. R. Bhuvanewari** - P20PHY1003 - **Investigation on Structural, Morphological and Electrochemical Properties of ZnS Nanoparticles and Ni doped ZnS Nanoparticles for Supercapacitor Applications** - (2022)
63. **Ms. R. Rajalakshmi** - P20PHY1017 - **Design of CoFe<sub>2</sub>O<sub>4</sub> Thin Film as an Efficient Electrode Material for Supercapacitor Application** - (2022)
64. **Mrs. M. Thooba Anjum** – P20PHY1017 - **Fabrication of TiO<sub>2</sub> Based Dye Sensitized Solar Cells using Chicken Bold as a Natural Sensitizer for Photovoltaic Applications** - (2022)
65. **Mrs. A. Vinnarasi** - P20PHY1024 - **One-Step Hydrothermal Synthesis of SnS<sub>2</sub> Nanoparticles and Cu doped SnS<sub>2</sub> Nanoparticles for Supercapacitor Applications** - (2022)
66. **Ms. S. Archana** – U21PG521PHY006 - **Electrochemical Properties of CuV<sub>2</sub>O<sub>5</sub> Microspheres as an Anode Material for Secondary Batteries** - (2023)

67. Ms. M. M. Arthisri – U21PG521PHY007 - **Synthesis of NiMn<sub>2</sub>O<sub>4</sub> Microspheres as an Anode Material for Rechargeable Batteries** - (2023) - **Gold Medalist**
68. Ms. R. Kavipriya – U21PG521PHY012 - **Zinc Vanadate (ZnV<sub>2</sub>O<sub>4</sub>) Micro-flowers as an Potential Anode Material for Rechargeable Batteries** - (2023)
69. Mr. R. Stalin - U21PG521PHY024 - **Structural and Electrochemical Performance of CoAl<sub>2</sub>O<sub>4</sub> Micro-flowers as an Anode Material for Secondary Batteries** - (2023)
70. Ms. B. Divya - U22PG521PHY007 - **Investigation on Photocatalytic Dye Degradation Performance of Hydrothermally Synthesized Manganese Tungstate Nanorods** - (2024)
71. Mr. M. Gokul - U22PG521PHY024 - **Facile Synthesis of Sheet-Like Bismuth Molybdate Nanoparticles for Visible Light-Driven Photocatalytic Application** - (2024)
72. Ms. R. Rajakavimani - U22PG521PHY022 - **Visible-Light-Triggered CuMoO<sub>4</sub> Spheres as an Efficient Catalyst of Methylene Orange Dye Degradation for Photocatalytic Application** - (2024)
73. Ms. P. Sneka - U22PG521PHY026 - **Green Synthesis of Copper Oxide (CuO) Nanoparticles using Peregrina Leaf Extract for Antibacterial Applications** - (2024)

### M.Sc – Internship Programme:

1. Mrs. K. S. Dhivyaa - (Reg. No. 20PPHY017) – **PG & Research Department of Physics, Sri Vidya Mandir Arts & Science College (Autonomous), Uthangarai, Krishnagiri – 636 902 – Structural Characterization of Green Synthesis Assisted Nickel Oxide Nanoparticles** – (21.03.2022 – 08.04.2022)
2. Ms. M. Shobika - (Reg. No. 21MP0628) – **Department of Physics, Sri GVG Vishalakshi College for Women (Autonomous), Udumalpet, Tiruppur – 642 128 - Cobalt Phosphide as an Efficient Electrode Material for Energy Storage Application** – (04.07.2022 - 27.07.2022)
3. Ms. R. Malinidevi - (Reg. No. 22MP1188) - **Department of Physics, Sri GVG Vishalakshi College for Women (Autonomous), Udumalpet, Tiruppur – 642 128 - Synthesis and Performances Study of Cobalt Sulphide Electrode Material for Supercapacitor Application** - (29.05.2023 - 14.06.2023)
4. Mrs. S. Anithamani, Ph.D Scholar, PG and Research Department of Physics, Thiruvalluvar Govt. Arts College, Rasipuram, admitted with the permission of the Registrar, Periyar University to learn software in our laboratory (02.01.2024 - 30.03.2024)

### Placement of My Scholars/Students at Various Institutions/Organizations:

**1. Dr. R. Rengaivan:**

**Major Dr. R. RENGAIYAN, M.Sc., M.Phil., B.Ed., Ph.D.,**  
**Head & Associate Professor in Physics & Associate NCC Officer**  
Arignar Anna Govt. Arts and Science College  
Karaikal – 609 605  
Govt. of Puducherry  
Mobile: 9442506350, e-mail: rengbhu@yahoo.co.in

**2. Dr. S. Selvanandan:**

**Dr. S.SELVANANDAN, M.Sc, M.Phil., B.Ed., Ph.D.,**  
**Professor & HOD**  
Department of Physics,  
ACS College of Engineering  
Kambipura, Mysore Road  
Bangalore  
MOBILE:+91-0-8884451258, e-mail: selvanandan@gmail.com

**3. Dr. M. K. Subramanian:**

**Dr. M. K. Subramanian., M.Sc, M.Phil., M.Ed., Ph.D.,**  
**Head & Associate Professor of Physics & Placement Officer**  
Thiruvalluvar Govt. Arts College  
Rasipuram - 637401  
Namakkal Dist. Tamilnadu State.  
Mobile : 98427-31367, e-mail: professormksubramanian@gmail.com

**4. Dr. K. B. Rajesh:**

**Dr. RAJESH K.B., M.Sc, B.Ed., Ph.D.,**  
**Assistant Professor in Physics**  
Chikkanna Government Arts College  
Tirupur – 641602, Tamil Nadu  
Mobile : 9942460031, e-mail: rajeskb@gmail.com

**5. Dr. A. Kalyanasundaram:**

**Dr. A. KALYANASUNDARAM, M.Sc, M.Phil., B.Ed., Ph.D.,**  
**Associate Professor & HOD of Physics, Principal In-charge**  
Avvaiyar Govt College for Women  
Dr. Ambedkar Street  
Karaikal - 609602  
Govt of Puducherry  
Mobile : 9442514170, e-mail: ayyarukalyanasundaram@gmail.com

**6. Dr. K. Vasudevan:**

**Dr. K. VASUDEVAN, M.Sc, M.Ed., Ph.D.,**  
**Head Master & Post Graduate Teacher**  
ADW HSSchool  
Kalangani, Minnampalli Anna Nagar-pu, Puduchadram  
Namakkal, Tamil Nadu (IN) - 637014  
Mobile: 9443275567, e-mail: vasu\_pgt@yahoo.co.in

**7. Dr. S. Manimegalai:**

**Dr. S. MANIMEGALAI, M.Sc., M.Phil., Ph.D.,**  
**Principal (Grade – I)**  
Thiruvalluvar Govt. Arts College  
Rasipuram - 637401  
Namakkal Dist. Tamilnadu State.  
Mobile: 9600317297, e-mail:

**10. Dr. N. Sakthivel:**

**Dr. N. SAKTHIVEL, M.Sc, B.Ed., Ph.D.,**  
**Principal**  
Sri Vidya Mandir College of Arts and Science  
Periyakalam, Neikkarapatti P.O.  
Uthamasolapuram, Salem - 636010  
Mobile: 7502340777, e-mail: an.sakthivel@yahoo.co.in

**11. Dr. V. Ravi:**

**Dr. V. RAVI, M.Sc., M.Phil., B.Ed., Ph.D.,**  
**Assistant Professor in Physics**  
Government Arts College  
Cherry Rd  
Kumarasamipatti, Salem - 636007  
Mobile: 9442487138, e-mail: raviveeran@rediffmail.com

**12. Dr. A. Prakasam:**

**Dr. A. PRAKASAM, M.Sc., M.Phil., Ph.D.,**  
**Assistant Professor in Physics**  
Thiruvalluvar Government Arts College  
Andagalur (PO), Rasipuram, Namakkal - 637401  
Mobile: 9944501455, e-mail: physicsprakasam@gmail.com

**13. Dr. M. Geetha:**

**Dr. M. GEETHA, M.Sc., M.Phil., Ph.D.,**  
**Assistant Professor in Physics**

Narasu's Sarathy Institute of Technology  
Omalur Taluk, Salem District, Poosaripatti - 636305  
Mobile: 9965469928, e-mail: srigeetha2@gmail.com

**14. Dr. P. Senthilkumar:**

**Dr. P. SENTHILKUMAR, M.Sc., M.Phil., Ph.D.,**  
**Village Administrative Officer**  
Vennanthur  
Namakkal District  
Mobile: 9894356328, e-mail: psenthil.vnr@gmail.com

**15. Dr. L. Arivuselvam:**

**Dr. L. ARIVUSELVAM, M.Sc., M.Phil., Ph.D.,**  
**Head Master**  
Govt. Tribal Residential Hr. Sec. School  
Karumandurai  
Pethanaickenpalayam  
Salem- 638 138

Mobile: 9442681693, 8610751059, e-mail: arivuphysics@gmail.com

**16. Dr. K. Lalithambigai:**

**Dr. K. LALITHAMBIGAI, M.Sc., M.Phil., Ph.D.,**  
**Assistant Professor in Physics**  
**K.S.R Arts and Science College for Women**  
**Thiruchengodu**  
**Namakkal (District)**

Mobile: 8695981931, e-mail: lallykesavan@gmail.com

**17. Dr. K. Suguna:**

**Dr. K. SUGUNA, M.Sc., M.Phil., Ph.D.,**  
**Principal Grade -I**  
N.K.R Govt Arts College for women  
Namakkal (District)

Mobile: 9894270378, e-mail: sugunamohan1963@gmail.com

**18. Dr. P. Ramu:**

**Dr. P. RAMU, M.Sc., M.Phil., Ph.D.,**  
**Assistant Professor in Physics**

Government Arts College  
Cherry Rd  
Kumarasamipatti, Salem - 636007  
Mobile: 9940327979, e-mail: ramusrm77@yahoo.co.in

**19. Dr. K. M. Prabhu:**

**Dr. K. M. PRABU, M.Sc., M.Phil., Ph.D.,**  
**Associate Professor in Physics**  
Sri Vidhya Mandir Arts and Science College  
SH18, Vignesh Nagar, Katteri  
Uthangarai - 635307  
Mobile: 9751575838, e-mail: svmprabu@gmail.com

**20. Dr. P. Sakthivel:**

**Dr. P. SAKTHIVEL, M.Sc., M.Phil., Ph.D.,**  
**Assistant Professor in Physics**  
Salem Sowdeswari College  
Sankari Main Rd, P M P Nagar  
Kondalampatti, Salem - 636010  
Mobile: 9080282180, e-mail: pkjsakthi@gmail.com

**21. Dr. D. Sakthi:**

**Dr. D. SAKTHI, M.Sc., M.Phil., Ph.D.,**  
**HOD of Physics & Principal**  
ERK Arts & Science College for Women  
Erumiyampatti (Harur-Salem Main Road)  
Kokkarapatti(PO), Pappireddipatti(TK)  
Dharmapuri - 636905  
Mobile: 9488588885, e-mail: rajisakthi84@gmail.com

**22. Dr. M. Prakasam:**

**Dr. M. PRAKASAM, M.Sc., M.Phil., B.Ed., Ph.D.,**  
**Assistant Professor in Physics**  
Pachamuthu Arts & Science College for Women  
Dharmapuri  
  
Mobile: 9486657744, e-mail: prakasam44@gmail.com

**23. Dr. C. Mohanasundaram:**

**Dr. C. MOHANASUNDARAM, M.Sc, M.Phil., B.Ed., Ph.D.,**  
**B. T. Assistant (Science)**

PUMS - Poraiyur  
Kolnaickenpatty (P. O)  
Mettur (Tk.)  
Salem (Dt.) – 636 452  
Mobile: 9994389704, e-mail: mscmsjaya@gmail.com

**22. Dr. A. Privadharsan:**

**DR. A. PRIYADHARSAN, M.Sc, Ph.D.,**

**Postdoctoral Researcher at BRIN Indonesia**

BRIN (Badan Riset dan Inovasi Nasional)  
Gedung BJ Habibie, Jl. M.H. Thamrin No.8, RT.2/RW.1, Kb. Sirih, Kec. Menteng, Kota Jakarta  
Pusat, Daerah Khusus Ibukota Jakarta 10340, Indonesia

Assistant Professor  
Department of Conservative Dentistry and Endodontics  
Saveetha Dental College and Hospitals  
Saveetha Institute of Medical and Technical Sciences (SIMATS), Chennai - 600077, Tamil Nadu  
Mobile: 9943243899, 8428526337, e-mail: dharsan69@gmail.com

**23. Dr. A. Arunkumar:**

**Dr. A. ARUNKUMAR, M.Sc, M.Phil., B.Ed., Ph.D.,**

**Post Doctoral Fellow**

C/o Prof. Dr. Xue-Hai Ju  
School of Chemistry and Chemical Engineering  
Nanjing University of Science and Technology  
Nanjing, 210094, PR China

Mobile: 9080247159, 9566954340, e-mail: 90arunkumara@gmail.com

**24. Dr. C. Indra Priyadharsini:**

**DR. C. INDRA PRIYADHARSINI, M.Sc, M.Phil., Ph.D.,**

**Assistant Professor in Physics**

Muthayammal College of Arts & Science (A unit of VENETRA Group)  
Rasipuram – 637 408  
Namakkal  
Tamilnadu

Mobile: 8300971664, 9500778372, e-mail: ipriyadharsini31@gmail.com

25. Dr. S. Shanavas:

Dr. S. SHANAVAS, M.Sc, Ph.D.,

**Post Doctoral Fellow**

Department of Chemistry

Khalifa University

P.O. Box 127788

Abu Dhabi, United Arab Emirates

Mobile: 8667630981, 9842411456, [shanashana8@gmail.com](mailto:shanashana8@gmail.com)

26. Dr. I. RAGAVAN

27. Dr. C. VIDYA

28. Dr. I. SARASAMREEN

29. Dr. S. ARUN KUMAR

VI. Foreign Visits under Educational Exchange or Any other Programmes:

1. Attended the Joint ICTP-KFAS Workshop on Nanoscience for Solar Energy Conversion 27 - 29 October 2008 (Miramare - Trieste, Italy), The Abdus Salam International Centre for Theoretical Physics at Trieste, ITALY.
2. Indo-Hungarian Educational Exchange Programme to visit during Sep-Nov', 2009, Department of Optics and Quantum Electronics, Szeged University, Szeged, HUNGARY
3. International Conference LEI-2009, Light at Extreme Intensities, Scientific opportunities and technological issues of the Extreme Light Infrastructure, 16-21. October, 2009, organised by National Institute for Laser, Plasma and Radiation Physics, Bucharest, Romania and Transilvania University, Brasov, ROMANIA.

VII. National Fellowships/Awards/Recognitions/Academic Honours/Distinctions Received:

1. Cash award for best Oral Presentation in NSPEOS, Meerut – 1997
2. GATE'87 Passed and Joined M.Tech (Optoelectronics and Optical Communication), Indian Institute of Technology, New Delhi - 16
3. Best Teacher award by Annai Madha Ammal Sheella Trust, at Annai Madha Ammal Sheella Trust Engineering College, Erumapatti, Namakkal on 2.8.2007
4. Best Teacher Award by E.R.K Trust, E.R.K Arts and Science College for Women, Erumianpatti, Dharmapuri, Tamilnadu on 1-10-2011
5. Best Motivator Award by Vellalar Trust, Erode, Tamilnadu on 14-02-2013

6. Best Motivator Award by Pachamuthu Trust, Pachamuthu Arts and Science College for Women, Dharmapuri, Tamilnadu on 28-02-2013
7. Best Motivator Award by Rainbow College of Education, Kannoorpatty Road, Puduchatram, Namakkal – 637 018 on 24.02.2015
8. ISPA Dr. S. Gunasekaran Awards for the best researchers who have made excellent contributions in the field of Research, during Conference (LASER-2021) organized by ISPA on 14.09.2021
9. Receiving ISPA Life Time Achievement Award from the Vice Chancellor, Prof. Dr. R. Jagannathan of Periyar University, Salem during the 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER – 2023) during 14-16<sup>th</sup> of September, 2023 organised by Department of Physics, Periyar University, Salem, Tamil Nadu, in Association with ISPA held on 14th September 2023 in Commemoration of Remembrance of Prof. Dr. S. Mohan.

VIII. Convener & Co-Convenor/Chairing Session for the following Conferences/Programmes:

- 1 National Symposium on “Photonics and Spectroscopy”, organized by Raman School of Physics, Pondicherry University, Pondicherry. NSPS-2001, 14-16, March 2001
- 2 One day State level Seminar on “Laser and its Applications”, Organized by Department of Physics, K.M. Centre for P.G, Studies. Pondicherry, 25<sup>th</sup> and 26<sup>th</sup>, December, 2001
- 3 Two Days State Level Seminar on “Photonics and its Applications” organized by department of Physics, Kanchi Mamunivar Centre for Post graduate Studies, Lawspet, Pondicherry during, 25<sup>th</sup> and 28<sup>th</sup> February, 2003
- 4 “Centenary Celebrations of Einstein’s Discoveries” held at Department of Physics, Periyar University, Salem on 28 March 2005.
- 5 Workshop on “Recent Trends in Physical Sciences Research” held at Dept. of Physics, Periyar University, Salem on 29, 30 August 2005.
- 6 National Conference on “Recent Advances in Material Science” held at Periyar University, Salem during 16-17 Feb. 2006
- 7 National Conference on “Recent trends in Vibrational Spectroscopy” (NCVS-2007) held at Department of Physics, Periyar University, Salem during 29-30 January, 2007.
- 8 One day Workshop on “Recent Developments in Nanomaterials Research”, held at Department of Physics, Periyar University, Salem, on 31<sup>st</sup> March, 2008.
- 9 One day Workshop on Recent Developments in Photonics Materials Research held at Department of Physics, Periyar University, Salem, on 12<sup>th</sup> March, 2009.

- 10 **One day Special Lectures on “50 Years of Lasers” organized by the Centre for Nanoscience and Nanotechnology, Periyar University, Salem, on 15<sup>th</sup> December, 2010.**
- 11 **One day “Energy Conservation – Awareness Programme” organized by the Centre for Nanoscience and Nanotechnology, Periyar University, Salem, on 20<sup>th</sup> December, 2010.**
- 12 **National Conference on “Advanced Nanomaterials (ANM-2012)” organized by the Centre for Nanoscience and Nanotechnology, Periyar University, Salem, Tamilnadu, during 6-7, February, 2012.**
- 13 **National workshop on “Electronic Circuit Design and PCB Fabrication” organized by the Centre for Instrumentation and Maintenance Facility (CIMF), Periyar University, Salem, during 27-28, March, 2012.**
- 14 **One day Workshop on “Recent Advances in Physics Experiments” (WRAPE-2012) held 28<sup>th</sup> March, 2012 organised by Department of Physics, Periyar University, Salem, Tamilnadu.**
- 15 **National Science Academies’ Lecture workshop on ‘Modern Trends in Chemistry’ organized by the Centre for Nanoscience and Nanotechnology, Periyar University, Salem, Tamilnadu, during 13-14, August, 2012.**
- 16 **National Seminar on “Materials for Advanced Technology” organized by Department of Physics, Periyar University, Salem – 636011, Tamilnadu, held on 21.2.2014.**
- 17 **National Conference on “Advanced Materials” (NCAM-2014), 18-19, July, 2014 organised by PG and Research Department of Physics, Sri Vidya Mandir Arts and Science College, Katteri, Uthangarai, Krishnagiri (District), Tamilnadu, India – 636 902, in Collaboration with Indian Spectrophysics Association (ISPA), Chennai - 600 030, Tamilnadu, India.**
- 18 **Chairing Session: Chaired **Technical Session - III** in the **National Workshop on “Advanced Characterization Techniques (ACT-2015)”** organized by Department of Chemistry, Periyar University, Salem – 636 011, Tamilnadu consists of Three Invited Lectures (**Invited Lecture (6) - TGA/DTA given by Prof. J. N. Balaraju**, Principal, NAL, Bangalore; **Invited Lecture (7) – Enantioselective Organic Synthesis to Carbon Materials Research given by Prof. M. Periasamy, F.A.Sc., F.N.A.**, School of Chemistry, University of Hyderabad; **Invited Lecture (8) – TEM & AFM given by Dr. J. Mathiyarasu**, Principal Scientist, Electroics & Electrocatalysis Division, CECRI, Karaigudi on 30.01.2015**
- 19 **Convenor of Programme: **Dr. R. Brakaspathy, Advisor/Scientist-G, Department fo Science & Technology (DST) Govt. of India, New Delhi**, Keynote address and Delivered Lecture and participated in the **“Interaction Programme on DST Schemes for Researchers, organized by the Centre for Nanoscience and Nanotechnology on 12.06.2015****

- 20 **Chairing Session:** Chaired **Technical Session - I** in the **International Year of Light – 2015 Celebrations** organized by School of Physical Sciences, Periyar University, Salem – 636 011, Tamilnadu **Invited Lecture (1) – Nonlinear Optics of Molecules and Materials given by Prof. P. K. Das**, Chairman, Chemical Sciences Division, Indian Institute of Science, Bangalore on 14.10.2015
- 21 **Chairing Session:** Chaired **Technical Session - III & IV** in the **National Conference on Advanced Materials (NCAM – 2016)** Organized by Department of Physics, School of Physical Sciences, Periyar University (Re- Accredited with ‘A’ Grade by NAAC) Periyar Palkalai Nagar, Salem - 636 011, Tamilnadu (**Session - III: Tuning Emission Colour in Inorganic Phosphors for White LEDs** by **Dr. N. Lakshminarasimhan**, Scientist, CSIR- Central Electrochemical Research Institute, Karaikudi & **Session - IV: Nanomaterial Synthesis and Characterization for Energy Efficient Applications** by **Prof. P. Thilakan**, Photon Energy Technology Laboratory, Centre for Green Energy Technology, Pondicherry University, Puducherry) held on 25-26<sup>th</sup> February, 2016.
- 22 **Chairing Session:**  **$E = MC^2$  (EVRA Mass Competitive Champions)** organized by the Department of Physics, Periyar University, Salem-11, held on the occasion of Einstein's Birthday, 14th March 2016.
- 23 **Chairing Session:** Chaired **Presentation – III**, in the **National Conference on Energy, Environment & Ethics (E<sup>3</sup> - 2016)** organized by Department of Engery Studies, Periyar University, Salem – 636 011, Tamilnadu & jointly organized by Centre for New and Renewable Energy Studies (CNRES), Periyar University, Salem – 636 011, Tamilnadu, during 28-29, March, 2016
- 24 **Chairing Session:** Chaired **Presentation – III (Topic: Super-resolution Imaging with DNA, Speaker: Dr. Sarit S. Agasti, Chemistry and Physics of Materials Unit, Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR)** in the **National Symposium on Recent Advances in Nanoscience and Nanotechnology (NSRANN – 2017)** organized by Department of Physics, Periyar University, Salem – 636 011, Tamilnadu, held on 15.03.2017
- 25 **Chairing Session:** Chaired **Presentation – III (Topic: Super-resolution Imaging with DNA, Speaker: Dr. Sarit S. Agasti, Chemistry and Physics of Materials Unit, Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR)** in the **National Symposium on Recent Advances in Nanoscience and Nanotechnology (NSRANN – 2017)** organized by Department of Physics, Periyar University, Salem – 636 011, Tamilnadu, held on 15.03.2017
- 26 **Chaired a Session:** **In commemoration of of International Day of Light (IDL) an “International Webinar Lecture Series on Laser, Optics and Photoincs”** 11-13, June 2020 organised by Department of Physics, Chikkanna Govt. Arts College, Tiruppur, Tamilnadu, Day-2, Lecture -4, Topic **“Ion Beam Nanofabrication for Subwavelength Optics”** by Dr. Rakesh Mote, Associate Professor, Department of Mechanical Engineering, Indian Institute of Technology, Bombay, held on 12.06.2020. Zoom Link, <https://us02web.zoom.us/j/84334933273?pwd=OTA3alBjNHc5dGQxaHViQ3hUUFIwZz09>,

ZOOM APP( for mobile link), Meeting ID: 843 3493 3273, Password: 397130, You tube link: [https://youtu.be/VgDTfk\\_qRu8](https://youtu.be/VgDTfk_qRu8).

- 27 **Chaired a Session: International Conference on Emerging Biomaterials for Advanced Applications (ICEBAA-2022) held during, April 21–22, 2022**, Organised by Department of Physics, and Department of Chemistry, Periyar University, Salem, Tamil Nadu & Department of Clinical Research Sibar Institute of Dental Sciences, Guntur, Andhra Pradesh, **Session – IV, Invited Talk – 7**, by **Prof. Aline F. Miller**, Manchester Institute of Biotech, UK, **Title: Self-assembling Peptide Hydrogel Materials: From Lab to Clinic, Invited Talk – 8**, by Prof. Amir Eliezer, Vice Chair AMPP Board of Directors, Israel, **Title: The Need of Bio-function Surfaces for Medical Implants.**
- 28 **Chaired a Session: National Seminar on “Advanced Energy Materials and Research” (NSAEMR)-2022**, 26th May 2022 to 27th May 2022 organised by Department of Physics, Periyar University, Salem, Tamil Nadu, Session – III, **Invited Talk – 5** by **Dr. N. Ponpandian**, Professor and Head, Department of Nanoscience and Nanotechnology, Bharathiar University, Coimbatore, Tamil Nadu, **Title: Synergetic Effect of Overall Water Splitting: Emerging Trends in Bi-Functional Electrocatalysis, Invited Talk – 6** by **Dr. M. Arivanandhan**, Professor, Centre for Nanoscience and Technology, Anna University, Chennai-600025, Tamilnadu, Tamil Nadu, **Title: Nanostructured Semiconducting Materials for Energy Harvesting, Invited Talk – 7**, **Dr. Pandiyarasan Veluswamy**, Indian Institute of Information Technology, Design and Manufacturing, IIITDM, Kancheepuram, Chennai – 600127, Tamilnadu, **Title: Energy Harvesting Materials for Flexible Electronics and Wearable Devices.**
- 29 **Chaired a Session: Commemoration of Silver Jubilee Year of Periyar University**, Department of Physics organised Special Lectures held on 14.09.2022 at Physics Seminar Hall, Periyar University, Salem. **Prof. Dr. K. Sankaranarayanan**, Professor and Head, Department of Physics, Alagappa University, Karaikudi, Tamil Nadu, has given talk on **Unidirectional Organic Scintillators for High Energy Radiation Detector Applications in the session - II.**
- 30 **Convenor: 3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER – 2023) during 14-16<sup>th</sup> of September, 2023** organised by Department of Physics, Periyar University, Salem, Tamil Nadu, in Association with ISPA held on 14<sup>th</sup> September 2023 in **Commemoration of Remembrance of Prof. Dr. S. Mohan.**

#### **XI. Classes Taught:**

**B.Sc., M.Sc., M.Phil., Ph.D., M.Tech (Geo.), B.Sc (Agri.), M.A (Pub. Admn.), Coaching classes for I.A.S (Prelim and Main Exams.) and Coaching for B.E and M.B.B.S (JIPMER) Entrance Examinations Jointly Organized by Directorate of Social Welfare, Govt. of Puducherry, and Pondicherry University, I.A.S (Prelim.) & NET/SLET Coaching classes, Periyar University, Salem, Tamilnadu.**

**XII. Collaborative Research Scientists with Other Institutions/Agencies:**

<b>Sl. No</b>	<b>Collaborating Scientists</b>	<b>Collaborating Agency</b>	<b>Status</b>	<b>Remarks</b>
1.	Prof. N. Sundaraganesan	Department of Physics (Engg.), Annamalai University, Annamalai Nagar 608 002, India	On Going	Six papers published in the International/Journal Journals and Submitted Three papers to International Journal
2.	Prof. S. Moorthy Babu	Crystal Growth Centre, Anna University, Chennai-25, India	On Going	Twelve papers Published in the International/National Journals
3.	Prof. Laura Ronchi Abbozzo	Atti della Fondazione Giorgio Ronchi, Fondata da Vasco Ronchi, Via S.Felice A Ema, 20 50125 FIRENZE, ITALY	On Going	Six papers published in the International of Micro-optica (Italian Journal of Optics)
4.	Dr. V. Aroulmoji, D.Sc	ARCHES Via Giuseppe Leuzzi 18 I-70013 Castellana Grotte ITALY	On Going	Thirteen papers published and Submitted Three papers to International/National Journal
5.	Dr. Osvay Karoly	Department of Optics and Quantum Electronics, University of Szeged, H-6720 Szeged, Do'mte'r 9, HUNGARY	On Going	Research work started and results will be published
6.	Dr. Jaroszewicz, Z	Institute of Applied Optics, Department of Physical Optics, Warsaw, Poland and National Institute of Telecommunications, Warsaw, POLAND	On Going	Fifteen papers published and Submitted Three papers to International Journal
7.	Dr. C. Nithya	DST-INSPIRE Faculty Awardee, CEESAT-Centre for Energy & Environmental Science and Technology, National Institute of	On going	Five papers published and submitted Three papers to International Journal

		Technology, Tiruchirappalli, Tamil Nadu, India		
8.	Prof. Dr. V. Raj	Advanced Materials Research Laboratory, Department of Chemistry, Periyar University, Salem 11, Tamil Nadu, India	On Going	Six papers published and submitted Three papers to International Journal
9.	Dr. Suresh Perumal	New Chemistry Unit, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, India	On Going	Three papers published and submitted Three papers to International Journal
10.	Dr. Vajjiravel Murugesan	Department of Chemistry, B.S. Abdur Rahman University, Vandalur, Chennai, India	On Going	Three papers published and submitted Three papers to International Journal
11.	Dr. S. Karthikeyan	Environmental Technology Division, Council of Scientific & Industrial Research (CSIR), Central Leather Research Institute (CLRI), Adyar, Chennai, 600 020, India	On Going	Three papers published and submitted Three papers to International Journal
12.	Dr. S. Bharathkumar	National Centre for Nanoscience and Nanotechnology, University of Madras, Guindy Campus, Chennai 600025, India	On Going	Three papers published and submitted Three papers to International Journal
13.	Dr. A. Mohamed Musthafa	Department of General Studies (Physics Group), Jubail University College (Male Branch), Royal Commission of Jubail, Jubail, Kingdom of Saudi Arabia	On Going	Three papers published and submitted Three papers to International Journal
14.	Dr. T. V. S. Pillai	University Department, Anna University of Technology Tirunelveli, Tamilnadu—627007, India	On Going	Three papers published and submitted Three papers to International Journal

15.	<b>Dr. S. Bhuvaneswari</b>	<b>Pondicherry University, Karaikal, U.T of Puducherry, India, PIN 609 605</b>	<b>On Going</b>	One published and submitted Three papers to International Journal
16.	<b>Dr. N. D'Amelio</b>	<b>CBM S.r.l. – Consorzio per il Centro di Biomedicina Molecolare, AREA Science Park, SS 14, Km 163.5, 34149 Basovizza, Trieste, Italy</b>	<b>On Going</b>	One published and submitted Three papers to International Journal
17.	<b>Dr. A. Toraldo</b>	<b>Bracco Imaging SpA-CRB Trieste, AREA Science Park, Building Q, SS 14, Km 163.5, 34149 Basovizza, Trieste, Italy</b>	<b>On Going</b>	One published and submitted Three papers to International Journal
18.	<b>Dr. V. Ilangovan</b>	<b>Department of Physics, K.M.C. for P.G. Studies &amp; Research, Puducherry 605008, India</b>	<b>On Going</b>	Three papers published and submitted Two papers to International Journal
19.	<b>Prof. S. Ponnusamy &amp; Prof. C. Muthamizhchelvan</b>	<b>Centre for Materials Science and Nano Devices, Department of Physics, SRM University, Kattankulathur 603203, Chennai, Tamilnadu, India</b>	<b>On Going</b>	Three papers published and submitted Three papers to International Journal
20.	<b>Dr. Z. Yaakob</b>	<b>Department of Chemical and Process Engineering, Faculty of Engineering and Built Environment, Universiti Kebangsaan Malaysia, UKM-Bangi 43600, Selangor, Malaysia</b>	<b>On Going</b>	Three papers published and submitted One paper to International Journal
21.	<b>Dr. S. Aravindan</b>	<b>Government Arts College (Autonomous), Salem - 636007, Tamilnadu, India</b>	<b>On Going</b>	Three papers published and submitted Three papers to International Journal
22.	<b>Dr. T. Mohr &amp; Prof. M. Müller</b>	<b>Department of Energy and Drive Systems, University of Applied Sciences, Ulm, Germany</b>	<b>On Going</b>	One paper published and submitted one paper to International Journal

23.	<b>Prof. Dr. R. Samson Ravindran</b>	<b>Mahendra Educational Institutions, Mahendhirapuri, Mallasamudram, Namakkal District, Tamil Nadu, India</b>	<b>On Going</b>	Three papers published and submitted one paper to International Journal
24.	<b>Dr. B. Balamuralikrishnan</b>	<b>Dept. of Food Science &amp; Biotechnology, College of Life Science, Sejong University, Seoul, 05006, South Korea</b>	<b>On Going</b>	One paper published and submitted Three papers to International Journal
25.	<b>Dr. V. Vasanthakumar</b>	<b>Advanced Materials Chemistry Laboratory, Department of Chemistry, Periyar University, Salem 11, Tamil Nadu, India</b>	<b>On Going</b>	Three papers published and submitted Three papers to International Journal
26.	<b>Dr. S. Karthikeyan</b>	<b>Aston Institute of Materials Research (AIMR), Aston University, West Midlands B4 7ET, UK</b>	<b>On Going</b>	Three papers published and submitted one paper to International Journal
27.	<b>Dr. P. M. G. Nambissan</b>	<b>Applied Nuclear Physics Division, Saha Institute of Nuclear Physics, 1/AF Bidhannagar, Kolkata - 700064</b>	<b>On Going</b>	Two papers published and submitted Two papers to International Journal
28.	<b>Prof. Roberto Acevedo</b>	<b>Facultad de Ingeniería Tecnología, Universidad San Sebastián, Bellavista 7, Santiago 8420524, Chile.</b>	<b>On Going</b>	Ten papers published and submitted Two papers to International Journal
29.	<b>Dr. Evangelos I. Gkanas</b>	<b>Hydrogen for Mobility Lab. Institute for Future Transport and Cities, Coventy University, Perioty Street, Coventy, CVI 5FB, UK</b>	<b>On Going</b>	One paper published and submitted One paper to International Journal
30.	<b>Dr. Srinivasan Subramanian</b>	<b>Materials Science Group, Indra Gandhi Centre for Atomic Research (IGCAR), kalpakkam – 603 102, Tamilnadu, India,</b>	<b>On Going</b>	One paper published and submitted One paper to International Journal

31.	<b>Prof. Rashmi Bhardwaj</b>	<b>Guru Gobind Singh Indraprastha University, India</b>	<b>On Going</b>	Submitted One paper to International Journal
32.	<b>Prof. Lala B. Sukla</b>	<b>Siksha O Anusandhan (SAO) University, Bhubaneswar, Odisha, India</b>	<b>On Going</b>	One paper published and submitted One paper to International Journal
33.	<b>Prof. Jo-Ann Rolle</b>	<b>The City University of New York, USA</b>	<b>On Going</b>	Submitted One paper to International Journal
34.	<b>Dr. S. Rajeshkumar</b>	<b>Nanobiomedicine Lab., Department of Pharmacology, Saveethadental college and Hospital, SIMATS, Saveetha University, Chennai -77, India</b>	<b>On Going</b>	One paper published and submitted One paper to International Journal
35.	<b>Dr. R. Chandrasekaran</b>	<b>Department of Zoology, Mizoram Central University, Aizawl, India</b>	<b>On Going</b>	One paper published and submitted One paper to International Journal
36.	<b>Dr. Tansir Ahamad</b>	<b>Department of Chemistry, College of Science, King Saud University, P.O. Box 2455, Riyadh 11451, Saudi Arabia</b>	<b>On Going</b>	Three papers published and submitted One paper to International Journal
37.	<b>Dr. Saad M. Alshehri</b>	<b>Department of Chemistry, College of Science, King Saud University, P.O. Box 2455, Riyadh 11451, Saudi Arabia</b>	<b>On Going</b>	Two papers published and submitted One paper to International Journal
38.	<b>Dr. Aeysha Sultan</b>	<b>Department of Chemistry, University of Education, Faisalabad Campus, Faisalabad, Pakistan</b>	<b>On Going</b>	One paper published and submitted One paper to International Journal
39.	<b>Dr. G. Velraj</b>	<b>College of Engineering, Anna University, Guindy, Chennai - 600025, India</b>	<b>On Going</b>	Two papers Published in the International/National Journals
40.	<b>Dr. P. Kumaresan</b>	<b>Thiru. A. Govindasamy Govt. Arts College, Tindivanam, Tamilnadu, India</b>	<b>On Going</b>	Fifteen papers Published in the International/National Journals

41.	<b>Dr. G. Rajarajan</b>	Centre for Research and Development, Mahendra Educational Institutions, Tiruchengode – 637 503, Tamilnadu, India	<b>On Going</b>	Eight papers Published in the International/National Journals
42.	<b>Dr. P. Nallasamy</b>	Bharathidasan Govt. College for Women, Pondicherry, India	<b>On Going</b>	Two papers Published in the International/National Journals
43.	<b>Dr. A. Ibrahim</b>	Department of Physics, College of Science King Khalid University, Abha 61413, Saudi Arabia	<b>On Going</b>	One paper Published in the International Journals
44.	<b>Dr. Mohd Shkir</b>	Advanced Functional Materials & Opto - electronic Lab. (AFMOL), Department of Physics, King Khalid University, Abha 61413, Saudi Arabia & School of Science and Technology, Glocal University, Saharanpur 247001, Uttar Pradesh, India	<b>On Going</b>	Ten papers Published in the International Journals
45.	<b>Dr. P. Baskaran</b>	Department of Physics and Nanotechnology, SRM Institute of Science and Technology, Kancheepuram, Tamil Nadu - 603 203, India	<b>On Going</b>	One paper Published in the International Journals
46.	<b>Dr. M. A. Majeed Khan</b>	King Abdullah Institute for Nanotechnology, King Saud University, Riyadh 11451, Saudi Arabia	<b>On Going</b>	One paper Published in the International Journals
47.	<b>Dr. S. Kaya</b>	Department of Chemistry, Cumhuriyet University, Sivas 58140, Turkey	<b>On Going</b>	One paper Published in the International Journals
48.	<b>Dr. Sultan Erkan</b>	Department of Chemistry, Faculty of Science, Cumhuriyet University, Sivas 58140, Turkey	<b>On Going</b>	One paper Published in the International Journals

49.	<b>Dr. Rajneesh Kumar</b>	Department of Physics, Institute of Science, Banaras Hindu University, Varanasi 221005, U.P., India	<b>On Going</b>	One paper Published in the International Journals
50.	<b>Dr. Dinesh Pratap Singh</b>	Millennium Institute for Research in Optics (MIRO), Physics Department, Faculty of Science, University of Santiago of Chile (USACH), Estación Central 9170124, Chile	<b>On Going</b>	One paper Published in the International Journals
51.	<b>Dr. Selvaraj Mohana Roopan</b>	Chemistry of Heterocycles & Natural Research Laboratory, Department of Chemistry, School of Advanced Sciences, Vellore Institute of Technology, Vellore, Tamilnadu, India	<b>On Going</b>	Three papers Published in the International Journals
52.	<b>Dr. Quyet Van Le</b>	Department of Materials Science and Engineering, Institute of Green Manufacturing Technology, Korea University, 145 Anam-ro, Seongbuk-gu, Seoul 02841, South Korea	<b>On Going</b>	One paper Published in the International Journals
53.	<b>Dr. Mohammad Abu Haija</b>	Department of Chemistry, Khalifa University of Science and Technology, P.O. Box 127788, Abu Dhabi, United Arab Emirates  Center for Catalysis and Separations, Khalifa University of Science and Technology, P.O. Box 127788, Abu Dhabi, United Arab Emirates	<b>On Going</b>	One paper Published in the International Journals
54.	<b>Dr. Venkatraman Madurai</b>	School of Physics, Madurai Kamaraj	<b>On Going</b>	One paper Published in the International

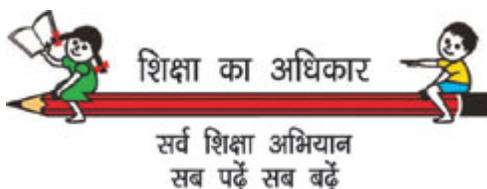
	<b>Ramakrishnan</b>	<b>University, Madurai, India</b>		Journals
55.	<b>Dr. Vasudeva Reddy Minnan Reddy</b>	<b>School of Chemical Engineering, Yeungnam University, Gyeongsan 38541, Republic of Korea</b>	<b>On Going</b>	One paper Published in the International Journals
56.	<b>Dr. V. Balasubramani</b>	<b>Department of Physics, Saveetha School of Engineering, Saveetha Institute of Medical and Technical Sciences, Chennai, Tamilnadu 602105, India</b>		
57.	<b>Dr. Mohd Shkir</b>	<b>University Center for Research and Development (UCRD), Chandigarh University, NH95, Chandigarh-Ludhiana Highway, Gharuan, Mohali, Punjab 140413, India</b>	<b>On Going</b>	One paper Published in the International Journals
58.	<b>Dr. Woo Kyoung Kim</b>	<b>School of Chemical Engineering, Yeungnam University, Gyeongsan 38541, Republic of Korea</b>	<b>On Going</b>	One paper Published in the International Journals
59.	<b>Dr. Balasubramani Vellingiri</b>	<b>Department of Physics, Saveetha School of Engineering, Saveetha Institute of Medical and Technical Sciences, Chennai, Tamil Nadu 602 105, India</b>	<b>On Going</b>	One paper Published in the International Journals
60.	<b>Dr. F. Maiz</b>	<b>Department of Physics, Faculty of Science, King Khalid University, P.O. Box 9004, Abha 61413,</b>	<b>On Going</b>	One paper Published in the International Journals

		Saudi Arabia		
61.	Dr. Xue-Hai Ju	School of Chemistry and Chemical Engineering, Nanjing University of Science and Technology, Nanjing 210094, People's Republic of China	On Going	One paper Published in the International Journals

### **XIII. Public contributions:**

#### **A. Social Service/Activities:**

1. Donated ancestor property/home to conduct Sarva Shiksha Abhiyan (SSA) at 72-A, Panduvan Ukkadai, Nalladai – 609 306 (Post), Tranquebar (Taluk), Mayiladuturai (District), Tamilnadu.



2. National AIDS awareness Campaign organized by Nehru Yuva Kendra at Pondicherry (Karaikal) on 5<sup>th</sup> April, 1992 and delivered a talk on “Rural Pupil and their Scientific Thought”.
3. As an Associate N.C.C. Officer, Organised the Blood Donation Camp at Sanipeyarchi Thirunallar Temple, Karaikal, Govt. of Pondicherry during 7<sup>th</sup>, December. 1995
4. Given talks in the All India Radio (FM), Karaikal and Pondicherry:
  - a. Group Discussion on Thanthai Periyar E. V. Ramasamy (17-9-1993) as a (Renaissance) Social Reformer.
  - b. Group Discussion on Dr. B. R. Ambedkar (14.4.1995) about his Social Upliftment.
  - c. A talk on “Stars and its Evolutions” Science day Celebration (28-2-1997)
  - d. A talk on “Sir Albert Einstein and his Scientific Achievements” (28-2-1999)

#### **B. Periyar University Assignments**

**Library:** As a Library In-charge, subject books are circulated and advised the students to refer in the Department of Physics Library, Periyar University, Salem. (Total books:

2500 books are available) from the year 2005 to 2012.

**C. Other University Assignments:**

1. **External Expert Committee Member:** Acted as an Expert in Technical Committee meeting for the purchase of GPU Computational cluster under DST-SERB project held on (Wednesday) 21.09.2022 @11.00AM via google meet. **Technical Committee Meeting DST-SERB Project**, Wednesday, September 21, 2022, at 11.00 am, Google Meet joining info, Video call link: <https://meet.google.com/qwj-dpxf-sxy>, Conducted by Dr. L. Senthilkumar, Professor and Head, Department of Physics, Bharathiar University, Coimbatore, Tamil Nadu.

2. **External Expert Committee Member:** Review Meeting held under the mentorship **Prof. M. Krishnan & Prof. K. Thamilaran for DST-SERB projects at Bharathidasan University, Trichy** to purchase Mixed Signal Oscilloscope (MSO) under DST PURSE (II Phase) Program. In this connection, I acted as an External Expert Committee Member to participate in the negotiation meeting fixed on 4th January 2018 at 2.30 pm at Centre for Nonlinear Dynamics, School of Physics, Bharathidasan University, Tiruchirapalli – 620 024.

**Chairman/Convenor/Academic Council Nominee/Member for Course Affiliation Committee to Start New Courses in Constituent/Affiliated Colleges of Periyar University and Other Assignments (68 Colleges):**

1. **Chairman: Board of Studies – University Industrial Collaborative Programme (UICP)** for syllabus framing to the following new courses from the academic year 2016 - 2017 (i) B.Sc (Radio Imaging Technology) (ii) Diploma Radio Imaging Technology (iii) Diploma in Laboratory Technology (iv) Diploma in Critical Care Management (v) Diploma in Hotel Management and Catering Science. First meeting was held at PRIDE on 25.10.2016 to submit **Programmes Eligibility, Duration, Programme Pattern, Scheme of Examination, Question Paper Pattern, Model Question Paper, List of Examiners, Question paper Setters and any other related Particulars.**
2. **Chairman: P.G. Board of Examinations, Ten Years (2005-2008, 2010-11, 2013-14, 2014-15, 2015-16 & 2016-17), P.U., Salem.**
3. **Chairman: M.Sc (Electronic Sciences) Question Setter's Committee, Madras University, Chennai – 600 005 from the academic 2010-2011 onwards.**
4. **Resource person for BSNL Staff: - Six months training programme organized by Departments of Commerce, Physics and Tamil, Periyar University, Salem, held during May-2006 to Oct-2006**
5. **Inspection Committee Member: to give permanent affiliation to Govt. Arts College, Dharmapuri. (2006-2007)**

6. **Inspection Committee Member:** to give affiliation to the course B.Sc (Electronics and Communication), Vivekanandha College, Thiruchengode, Namakkal. (2005-2007)
7. **Additional Chief Superintendent:** Pride Centres at Dharmapuri, Krishnagiri, Tiruppathur, Pondicherry, Hosur, Vellore, Mecheri and Mettur (2005-2007).
8. **Industrial Visit to Salem Steel Plant** on 17.3.2007 along with M.Sc students, M.Phil and Ph.D Scholars for learning CRM & HRM and visit to WRI, BHEL, Trichy on 9-1-2007 for Laser materials Processing.
9. **Convenor:** M.Sc (Physics-CBCS) Entrance–cum- Selection Committee for the year 2006-2007 Admission.
10. **Observer:** PRIDE Examinations, Periyar University, Salem-636 011, from 26-11-2007 to 11-12-2007 at JNRM College, Andaman and Nicobar Islands.
11. **Coordinator:** Periyar University Examinations & Engineering Examinations from 4-5-2008 to 14-8-2008
12. **Additional Controller of Examinations (i/c),** Periyar University, Salem from 15-4-2009 to 15-1-2010.
13. **Camp Officer (Revaluation),** Periyar University, Salem, from 27-7-2010 to 1-10-2010
14. **Inspection Committee Member:** to give affiliation to Viswa Bharathi Arts and Science College, Murappur, Dharmapuri Dist. (2011-2012) on 20-12-2010
15. **Camp Officer (PG):** Periyar University, Salem, from 22-11-2010 to 08-03-2011
16. **Camp Officer (PG):** Periyar University, Salem, from 15-04-2011 to 22-8-2011
17. **Inspection Committee Member:** to give permanent affiliation to Vidya Mandir College for Arts and Science, Uthangarai (2011-2012) on 13-12-2011
18. **Inspection Committee Member:** to give permanent affiliation to Sengunthar Arts and Science College, Tiruchengode, Namakkal Dist. (2011-2012) on 14-12-2011
19. **Inspection Committee Member:** to give permanent affiliation to Selvamm Arts and Science College, Namakkal Dist. (2011-2012) on 19-12-2011
20. **Inspection Committee Member:** to give permanent affiliation to Govt. Arts College, Dharmapuri (2011-2012) on 27-01-2012.
21. **Board of Studies Meeting:** to UG Physics at the Department of Physics, Vivekananda College for Women held on 21-02-2012

- 22. Inspection Committee Member:** to give M.Sc (Physics) affiliation to KSR College and Arts & Science College, Thiruchengodu, Namakkal Dist. (2011-2012) on 22-05-2012
- 23. Inspection Committee Member:** Permission to start M.Sc (Physics) affiliation to A.A.G.A College, Namakkal on 31-07-2012
- 24. Inspection Committee Member:** Permission to start M.Sc (Physics) affiliation to A.A.G.A College, Attur on 01-08-2012
- 25. Inspection Committee Member:** Permission to start M.Phil (Physics) affiliation to Thiruvalluvar Arts College, Rasipuram on 01-10-2012
- 26. Inspection Committee Member:** to give permission to start addition UG course affiliation to Shree Saradha Nikethan Arts and Science College for Women, Dhakshineswaram, Kanavaiputhur, Omalur (Taluk), Salem - 636 354 (2012-2013) on 28-11-2012
- 27. Inspection Committee Member:** Permission to start M.Phil (Physics) affiliation to Shree Vidya Mandir College for Arts and Science, Uthangarai on 1-12-2012
- 28. Inspection Committee Member:** Permission to start B.Sc (Physics - Additional Course) affiliation to E.R.K Arts and Science for Women, Erumianpatti, Dharmapuri District, Tamilnadu on 10-06-2013
- 29. Inspection Committee Member:** Permission to start B.Sc (Physics - Additional Course) affiliation to A.V.S Arts and Science College, Salem-636 106, Tamilnadu on 24-07-2013
- 30. Inspection Committee Member:** Addition of 5 students to M.Phil (Physics) Course in addition to 15 students existing at Kandasamy Kandar College, Paramatti Velur, Namakkal, Tamilnadu on 4-09-2013
- 31. Inspection Committee Member:** Permission to start B.Sc (Physics - Course) affiliation to Govt. Arts & Science College for Women, Barugur, Krishnagiri (Dt), Tamilnadu on 10 -10-2013
- 32. Inspection Committee Member:** Permission to start M.Phil (Physics - Course) affiliation to Arignar Anna Govt. Arts College for Men, Namakkal (Dt), Tamilnadu on 22-11-2013
- 33. Inspection Committee Member:** Permission to start M.Phil (Physics - Course) affiliation to Pachaimuthu Arts and Science College for Women, Dharmapuri (Dt), Tamilnadu on 22-02-2014 & 5.4.2014
- 34. Academic Council Member:** Academic Council Meeting attended for Modification in the syllabi at Sri Sarada College for Women on 20.03.2014.

35. **Board of Studies Meeting held at Department of Physics, Selvamm Arts and Science College (Autonomous), Namakkal on 5.6.2014**
36. **Inspection Committee Member: Permission to start M.Phil (Physics - Course) affiliation to Govt. Arts College, Krishnagiri (Dt), Tamilnadu on 28-08-2014.**
37. **Inspection Committee Member: Permission to start M.Phil (Physics - Course) affiliation to Arignar Anna Arts & Science College, Krishnagiri (Dt), Tamilnadu on 08-04-2015.**
38. **Board of Studies Meeting held at Department of Physics, Selvamm Arts and Science College (Autonomous), Namakkal on 21.04.2015**
39. **Inspection Committee Member: Permission to start B.Sc (Physics – Additional Section) course to Lakshinarayana Arts & Science College for Women, Thadagam Village, Thokkampatti Post, Dharmapuri Dist. – 636 705 on 4.05.2015**
40. **Inspection Committee Member: Permission to start M.Sc (Physics - Course) affiliation to Morappur Kongu Arts & Science, Vengiyampatti, Morappur, Harur Taluk, Dharmapuri – 635 305 on 5.5.2015**
41. **Convenor, Inspection Commission: Permission to start B.Sc (Physics - Course) affiliation to Vidya Arts and Science College, Koranam Patti (Village), Edappady (Taluk), Salem (district) – 637 102 on 6.5.2015**
42. **Convenor, Inspection Commission: Permission to start B.Sc (Physics - Course) affiliation to Salem Kongu Arts and Science College, Bangalore Main Road, Mamangam, Salem – 636 302 on 6.5.2015**
43. **Inspection Committee Member: Permission to start B.Sc (Physics - Course) affiliation to Sri Jayajothi Arts & Science College for Women, Jalakandapuram Main Road, Tharamangalam, Salem – 636 502 on 07-05-2015.**
44. **Inspection Committee Member: Permission to start M.Sc (Physics - Course) affiliation to Kailash College for Women, Mettur (Taluk), Nangavalli, Periya Sorakai (Village), Salem, on 08-05-2015**
45. **Inspection Committee Member: Permission to start M.Sc (Physics - Course) affiliation to Adhiyaman Arts and Science College for Women, Srinivasa Nagar, Uthangarai, - 635 207, Krishnagiri (District) on 08-05-2015**
46. **Inspection Committee Member: Permission to start M.Sc (Physics - Course) affiliation to Kailash College for Women, Mettur (Taluk), Nangavalli, Periya Sorakai (Village), Salem, on 11-05-2015**

47. **Inspection Committee Member:** Permission to continue B.Sc (Physics - Course) affiliation to Sherveroy Arts and Science College, Vazhavanthi, Yercaud on 16-07-2015
48. **Inspection Committee Member:** Permission to start B.Sc (Physics - Course) affiliation to Kavitha's Arts and Science College (Co-Education), Chinna Manali, Thiruchengode (Taluk), Namakkal (District) on 21-07-2015
49. **Inspection Committee Member:** Permission to continue B.Sc (Physics – Additional Course) affiliation to Vivekananda Arts & Science College for Women, Elayampalayam, Thiruchengode on 21-08-2015
50. **Inspection Committee Member:** Permission to continue B.Sc (Physics – Additional Course) affiliation to Bharathiar Arts & Science College for Women, Deviyakuruchi, Attur on 22-08-2015
51. **Inspection Committee Member:** Permission to continue B.Sc (Physics – Additional Course) affiliation to Shri Sakthi Kailash Arts & Science College for Women, Ammapet, Salem - 636003 on 27-08-2015
52. **Inspection Committee Member:** Permission to start B.Sc (Physics - Course) affiliation to Sri Arunachala Arts and Science College (Co-Education), Mathampatti, Palacode (Taluk), Dharmapuri (District) on 3-09-2015
53. **Inspection Committee Member:** Permission to start B.Sc (Physics - Addiditonal affiliation Course) to Padmavani Arts & Science College for Women, Opposite to Periyar University, Salem – 636 011 on 07-10-2015
54. **Inspection Committee Member:** Permission to start M.Phil (Physics) affiliation Course to Sivagamiammal College of Arts & Science, Kattinayanapalli, Krishnagiri – 635 001 on 6-11-2015 & Permission to continue M.Sc (Physics) Course affiliation on 31.10.2015
55. **Inspection Committee Member:** Grant Permission for Conducting full-time & part-time Ph.D research programme in Physics Discipline from the Academic Year 2015-16 to Department of Physics, Government Arts College (Men), Krishnagiri – 635 001 on 16.02.2016
56. **Inspection Committee Member:** Permission to start M.Phil (Physics) affiliation Course to E.R.K Arts and Science for Women, Erumianpatti, Dharmapuri District, Tamilnadu on 17.02.2016
57. **Inspection Committee Member:** Permission to start B.Sc (Physics) New affiliation Course to Unique College of Arts & Science, Karapputtu, Uthangarai (TK), Krishnagiri District, Tamilnadu on 16.09.2017

58. **Inspection Committee Convenor-cum-Member:** Grant Continuous Affiliation for Conducting B.Sc (Physics) Course at Salem Kongunadu Arts & Science College, Mamangam, Salem on 13.12.2017
59. **Inspection Committee Member:** Permission to start B.Sc (Physics) New affiliation Course to AES Arts and Science College, Periyapanamutlu, Anchoor (PO), Bargur (TK), Krishnagiri District, Tamilnadu on 24.12.2020
60. **Inspection Committee Member:** Grant Continuous Affiliation for Conducting B.Sc (Physics) Course at Sir Vidya Kamachi Arts and Science College for Women, Amaram & (PO), Mettur (TK), Salem (Dt.) – Tamilnadu - 636451 Taon 24.12.2020
61. **Inspection Committee Member and Subject Expert** for continuance of Provisional Affiliation (B.Sc – Physics) at Sri Vidya Kamachi Arts and Science College for Women, Amaram, Mecheri, Mettur on 08.01.2021
62. **Inspection Committee Member:** Grant Continuous Affiliation for Conducting M.Sc (Physics) Additional Course at Vidya Mandir College for Arts and Science, Uthangarai on 05-02-2021
63. **Inspection Committee Member and Subject Expert:** Permission to start M.Sc (Physics - Course) affiliation to Jayam Arts and Science College, Dharmapuri District on 26.05.2022
64. **Academic Council Nominee:** Attended Academic Council meeting on 21.10.2022 for the academic year 2022-2023 at Vivekandha College of Arts and Sciences for Women (Autonomous) Tiruchengode - 637 205, Tamil Nadu
65. **Inspection Committee Member and Subject Expert:** Permanent Affiliation of B.Sc (Physics - Course) to Government Arts and Science College, Kumarapalayam - 638 183 on 25.04.2023
66. **Academic Council Nominee:** Attended 13<sup>th</sup> Academic Council meeting on 16.06.2023 at Board Room, Vivekandha College of Arts and Sciences for Women (Autonomous), Elayampalayam, Tiruchengode - 637 205, Namakkal (Dist.), Tamil Nadu.
67. **Inspection Committee Member and Subject Expert:** Continuance of Provisional Affiliation to M.Sc (Physics - Course) affiliation to Jayam Arts and Science College, Nallur, Dharmapuri District - 636813 on 11.08.2023
68. **Governing Body Nominee** for the selection of Assistant Professor (Aided) in Physics at Erode Arts and Science College (Autonomous), Erode on 19.09.2023

**XIV. Experience in Developing “E-Content” for Courses in Physics Discipline or Any Other Area.**

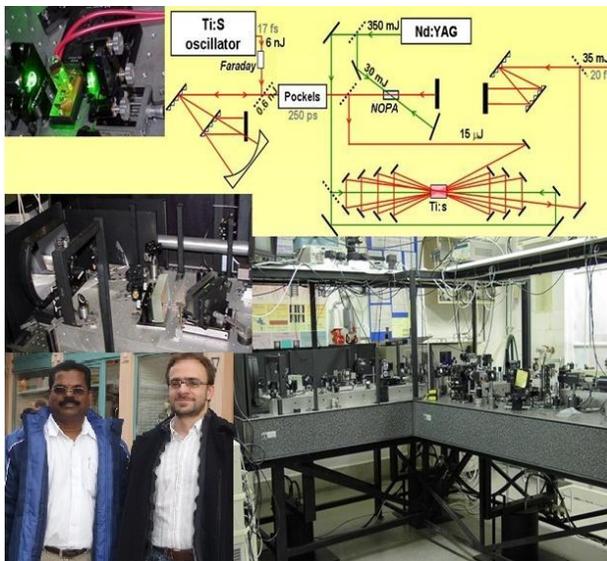
**M.Phil (Physics) - Advanced Physics - Paper-II & Paper-III (Laser Physics - Micro optics/ Nano-optics) of Distance Education through intranet of Periyar University & ZEMAX Optical design through e-content, as a licensed software holder.**

**XV. Other academic, professional, administrative or any other information to bring to the attention of the Selection Committee:**

**Co-Curricular Activities with Other Universities:**

1. Annamalai University – Board of Studies & Examinations, Question Paper Setter’s Committee - Chidambaram
2. Pondicherry University – Member, PG Board of Studies
3. Mother Teresa University – Question Paper Setter’s Committee, Kodaikanal
4. Bharadhasan University – Question Paper Setter’s Committee, Trichy
5. Vellore Institute of Technology - Vellore
6. Crystal Growth Centre, Anna University, Chennai-25
7. M.S. University of Technology, Baroda, Gujarat
8. Cochin University of Science and Technology, Cochin
9. Kerala University, Kerala
10. Member, Board of Studies, K.M.C.P.G.S, Puducherry
11. Bharathidasan College for Women, Pondicherry
12. Faculty Selection Committee, Saradha College for Women, Salem
13. N.A.S College, Meerut, U.P.
14. Madurai Kamaraj University – Question Paper Setter’s Committee
15. K.S.R. Arts and Science College – Member, Board of Study and Question Paper Setter’s Committee
16. Karpagam University, Coimbatore
17. Chairman, Question Paper Setters Committee, M.Sc (Electronic Sciences), Madras University, Chennai - 5
18. A.V.V.M College, Poondi Pushpam College, Tanjore, Tamilnadu
19. Bharathiar University, Coimbatore - Question Paper Setter’s Committee
20. Lucknow University, U.P
21. Subject Expert, Faculty Selection Committee, Mizoram Central University
22. Alagappa University, Karaigudi - Question Paper Setter’s Committee
23. Periyar Maniammai University, Vallam, Thanjavur – 613 403, Tamilnadu
24. Member, College Academic Council, Sri Saradha College for Women, Salem
25. Manonmaniam Sundaranar University, Tirunelveli
26. Board of Studies (CBCS), Selvamm Arts and Science College (Autonomous), Namakkal
27. T.B.M.L College, Porayar - 609307, Tamilnadu
28. Mother Teresa University – SET Question Paper Setter’s Committee at ANNA University, during 23-25, January, 2016
29. Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore.
30. Expert, Faculty Selection Committee, Madras University, Chennai – 5
31. Member, P.G. Board of Studies (CBCS), Thiruvalluvar University, Vellore – 632 115
32. University Nominee, BOS, Govt. Arts College, Salem-7
33. Nesamony Memorial Christian College, Marthandam - 629 165

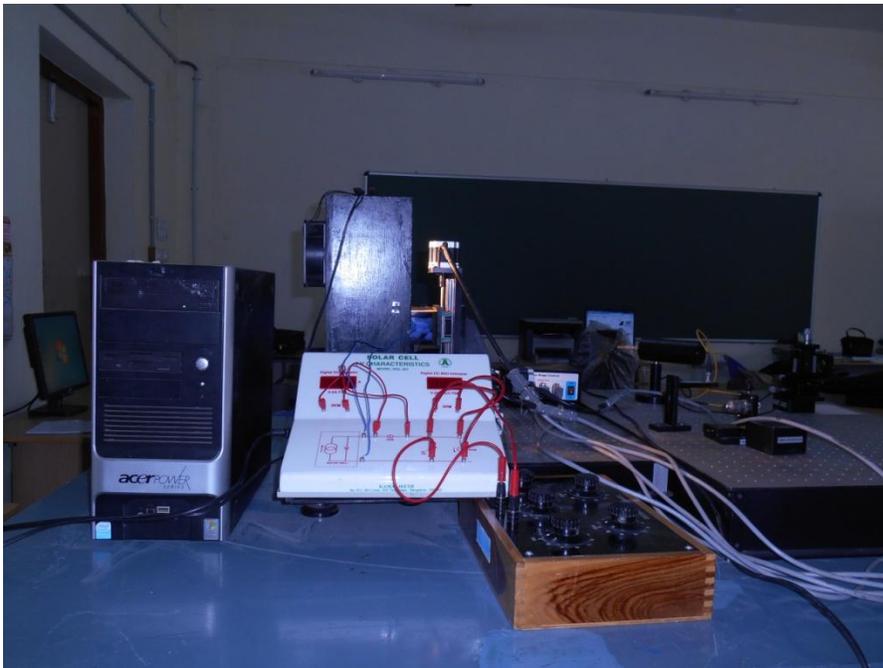
34. University College of Engineering, Anna University Constituent College, Konam, Nagercoil, Tamilnadu-629004
35. S.T.Hindu College, Nagercoil - 629 002
36. Arul Anandar College, Madurai
37. Govt. Arts College, Udumalpet
38. Holy Cross College, Nagercoil
39. St. Xavier College, Palayamkottai
40. Dravidian University, Kuppam
41. Member, P.G. Board of Studies, PKR Arts College for Women, Gobichettipalayam
42. Subject Expert, Faculty Selection Committee, Ayya Nadar Janaki Ammal College, Sivakasi
43. Scott Christian College, Nagercoil
44. V.C Nominee, Thiruvalluvar University – Principal Selection to Anand Arts and Science College, Thandrambattu, Thiruvannamalai (dist.), TN.
45. V.C Nominee, Thiruvalluvar University, Board of Studies - Theivanai Ammal College for Women, Villupuram, Tamilnadu.
46. The Gandhigram Rural Institute (Deemed to be University) Gandhigram – 624 302, Dindigul, Tamil Nadu



**Extreme Light Intensity Titanium-Sapphire Laser Laboratory, Department of Optics and Quantum Electronics, Szeged University, Szeged, HUNGARY**



Participants in LEI 2009, Aula of Transylvania University, Braşov, Romania (Myself first row 4<sup>th</sup> from left), **Prof. Gerard Mourou, Nobel Prize Winner (Physics) in 2018 (Red Coloured Shirt).**



**DSSC & Silicon Solar Cells Testing Method in Laser and Nano-Optics Laboratory, Department of Physics, Periyar University, Salem - 636011**



**D.Sc Degree received from the Governor & Chancellor of Tamil Nadu, Shri. R. N. Ravi at Periyar University Convocation on 28.06.2023**

# SEVENTY FIRST CONVOCA'



# ELI hosts its first major conference

ELI's first international conference, Light at Extreme Intensities or LEI, was held on 16–21 October 2009 at Transylvania University of Braşov, Romania.

The field of lasers with ultrashort pulses and very high intensity ("extreme light") has evolved and matured tremendously in the past few years. ELI's preparatory phase (ELI-PP) has contributed to the progress of the field at an astonishing speed, opening up new research directions and challenging the frontiers of high-field science and ultrafast technologies.

"Ultrashort laser pulses" refers to light pulses with a duration measured in femtoseconds ( $1 \text{ fs} = 10^{-15} \text{ s}$ , which corresponds to about half a period of red light) or even attoseconds ( $1 \text{ as} = 10^{-18} \text{ s}$ ). This timescale became possible thanks to scientific and technological progress in the generation, amplification and measurement of ultrashort laser pulses (fs) and ultrashort laser-generated pulses (as). ELI, devoted to building the most powerful laser in the world (exawatt class), will be able to address laser-matter interaction in the hitherto unreachable intensity regime, the ultra relativistic regime ( $10^{24} \text{ W/cm}^2$ ), where electrons and ions in the laser field exhibit relativistic character.

The purpose of the LEI 2009 conference, intended as the first of a series, was to assemble researchers from Europe and beyond, with the aim of designing both ELI and the future experiments that can be carried out using the facility. The conference topics were:

- high-field physics;
- lasers;
- secondary sources of particles;
- attosecond physics;
- secondary sources of X-rays.

The conference was attended by 180 people from 23 countries. They were scientists, researchers, students and also officials from the EU and from the education



The participants in LEI 2009, which took place in the Aula of Transylvania University of Braşov.

and research ministries of countries in the ELI consortium.

For the opening session we were honoured to be spoken to by Marius Enachescu ("First ELI conference organized in an ELI host country"), Hervé Péro ("Policy developments and challenges at European level in the field of research infrastructures"), Carlo Rizzuto ("A vision for the research infrastructures in the ERA year 2020"), Wolfgang Sandner ("Laserlab Europe") and Gérard Mourou ("High-intensity physics with ELI"). During the 15 sessions held over five days, 13 plenary talks, 22 invited talks and 31 oral talks were presented. The poster session (held simultaneously with a display and tasting of cheese and wines from participating countries) had 47 contributions. Another special session discussed the roles of the ELI sites decided by the consortium on 1 October 2009 (in the Czech Republic, Hungary and Romania).

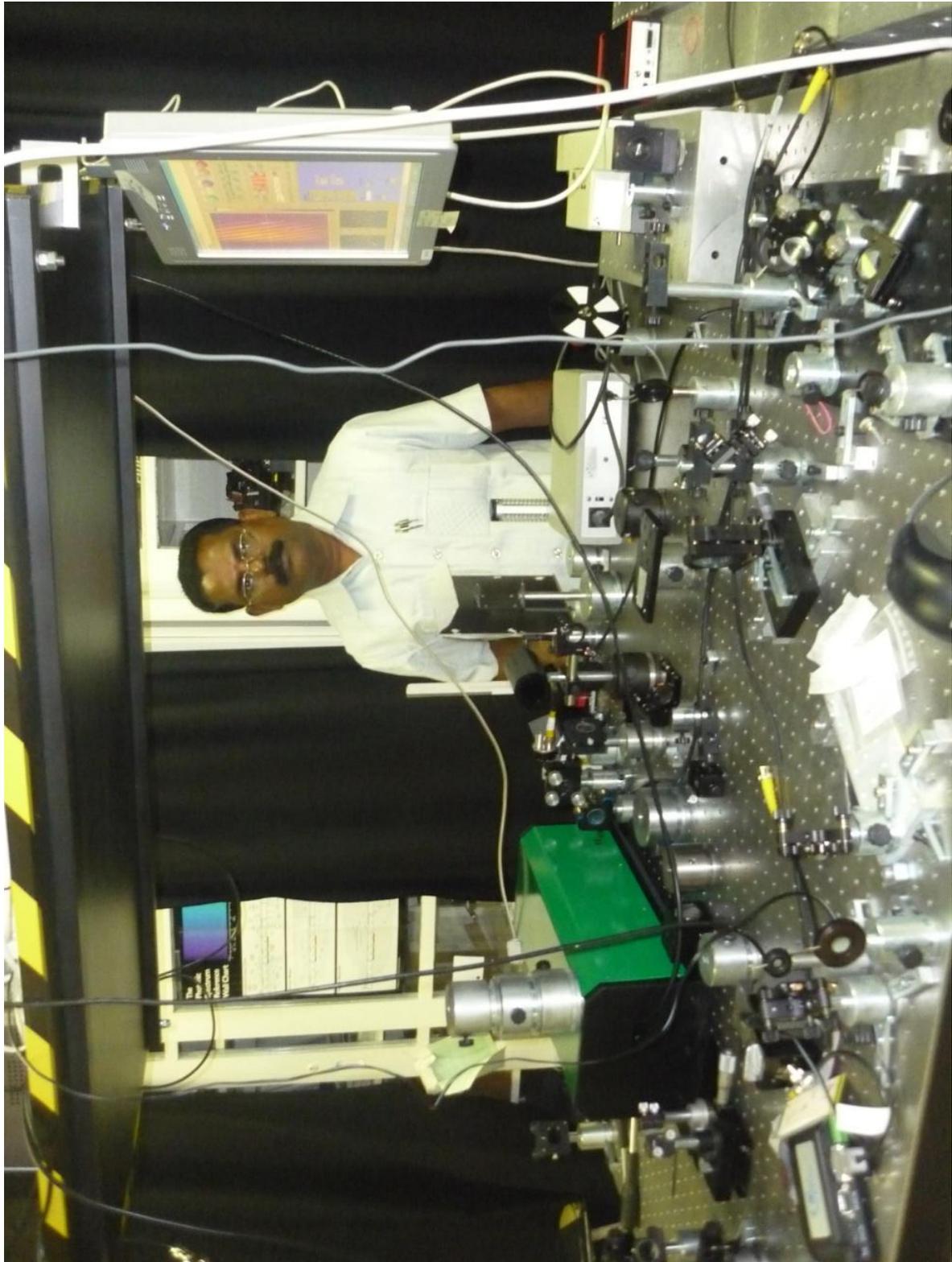
An international jury headed by Prof. Toshiki Tajima selected three scientists to be awarded for the best contributions of young authors (under 35 years) to the conference. The winners were Dr Saumyabrata Banerjee (Rutherford Appleton Laboratory, UK), Dr Samuel Martins (Instituto Superior Tecnico, Portugal) and Dr Zsuzsanna Major (Max-Planck-Institut für Quantenoptik, Germany).

A one-day social programme was offered to participants, including visits to Peles and Pelisor royal castles in Sinaia, Dracula Castle in Bran (see illustration on the front cover) and a banquet at Bran Inn.

The 54 papers from the conference will be published soon by the American Institute of Physics as a formal conference proceedings. The next LEI conference will be held in 2011 in the Hungarian town of Szeged.

*Prof. Dan C Dumitras, organizing committee*

**Participants in LEI 2009, which took place in the Aula of Transylvania University of Braşov, Romania (Myself - first row 4<sup>th</sup> from left) - Prof. Gerard Mourou, Nobel Prize Winner in Physics in 2018 (Red Coloured Shirt).**



**Myself working in Prof. Dr. Osvay Karoly, Head, Laser Group, Department of Optics and Quantum Electronics, Szeged University, Szeged, HUNGARY Laboratory under Indo-Hungarian Educational Exchange Programme during, Sep-Nov', 2009.**

# Certificate

This is to certify

P. M. Anbarasan

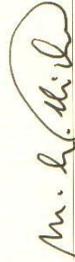
Has attended ZEMAX Training Course  
Optical Design Using ZEMAX  
at BANGALORE, India  
During 8<sup>th</sup> -10<sup>th</sup> Jun 2009

  
Mr Robert Huang, CEO  
Wavelab Scientific Pte Ltd

Date: 9<sup>th</sup> July 2009

  
WAVELAB  
SCIENTIFIC  
*Innovative Solutions*

  
ZEMAX  
DEVELOPMENT CORPORATION



Dr Mark Nicholson, Vice President,  
Zemax Development Corporation, USA

Date: 9<sup>th</sup> July 2009

Trained ZEMAX Optical designer, as a Licensed Software Holder. Wavelab Scientific Pvt., Ltd., Innovative Solution, Singapore based Zemax Development Corporation, USA.

# LIFE MEMBER



SOLAR ENERGY SOCIETY OF INDIA (SESI)

## Membership Certificate

**Prof. P.M. Anbarasan**

*This is to certify that*

*is a member of Solar Energy Society of India (SESI).*

*Membership No.*

**LM/1680/2011**

**Ajay Prakash Shrivastava**  
President

**SOLAR ENERGY SOCIETY OF INDIA (SESI)**  
(Indian Section of International Solar Energy Society)  
A-14, Mohan Cooperative Industrial Estate  
Mathura Road, New Delhi 110 044  
Telephone.: +91-11-65649864, Telefax: +91-11-26959759  
E-mail: dg\_sesi@yahoo.co.in, info@sesi.in  
Website: www.sesi.in

**Rajinder Kumar Kaura**  
Secretary General

# CERTIFICATE

This is to certify that Professor Ponnusamy Munusamy Anbarasan, Department of Physics, Periyar University, Salem - 636011, Tamil Nadu, delivered a talk entitled, "Boosting Laser Pulses to Extreme Light Intensities Through OPCPA Technique for Nuclear Waste Management" in International Day of Light - Light for LITE (Innovation, Thought and Education) organised by IEEE Photonics Society, IIT, Bombay on 16th May, 2020

Lekshmi Eswaramoorthy  
President - OSA Student Chapter IITB



Abhay Anand V S  
President - IEEE Photonics Student Chapter IITB



ரெயின்போ கல்வியியல் கல்லூரியில்

## பட்டமளிப்பு விழா

நாமக்கல், ஜூன் 12-  
நாமக்கல் மாவட்டம் புதுச்சத்திரம் ரெயின்போ கல்வியியல் கல்லூரியில் 6-வது பட்டமளிப்பு விழா நடைபெற்றது. விழாவுக்கு கல்லூரியின் தலைவர் என்ஜினியர் மாணிக்கம் தலைமை தாங்கினார். ராசிபுரம் திருவள்ளூர் அரசு கலைக்கல்லூரி இயற்பியல் பேராசிரியர் சுப்பிரமணியன், கருப்பூர் அரசு மேல்நிலைப்பள்ளி முதலமைச்சர் ஆசிரியர் பெருமாள் ஆகியோர் முன்னிலை வகித்தனர். பெரியார் பல்கலைக்கழக இயற்பியல் துறை பேராசிரியரும், நானோ அறிவியல்-தொழில் துட்பமைய ஒருங்கிணைப்பாளருமான அன்பரசன் சிறப்பு

விருந்தினராக கலந்துகொண்டு மாணவ, மாணவிகளுக்கு பட்டங்கள் வழங்கினார். பின்னர் அவர் பேசுகையில், ஆசிரியர்களின் பங்கு சமுதாயத்திற்கு மிகவும் அவசியம் என்றும், இளைய தலைமுறையை ஊக்குவிக்க வேண்டியது அவசியம் என்றும், அனைத்திற்கும் மேலாக மாணவர்களின் முன்னுதாரணமாக ஆசிரியர்கள் திகழ வேண்டும், தங்களது பணிகளை செவ்வனே செய்து சமூக

கத்தை வாடிவமைக்கும் சிற்பிகளாக ஆசிரியர்கள் அமைய வேண்டும் என்றார். விழாவில் 2012-2013 மற்றும் 2013-2014-ம் கல்வியாண்டுகளில் பி.எட்.பட்ட வகுப்பில் பயின்று தேர்ச்சி பெற்று முதல் 3 தரவரிசையில் இடங்களை பிடித்தவர்களுக்கு தங்கம், வெள்ளி பதக்கங்களும் நினைவு பரிசுகளும் வழங்கப்பட்டன. மேலும் 187 மாணவ, மாணவியர்கள் பட்டங்களை பெற்று உறுதிமொழி எடுத்துக் கொண்டனர். இதில் கல்லூரி நிர்வாக குழு இயக்குனர்கள், துறைத்தலைவர்கள், பேராசிரியர்கள், பட்டதாரிகள், பெற்றோர்கள் உள்பட பலர் கலந்து கொண்டனர்.



Degree awarded as a Chief Guest in the Sixth Convocation held at Rainbow Education College, Puduchatram.



Receiving ISPA Life Time Achievement Award from the Vice Chancellor, Prof. Dr. R. Jagannathan of Periyar University, Salem during the **3<sup>rd</sup> International Conference on Light Applications in Science and Engineering Research (LASER – 2023)** during 14-16<sup>th</sup> of September, 2023 organised by Department of Physics, Periyar University, Salem, Tamil Nadu, in Association with ISPA held on 14<sup>th</sup> September 2023 in Commemoration of Remembrance of Prof. Dr. S. Mohan.

Indian SpectroPhysics Association (ISPA)  
&  
Periyar University, Salem  
3<sup>rd</sup> International Conference on  
Light Applications in Science, Engineering and Research  
(LASER - 2023)

In Commemoration of Remembrance of Prof. Dr. S. Mohan

**ISPA Life Time Achievement Award**

Conferred on



**Prof. P.M. ANBARASAN, Ph.D., D.Sc.**

Professor, Department of Physics

Director, Centre of New and Renewable Energy Studies

Periyar University, Salem

*Professor P.M. Anbarasan, born on the 29th of May 1964, has traversed an illustrious academic journey marked by unwavering dedication and relentless pursuit of knowledge. His educational odyssey commenced with a B.Sc. in Physics from the University of Madras in 1986, followed by an M.Sc. in Physics from Bharathidasan University in the year 1988. He furthered his scholarly pursuits by attaining a Ph.D. in Laser Physics/Micro-optics from Pondicherry Central University in 2001, and his thirst for knowledge culminated in the distinguished Doctor of Science (D.Sc.) in Physics from Periyar University, Salem, in 2022.*

*Professor Anbarasan embarked on his teaching career as a Lecturer at Pondicherry University from 1998 to 2005, where he sowed the seeds of academic enlightenment. Subsequently, he ascended the academic ladder, assuming the role of Associate Professor in Physics at Periyar University from 2006 to 2008, a position that served as a stepping stone to his current status as a revered Professor within the same institution. His expertise spans the diverse realms of Laser and Spectroscopy, Nano-optics, Solar cells, Materials Science, Photo catalysts, Renewable Energy, and Quantum chemical calculations.*

*With over three decades of profound experience in the fields of laser and spectroscopy, Professor Anbarasan's intellectual footprint extends far and wide. His scholarly contributions manifest through the presentation of 300 papers at national and international conferences, seminars, and workshops, complemented by the meticulous organization of 17 such events. His mentorship has nurtured the academic growth of 17 Ph.D. students, while also guiding numerous M.Phil. and M.Sc. projects. An impressive compendium of 300 research papers in refereed journals attests to his prolific research output, accentuated by an esteemed h-index of 22, an i10 index of 57, and a remarkable citation count of 1746. Furthermore, his authorship extends to seven scholarly books.*

*Professor Anbarasan's scholarly endeavors have been supported by several substantial research projects, collectively amounting to 15.5 crore in funding, sponsored by entities such as the Government of Tamil Nadu, DST, NBHM, and DAE-BRNS. His pursuit of knowledge has transcended geographical boundaries, with collaborative research efforts taking him to countries including Italy, Hungary, Romania, Poland, France, and Germany.*

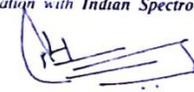
*His steadfast commitment to scientific inquiry is mirrored in his memberships in esteemed organizations such as the Optical Society of India (OSI), the Indian SpectroPhysics Association, the Indian Laser Association, the Indian Association for Crystal Growth, and the Materials Research Society of India. His stature as a scholar is underscored by his designation as a Life Fellow Member, and he has been honored with the INSA-JRD/TATA Fellowship by the Government of India.*

*As we acknowledge Professor Anbarasan's exceptional contributions to the realm of science, may we find inspiration in his dedication and fervor. Department of Physics, Periyar University, Salem, in collaboration with the Indian SpectroPhysics Association, Chennai, takes immense pride in bestowing upon Professor P.M. Anbarasan the prestigious ISPA Dr. Life Time Achievement Award, a recognition richly deserved for his unwavering commitment to the pursuit of knowledge and the advancement of science."*

*Given under the seal of Indian SpectroPhysics Association (ISPA) on 14th September 2023 at 3<sup>rd</sup> International Virtual Conference on Laser Applications on Science, Engineering and Research (LASER - 2023) in commemoration of Dr. S. Mohan organized by Department of Physics, Periyar University Salem in association with Indian SpectroPhysics Association, India.*

  
Dr. V. Raj  
HoD, Physics

Place: Chennai, India  
Date : 14.09.2023

  
Arival Manohar  
Dr. S. Gunasekaran  
Founder-President, ISPA

# Conferring Awards

## ISPA Dr. S. Gunasekaran Award



*Prof. P.M. Anbarasan, etc*  
*Professor, Department of Physics*  
*Periyar University, Salem*

On behalf of [Indian SpectroPhysics Association \(ISPA\)](#), I have been received the “ISPA Dr. S. Gunasekaran Award”. The Award bestowed during the inaugural session of the International Virtual Conference on Light Applications in Science and Engineering Research (LASER – 2021) organised by the ISPA in Association with Sophisticated Analytical Instrumentation Technique (SAIF), St. Peter’s Institute of Higher Education and Research held on 14<sup>th</sup> September 2021 in [Commemoration of Remembrance of Prof. Dr. S. Mohan.](#)

# CERTIFICATE

PROUDLY PRESENTED TO

*Ponnusamy Munusamy  
Anbarasan*

**RSC-IITM Desktop Seminar on Environmental  
Sciences**

**Oct 11, 2022**

Date of Completion

**RSC Publishing Webinars**

Organiser



ROYAL SOCIETY  
OF CHEMISTRY



## *Certificate of Appreciation*

This certificate of appreciation is presented to  
Prof. Dr. Ponnusamy Munusamy Anbarasan

for your contribution in Mega  
Tinkering Day on 12<sup>th</sup> August 2025. We thank you for your  
tremendous efforts to make the event successful.

**Deepali Upadhyay**  
Program Lead  
Atal Innovation Mission



**Dr. K. SUGATHA, M.Sc.,  
M.FPM, Ph.D.**  
Principal Grade C  
S.V.E. Oorri Arts College for  
Women,  
Sivakolli.



**Dr. P. RAMU, M.Sc., M.FPM,  
Ph.D.**  
Assistant Professor in Physics  
Government Arts College  
Cherry B.L, Kunturamangalam,  
Bilamp - 7



**Dr. K. M. PRABHU, M.Sc.,  
M.FPM, Ph.D.**  
Assistant Professor in Physics  
Sri Valley Model Arts and  
Science College  
SRIH,  
Uppala, Nellore, Andhra  
Pradesh - 522207



**Dr. P. SANTHIVEL, M.Sc.,  
M.FPM, Ph.D.**  
Assistant Professor in Physics  
Sri Venkateswara College  
Sri Venkateswara Rd, P.M.P Nagar  
Kothamangalam, Salem -  
636614



**Dr. P. SAKTHI, M.Sc.,  
M.Phil, Ph.D.**  
HOD of Physics & Principal  
Sri Venkateswara College  
Sri Venkateswara Nagar,  
Kothamangalam, Salem  
Dist.



**Dr. M. PRASAD, M.Sc.,  
M.Phil, B.Ed, Ph.D.**  
Assistant Professor in Physics  
Thiruvalluvar University  
Cannara College, Cannara



**Dr. C. SUNDARAM, M.Sc.  
M.Phil, B.Ed, Ph.D.**  
S.T. Assistant Science  
FCMS - Periyar  
Kottaimangalam (T. C)  
Mannar (Th. I. Sakshi (Dr.)



**Dr. A. PRITHVIRAJAN,  
M.Sc., Ph.D.**  
Assistant Professor in Physics  
Sri Venkateswara College  
for Women, Kunturamangalam,  
Kottamangalam, Salem  
Dist.



**Dr. A. ARUNKUMAR,  
M.Sc., M.Phil, B.Ed, Ph.D.**  
Post Doctoral Fellow  
Dr. C.V. D. C. Research, Senior  
Scientist, Kottamangalam  
College  
Kottamangalam, Salem  
Dist.



**Dr. C. INDRA,  
PREYARAJAN, M.Sc.,  
M.FPM, Ph.D.**  
Assistant Professor in Physics  
Maharaja College of Arts  
& Science (A unit of  
VYSSEELA Group)  
Rajapuram - 571 401,  
Dakshin  
Kannada



**Dr. S. SRINIVAS, M.Sc.,  
Ph.D.**  
Post Doctoral Fellow  
Department of Chemistry  
Sri Siddhaganga University  
P.O. Box 127160  
New Delhi, New Delhi  
Dist.



AMRITAPURI  
CAMPUS



Institution's Innovation Council Lecture series on  
**Systematically Understanding Paradox in  
Society through Innovative Scientific Approach**

27 AUG 2024 | 03:00 P.M.

- Prayer Song :  
Welcome Address : **Ms. Sreejitha Raj**  
Research Scholar,  
Department of Mechanical Engineering  
Amrita School of Engineering
- Introduction speech : **Dr. T. Ganesan**  
IIC-President
- Presidential Address : **Dr. Jyothi S. N.**  
Associate Dean  
Amrita School of Engineering
- Introduction about  
Guest speaker : **Ms. Shreya Baltha**  
Research Scholar,  
Department of Mechanical Engineering,  
Amrita School of Engineering
- Key Note Address : **Dr. Ponnusamy Munusamy Anbarasan**  
Senior Professor-cum-Director (HAG) – Rtd.  
Head, Centre for New & Renewable  
Energy Studies (CNRES)  
Department of Physics, Periyar  
University, Salem – 636 011, Tamil Nadu, India
- Vote of Thanks : **Ms. Shreya Baltha**  
Research Scholar,  
Department of Mechanical Engineering,  
Amrita School of Engineering





**AMMACHI LABS**



**Any other relevant but brief information on academic standing.**

**Contributions to Teaching: Contributions in developing courses, academic programmes, innovative teaching methods, work leading to better teaching, research and management in the Centre & Department. Seminar classes conducted through Smart Class, Multimedia Power Point (Side Projector) and Intranet teaching in the Periyar University in addition to the normal black board teaching. Industrial visit arranged to impart their (students) knowledge. STEM experts for robotics, 3D printing, and drone design focused on integrating these technologies to teach Science, Technology, Engineering, and Mathematics**

**I hereby declare that all the information given in this profile is true to the best of my knowledge and belief.**

**Place: Salem - 16**

**Date: 15.09.2025**

**(P. M. Anbarasan)**