

FACULTY PROFILE

1. Name : Dr. A.Priyadharshini
2. Designation : Assistant Professor
3. Qualification : M.Sc.,B.Ed., M.Phil., Ph.D.
4. Mobile number : 9092588287
5. E-mail id : priyadharshini@auxiliumcollege.edu.in
6. Teaching Experience : 4 Years
7. Area of specialization : Crystal Growth (Organic, Semi-Organic and Nonlinear Optical Materials)
8. Research Experience and Guidance : 5 Years
9. No. of Papers Published : 8
10. No. of Papers Presented in the National/ International/ Seminars/ Workshops/ Conferences : 8
11. No. of Seminars/Workshops/Conferences organized: 4
12. Responsibilities held : Physics department Association In-charge, Innovation In-charge
13. Current Responsibilities : Tutor, STP Online Course In-charge, Log Book In-charge
- 14. Honors & awards received (Descriptive):**

1. Research Award- Research award for the year 2017 awarded by VIT, Vellore, October 2018.
2. Received Best poster presentation award in the year 2017.

15. Any Other (Descriptive)

Instruments Handled

- ✓ UV-Vis-NIR Spectrophotometer
- ✓ Optical Microscope
- ✓ Vickers Micro hardness
- ✓ Crystal Growth systems
- ✓ P-E loop measurement
- ✓ Z-Scan
- ✓ Dielectric Instrument

Publications in Journals

1. **Priyadharshini, A.** and Kalainathan. S. ‘Synthesis, crystal growth and characterization of third order NLO active single crystal: 2-(4-ethylbenzylidene) malononitrile (EBM).’ Journal of Physics and Chemistry of Solids, ISSN 0022-3697, December 2018, Vol: 123, PP: 59-69.
2. **Priyadharshini, A.** and Kalainathan. S. ‘Bulk crystal growth and their effective third order nonlinear optical properties of 2-(4-fluorobenzylidene) malononitrile (FBM) single crystal’ Optical Materials, April 2018, Vol: 78, PP: 35-43.
3. **Priyadharshini, A.** and Kalainathan. S. ‘Growth and Characterizations of ZSM-5 Zeolite Added TGS Crystals’. Journal Article Mechanics, Materials Science & Engineering, ISSN: 2412-5954, March 2018, Vol: 15.

4. **Priyadharshini, A.** and Kalainathan. S. ‘Bulk crystal growth, spectral, optical, thermal, electrical and third-order NLO properties of benzylidene malononitrile derivative single crystal: a promising material for nonlinear optical device applications.’ Journal of Materials Science: Materials in Electronics, February 2018, Vol: 29, PP: 2698-2708.
5. **Priyadharshini, A.** and Kalainathan. S. ‘Bulk crystal growth and characterization of organic nonlinear optical crystal: 2-(2,4-dimethoxybenzylidene) malononitrile (DMM).’ Mechanics, Materials Science & Engineering Journal, ISSN:2412-5954, April 2017, Vol : 9.
6. **Priyadharshini, A.** and Kalainathan. S. ‘Bulk Crystal Growth, Optical, Electrical, Thermal, and Third Order NLO Properties of 2-[4-(Diethylamino) benzylidene] malononitrile (DEBM) Single Crystal.’ The Journal of Physical Chemistry C, September 2017, Issue 40, Vol: 121, PP: 22384-22395.
7. **Priyadharshini, A.** and Kalainathan. S. ‘Structural, optical, electrical properties of new hybrid organic–inorganic NLO single crystal: bis (1H-benzotriazole) hexaaqua-zinc bis (sulfate) tetrahydrate (BZS).’ Journal of Materials Science: Materials in Electronics, April 2017, Vol: 28. Issue 7, PP: 5089-5101.
8. **Priyadharshini, A.** and Kalainathan. S. ‘Synthesis, structure and characterization of new promising organic NLO crystal: thiosemicarbazide 4-hydroxybenzenesulfonate monohydrate (THBSM).’ Journal of Materials Science: Materials in Electronics, May 2017, Vol: 28, Issue 10, PP: 7401-7412.

FDP's/ Seminars/ Workshops/Webinars

- 59th DAE-Solid State Physics Symposium held at VIT University, Vellore, 2014.
- 19th National seminar on crystal growth conducted by VIT University, Vellore, 2015.
- Workshop on Advanced functional materials (WAFM-2017), Department of physics, SSN College of Engineering, Chennai-603 110, during 3rd - 4th Feb 2017.
- 21st National seminar on crystal growth and applications (NSCGA-2017), Department of physics, National college, Tiruchirappalli-620001, during 6-8th March 2017
- International Conference on Materials and Processing and Applications (ICMPA-2016), held at VIT University, Vellore, during 14-16 Dec 2017.
- 2nd International Conference on Advances in Materials and Technology (ICAMST-2017), held at VIT University, Vellore, during 9-11th October 2017.
- International Workshop on materials Technology and Applications (IWMTA – 2018), held at Vellore Institute of Technology, Vellore, during 11th & 12th October 2018.
- National Conference on Material Science organized by Loyola Physics Association, Loyola college, Chennai 600034 sponsored by university of grand commission on 9th January 2020.
- National Webinar on ‘Nanotechnology and Nano Gas Sensors’ organized by Department of Physics Rathinam College Arts and Science, Coimbatore, 22nd & 23rd May 2020.
- National Webinar on History of Nuclear Fission, organized by Department of Physics V. O. Chidambaram College, Thoothukudi - 628008, Tamil Nadu, India, 25th May 2020.
- National Webinar on ‘Advancement in Optical Communication through Optical Fibres’, Department of Physics, V.V.Vanniaperumal College for Women, Virudhunagar. -626001, 27th May 2020.

- National Webinar on ‘Nonlinear optical behaviour of nanomaterials’, Department of Physics, Lady Doak College, Madurai, 25th May 2020.
- National FDP on ‘Recent Trends in Material Frontiers’, Organized by department of Science, St. Joseph’s College of Engineering, Chennai-600119, 29th & 30th May 2020.
- National Webinar on ‘Advanced Materials Research’, Department of Physics, K.S.Rangasamy College of Arts and Science (Autonomous), Tiruchengode, 30th May 2020
- National Faculty Orientation Program on ‘ICT enabled teaching and learning’ organized by Head, Department of Business administration, Auxilium College, 30th May 2020.
- National Webinar on ‘Graphene based Nanocomposites for energy storage’ organized by Department of Physics, V.O.Chidambaram College, Thoothukudi -628008, 1st June 2020.
- National Webinar on ‘Solid State Physics-Series 1: `Electrons in Solids’, Department Of Theoretical Physics, University Of Madras, 1st – 4th June 2020.
- National Webinar on ‘Dating Sand Using Luminescence’, Department of physics, Voorhees College, Vellore-632001, 2nd June 2020.
- National Webinar on ‘Advanced Organic Materials’, PG & Research Department Of Chemistry, National College (Autonomous), Tiruchirappalli – 620001, 3rd June 2020.
- National Webinar on ‘Role of Spectroscopic Techniques in Material Characterization and Engineering Applications’ organized by Department of Physics, Auxilium College (Autonomous), Vellore – 632006, 3rd June 2020.
- International Webinar on ‘Advanced Materials (IWAM- 2020)’, Department of Physics, LRG Government Arts College, Tirupur, 3rd June 2020.
- National Webinar on ‘Nonlinear optical behaviour of nanomaterials’, Department of Basic Science & Humanities, GMR Institute of Technology, Rajam, Andhra Pradesh, 4th June 2020.

- National Webinar on ‘ Creative Writing Of Research Proposals & Articles’ organized by Department of physics, Adikavi Nannaya University, Rajamahendravaram, 4th June 2020.
- National FDP on ‘Advancements in Materials Science’ organized by Department of Science and Humanities, Jeppiaar Institute of technology, 4th June 2020.
- International Webinar on ‘Recent Advances in Materials Science and Nanotechnology’ organized by Department of Physics, Bannari Amman Institute of Technology, Sathyamangalam - 638 401, Tamil Nadu, India, 4th-6th June 2020.
- National Webinar on ‘Novel Materials, Characterization and Applications’ organized by Department of Physics, Auxilium College (Autonomous), Vellore, 9th & 10th June 2020.
- International Webinar on ‘Materials for Energy Generation and Storage’ organized by Department of Chemistry, Poompuhar College, Tamilnadu HR & CE Department, Melaiyur – 609107, 10th June 2020.
- National Webinar on ‘Scholarship and Different Summer Training Programs for Higher Studies’ organized by Department of Science and Humanities, Jeppiaar Engineering college, OMR, Chennai -119, 11th June 2020.
- International Webinar on ‘Recent Trends in Physics’ organized by Department of Science and Humanities, organized by Department of Physics with Computer Applications & Internal Quality Assurance Cell (IQAC) of St. Joseph’s College (Arts & Science), Kovur, Chennai, 12th June 2020.
- National Webinar on ‘Essentials of Nanotechnology and Nanoelectronics’ organized by Department of Physics, Saveetha Engineering College, 13th June 2020.
- National Webinar on ‘Materials Technology And Research Perspectives In Physics’ organized by PG and Research Department of Physics, Marudhar Kesari Jain College for Women , Vaniyambadi, 15th – 17th June 2020.

- International FDP on ‘Evolving Best Teaching and Learning Practices in the Pandemic Era 2020’ organized by The Board of Management Auxilium College (Autonomous), Vellore, 15th -21th June 2020.
- National Webinar on ‘Advances in Crystal Growth and Nano Materials’ organized by Department of Physics(SF), Kamaraj College, Thoothukudi-628003, 18th June 2020.
- International Webinar on ‘Recent Trends in Advanced Material Science’ organized by Post Graduate & Research Department of Physics, The American College, An Autonomous Institution affiliated to the Madurai Kamaraj University, 19th June 2020
- International Webinar on ‘Nanotechnology in Aerospace’ organized by Department of Physics, Auxilium College (Autonomous), Vellore, 22nd June 2020
- National Webinar on ‘Electrospun 1D-Nanomaterials and their applications in DSSC’ organized by Department of Physics, Saveetha Engineering College, 23rd June 2020.
- National Webinar on ‘Radiation Physics’ organized by Department of Science, St. Joseph's college of Engineering, St. Joseph's group of institutions, OMR, Chennai -119, 23rd June 2020.
- International Virtual Conference on ‘Photovoltaics and Materials Science’ organized by Centre for Crystal Growth, Vellore Institute of Technology, Vellore, 23rd June 2020
- International FDP on ‘Emerging Trends In Information Technology’ organized by Department of Information Technology, Karpagam College of Engineering, Coimbatore, 23rd – 27th June 2020.
- National Webinar on ‘Importance of nano structured thin film cathode materials for Lithium ion battery application’ organized by Department of Physics, Arumugam Pillai Seethai Ammal College, Tiruppattur, Sivagangai, Tamilnadu, 26th June 2020.
- International Webinar on ‘Oxygen Electrocatalysis: The Holy Grail of Energy Conversion and Storage, organized by Chennai Institute of Technology, 29th June 2020.
- One Day Training Cum Orientation Programme conducted by Department of English and Foreign Languages, and Department of Linguistics, Bharathiar University, Coimbatore in association with TANSICHE on 30th September, 2020.
- National level FDP on Research Trends in Physics & Electronics’ from 27th Jan to 1st Feb, 2021 organized by Department of physics & Electronics, LFDC & Auxilium College.
- Workshop on " Density Functional Theory for Beginners' organized by PG & Research Department of Physics, Marudhar Kesari Jain

College for Women, Vaniyambadi on 8th Sep 2021

- International Web Conference on Materials Science and its Technological Advancements held on 22nd September 2021 organized by The Department of Physics, Voorhees College, Vellore.
- Workshop on 'Documentation and Data Management' organized by IQAC on 29th October 2021.
- IP Awareness/ Training Program under National Intellectual Property Awareness Mission at AUXILIUM COLLEGE on 25th Jan 2022.
- A Two-Week Online Faculty Development Programme on LibreOffice suite Writer, Cal & Impress' organized by The Board of Management, Auxilium College (Autonomous), Vellore in association with Spoken Tutorial, IIT Bombay from 26th may to 10th June 2022.
- National Webinar on 'Applications of Physics in Medicine' organized by PG & Research Department of Physics, Auxilium College (Autonomous), Vellore and Department of Physics, Little Flower Degree College, Hyderabad on 22nd August 2023.
- National Webinar Series 2023-(EVENT-1): "Astronomy from Ground and Space on 29th August 2023 organized by the department of physics, St.Joseph's college (Autonomous), Thiruchirappalli-62002, India.
- IP Awareness/ Training Program under National Intellectual Property Awareness Mission at AUXILIUM COLLEGE on 16th Sep 2023.