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| Name | Dr. P. Padmavathi |
| Qualification | M.Sc.,M.Phil.,SET.,B.A(Hindi)., Ph. D |
| Designation | Assistant Professor |
| Year of Joining | 23/11/2023 |
| Specialization | Ultrasonics |
| Email id | padma.pi2018@gmail.com |



Seminars/Workshops/FDP/Conferences /Webinars

| Date | Paper Presented/ Participated | Title of the Paper | Organized By | Workshop/ Seminar/ FDP/ Conferences | Type |
|-------------------------------|--------------------------------------|---|--|---|-----------------|
| 1.07.2024 – 10.07.2024 | participated | Training ID MMC-085-2024-JL-A-01458 NEP 2020 Orientation and Sensitization programme | Bharadidasan University,Tirchy | Training and sensitization programme | National online |
| 13.07.24 | participated | Energy Efficient Habitat | Dept of Environment & Climate Change, Tamilnadu | Workshop | State |
| Jan-Apr 2024 (12 week course) | - | Biophotonics | NPTEL | Short term course (Elite + Silver) | National |
| 06.04.2024 | Participated | - | IQAC, St. Xavier's college, palayamkottai | AI tools for Teaching and learning | State |
| 21.03.2024 – 22.03.2024 | Participated | - | Science Academies' & PG & Research Department of | Lecture workshop on Characterization of Molecules and | State |

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| | | | Physics, Popes College, Sawyerpuram | Materials | |
| 20.03.2024 | Participated | - | Library Committee, St. Mary's College, Thoothukudi | Glimpse on OER in conjunction with tutorial on ZOTERO: A reference management tool | National |
| 20.01.2024 | Participated | - | Marian Research Forum & Internal Quality Assurance Cell, St. Mary's College (Autonomous), Thoothukudi | Navigating Consultancy, Filing Patent and Designing Research Article: Insights and Strategies | National Seminar |
| 12.01.2024 to 13.01.2024 | Participated | - | Department of Physics, SSN College, Kalavakkam, Chennai | Programme on synthesis of crystalline materials and their structural and optical characteristics | Workshop- Hands on Training |
| 30.09.23 | Participated | - | ICT Academy of Tamil Nadu, Madurai | Bridge 2023-Madurai (A High Impact Industry-Institute Interaction Event of India) | Interaction event |
| 24.03.2023 to 04.04.2023 | Participated | - | Sathyabama Institute of Science and Technology | II international FDP on Advanced Materials for Technological Applications | FDP |
| 22.12.2022 - 24.12.2022 | Presented | Molecular interaction between ester with ethanol at different temperature using ultrasonic technique | Department of Physics and Materials Science and Engineering (PMSE) Jaypee Institute of Information Technology, Noida (INDIA) | 2nd International Conference On Advanced Materials And Nanotechnology (ICAMN2022) | International Conference |

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| 10.11.2022 - 11.11.2022 | Presented | Green synthesis and characterization of Zinc oxide using carica papaya leaf extract | Department of Physics, Faculty of Engineering, Teerthankaer Mahaveer University | 3 rd International conference on Material and Devices (NCMD 2022) | International conference |
| 10.11.2022 - 11.11.2022 | Presented | Investigation of Excess Thermo-Acoustic behaviour of Binary liquid mixture with various temperature using Ultrasonic Technique | Department of Physics, Faculty of Engineering, Teerthankaer Mahaveer University | 3 rd International conference on Material and Devices (NCMD 2022) | International conference |
| 18.02.2022 - 23.02.2022 | Participated | - | Department of Physics, St. Mary's College, Thoothukudi | Online FDP on Smart materials for New technology | International FDP |
| 07.02.2022- 08.02.2022 | Participated | - | Department of Physics, Jamal Mohamed College (Autonomous), Tiruchirappalli | An online FDP on Astronomical studies | National FDP |
| 10.01.2022 | Participated | - | Library Committee, St. Mary's College, Thoothukudi | Hands on Tutorial on Library without walls: E-Resources through NLIST | National |
| 23.11.2021 - 27.11.2021 | Participated | - | Department of Physics, St. Mary's College, Thoothukudi | Five days international faculty Development Programme on Nano materials | International FDP |
| 29.07.2021 - 31.07.2021 | Presented | An Investigation in the Binary Mixture of N-Butyl Acetate with CCl ₄ using Ultrasonic | Department of Environmental Sciences in collaboration with Physics Department, Sharda University | International Conference on Energy and Environmental Materials (INCEEM) | International E-Conference |

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| | | Techniques | | | |
| 19.07.2021 - 22.07.2021 | Presented | Physico-Chemical Characterization Of Ethyl Propionate With Butanol At Different Temperatures Using Ultrasonic Technique | School of Basic Science and Research, Sharda University, Greater Noida | International Conference on Science and Engineering of Materials (ICSEM) | International E-Conference |
| 29.04.2021 & 30.04.2021 | Presented | Study of Acoustical Parameters of Bioactive Compound with Benzyl Propionate using Ultrasonic Technique | Department of Botany, St. Mary's College, Thoothukudi | International E-Conference on Recent Trends in Science and Technology | International E-Conference |
| 24.03.2021- 26.03.2021 | | an analysis on thermo-acoustic behavior of binary liquid mixture with various temperature using ultrasonic technique | Department of Physics, Manonmanium Sundaranar University | International E-Conference on Advances in Materials Science(ICAMS 2021) | International E-Conference |
| 07.02.2021 - 09.02.2021 | Presented | A discussion of acoustical parameters in binary mixtures at different temperatures: An ultrasonic study | Shetkari Shikshan Sanstha's Arts, Commerce & Science College, Maregon, (Affiliated to SGB Amravati University, Amravati (M.S)) | International E-Conference on Recent Advances in material Science and Nano Technology | International E-Conference |

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| 28.11.2020 - 30.11.2020 | Presented Best Paper award | Ultrasonic studies in DMSO with different alcohol mixtures | Department of Physics, School of Sciences and Research (SBSR), Sharda University, Greater Noida, Utter Pradesh, India | Recent Trends in Acoustics and Material Science"-2020 (RTAMS-2020) | National Conference |
| 28.07.2020 - 04.08.2020 | Participated | - | Puthiya Thalaimurai Foundation | Basics of Website Development and Web Hosting | Certificate course |
| 11.07.2020 | Participated | - | IQAC, St. Mary's College (Autonomous), Thoothukudi | Learning to live with COVID-19: Embracing the new reality | National Level Webinar |
| 10.07.2020 | Participated | - | IQAC, St. Mary's College (Autonomous), Thoothukudi | An update on COVID -19 | International Level Webinar |
| 18.06.2020 - 20.06.2020 | Participated | - | Servite College of Education for Women, Thogamalai, Karur Dt. | ICT Tools for smart teaching | State Level Workshop |
| 15.06.2020 - 17.06.2020 | Participated | - | IQAC, V.O.C College, Thoothukudi | Research capacity building | National level FDP |
| 08.06.2020 - 15.06.2020 | Participated | - | Ramanujan College, University of Delhi, Delhi | Open source Tool for research | National level FDP |
| 29.05.2020 - 30.05.2020 | Participated | - | Faculty of Humanities and Science, Adayalampattu phase - ii campus Dr.M.G. Educational and research institute | virtual teaching - learning moodle the efficient way | National level Webinar |
| 26.05.2020 - 28.05.2020 | Participated | - | UGC-human resource development Centre | Online course design, development and delivery | National level workshop |

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| | | | University of Hyderabad | | |
| 23.05.2020 | Participated | - | St. Mary's College (autonomous), Thoothukudi | Teachers resilience; the blue print for efficiency during uncertainty | National level Webinar |
| 22.05.2020 | Participated | - | NTVS, college of law, Institute of legal education and research, Nandurbar | Current issue in intellectual property rights | National level Webinar |
| 20.05.2020 - 21.05.2020 | Participated | - | Department of applied science under IQAC, PIET, Jaipur | Migration of it infra using cloud | National level FDP |
| 18.05.2020 - 22.05.2020 | Participated | - | Dept. of Commerce, Kamaraj college, Thoothukudi | Effective online teaching methodologies | National level workshop |
| 16.05.2020 | Participated | - | PG department of chemistry(SSC), St. Mary's college(autonomous), Thoothukudi | Bioinformatics in micro biome research & climate, biomes and India | National level webinar |
| 14.05.2020 | Participated | | ICT academy | Good teacher to great teacher | State level webinar |
| 12.05.2020 | Participated | | Karpagam Institute of Technology Department of science and humanities, Karpagam institute of technology, coimbatore | Virtual learning resources in science teaching | National level webinar |
| 11.05.2020 - 15.05.2020 | Participated | | ICT academy | The future of skills – education, employment & entrepreneurship | National level webinar |

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| 11.05.2020 -16.05.2020 | Participated | | Ramachandra college of Engineering, Eluru | Innovation to academician | National level FDP |
| 11.05.2020 | Participated | | ICT academy | The power of you | State level webinar |
| 11.05.2020 | Participated | | Colombu staff plan college | Digital technology and e-based learning in TVET | International webinar |
| 14.05.2020 | Participated | | Colombu staff plan college | Development of online teaching and learning resources using ICT | International webinar |
| 13.05.2020 | Participated | | Colombu staff plan college | Cultivating a positive attitude for professional excellence | International webinar |
| 13.05.2020 - 14.05.2020 | Participated | | Dept. of Psychology, St. May's college(Autonomo us), Thoothukudi | Mental health and psychological consideration during lockdown | National level Workshop |
| 12.05.2020 | Participated | | Marian research forum, St. Mary's college(Autonomo us), Thoothukudi | Selection for appropriate statistical tools: A critical way for successful research | National level Webinar |
| 11.05.2020 | Participated | | Dept. of Psychology, St. Mary's college (Autonomous), Thoothukudi | Psychological first aid | National level webinar |
| 08.05.2020 | Participated | | Colombu staff plan college | Role of TVET schools in bridging the gap in workforce development | International webinar |
| 07.05.2020 | Participated | | Colombu staff plan college | Supervision and monitoring of teaching processes of | International webinar |

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| | | | | TVET teachers | |
| 07.05.2020 | Participated | | SNS college of technology, Coimbatore | Nano materials for energy conservation and storage | National level webinar |
| 05.05.2020 - 08.05.2020 | Participated | | RK university | conceptual and applied physics | National level webinar |
| 05.05.2020 | Participated | | Colombu staff plan college | Revised taxonomy of learning domains and its implication in TVET | International Webinar |
| 04.05.2020 | Participated | | Colombu staff plan college | Digital innovation in TVET sector to enhance NVQS | International Webinar |
| 04.05.2020 | Participated | | Guru Nanak Institute of Management Studies (approved by AICTE, new Delhi & affiliated to university of Mumbai) | How to use Turnitin software for your research "Turnitin online on campus" | National Webinar |
| 03.05.2020 | Participated | | IQAC and department of chemistry, Shri Pancham Khemraj Mahavidyalaya, Sawantwadi | Applications of quantum chemistry | National online conference |
| 03.05.2020 | Participated | | PG department of physics, Cauvery college for women (autonomous), Trichy - 18 | How nanoscience and technology inspired from nature and Transforming the world? | National level webinar |

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| 29.04.2020 | Participated | | Colombu staff plan college | Test items development techniques for TVET teachers | International webinar |
| 20.04.2020-06.05.2020 | Participated | | Ramanujan college, University of Delhi | Managing online classes and co-creating MOOCS | National level FDP |
| 16.03.2019 | presented | | Pope's College, Sawyerpuram | Advanced Materials-SSAM'19 | State Level semianr |
| 02.02.2019 | Participated | - | VOC College, Thoothukudi | Scholarly writings and Publishing research papers | State Level workshop |
| 11.11.2018 & 15.11.2018 | presented | Evaluation of thermodynamic parameters of sea water at different temperature through ultrasonic studies | Acoustical Society of India & Ultrasonic society of India, New Delhi | WESPAC 2018 NEW DELHI | International conference |
| 20.02.2018 & 21.02.2018 | Participated | - | Shri Ramasamy Naidu Memorial College, Sathoor | ICMAT-SPA 2018 | International Conference |
| 29.01.2018 & 30.01.2018 | Participated | - | Manonmaniam Sundaranar University Tirunelveli. | Physics- RCP 2018 | State level Refresher Course |

Papers Published

| Paper Title | Author(s) | Journal | Year | Volume | Issue | Page No. |
|--|--|-------------------------------|------|--------|-------|-----------|
| Investigation of ultrasonic parameters and thermal conductivity of binary liquid mixtures with | A. Mathana Gopal, S.Irudaya Sahaya Lancy, P. Padmavathi , J.Poongodi, A. MosesEzhil Raj | Studies in Indian place names | 2020 | 40 | 71 | 1008-1014 |

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| alcohol with benzene | | | | | | |
| A discussion of acoustical parameters in binary mixtures at different temperatures: An ultrasonic study | P. Padmavathi, S.Irudaya Sahaya Lancy, Krishna Kumar Pandey, A. Mathana Gopal, J.Poongodi, A. MosesEzhil Raj | International Journal of Scientific Research in Science and Technology | 2021 | 8 | 1 | 16-20 |
| Comparative Analysis of Commercial and Herbal Extorted Cough Syrups in Tamilnadu (South India) Zone - An Investigation by Methodologies of Spectral Way and High Frequency (Ultrasonic) Waves to Predict Samples Efficacy | P Padmavathi, Senthil Kannan K, Jessie Fernando, Poongodi , Vijayalakshmi B, Moses Ezhil raj, Irudaya Sahaya Lancy S | AIP Conference proceedings | 2022 | 2385 | | 060001-060006 |
| Thermo-acoustic studies of ethyl propionate with propan-2-ol at different temperatures using ultrasonic technique | P.Padmavathi, A. Lucas Rexceline, A.Mathana Gopal A.Irudaya Sahaya Lancy, J.Poongodi | Materials today: Proceedings | 2022 | 67 | 5 | 821-826 |
| Effect of temperature on the ultrasonic investigation in binary liquid mixture of N-Butyl Acetate with 2-Propanol | S. Irudaya Sahaya Lancy, P. Padmavathi, C. James, J. Poongodi,s Ezhil Raj | Neuroquantology | 2022 | 20 | - | 3508-3510 |
| Study of acoustical parameters of bioactive compound with benzyl propionate using ultrasonic technique | P. Padmavathi, S. Irudaya Sahaya Lancy, A. Mathana Gopal, Jessie Fernando, J. Poongodi, Krishna Kumar Pandey, Moses Ezhil Raj | AIP Conference Proceedings | 2022 | 2446 | | 100029 |

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|--|---|----------------------------|------|------|--|--------|
| Extortion, anti-bacterial, spectral, band gap and ultrasonic factors of herbal cough syrup and content comparison with commercial samples | P. Padmavathi , J. Fernando, K. SenthilKannan, J. Poongodi, A. M. Ezhil Raj, R.P. Patel | AIP Conference Proceedings | 2022 | 2446 | | 100034 |
| Opto electronic filter effectiveness by influx of macro, thin film and nano scalings stress analysis of trapezoidal and spiral coated device characterizations of Eu ²⁺ doped barium hexafluorosilicate (BaSiF ₆ :Eu ²⁺) phosphors | J. Fernando, P. Padmavathi , K. SenthilKannan, A. R. Kadam, Samiksha. B. Dhoble, R. Kannan, S. J. Dhoble | AIP Conference Proceedings | 2022 | 2446 | | 100036 |
| Vicker's hardness, elastic stiffness, fracture toughness, hardness in mohs scale, young's modulus and yield strength measurement of BaSiF ₆ :Eu ²⁺ phosphors | J. Fernando, P. Padmavathi , K. SenthilKannan, A. R. Kadam, R. Kannan, S. J. Dhoble | AIP Conference Proceedings | 2022 | 2446 | | 100035 |

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| Gruneisen parameters for alcohol with benzene at different temperature | A. Mathana Gopal, S. Irudaya Sahaya Lancy, P. Padmavathi , J. Poongodi, A. Moses Ezhil Raj | AIP Conference Proceedings | 2022 | 2446 | | 100030 |
| Molecular Interaction in Binary Mixtures of Benzyl propionate with methanol at different temperatures: An Ultrasonic study | Jessie Fernando , Jeeva Rani Thangam G, Padmavathi P , Irudaya Sahaya Lancy S, Krishna Kumar Pandey, Poongodi J | Neuroquantology | 2022 | 22 | | 3674-3682 |
| Physico-Chemical Characterization of Ethyl Propionate with Butanol at Different Temperatures Using Ultrasonic Technique | Padmavathi P. MathanaGopal A., IrudayaSahayaLancy A., Krishna Kumar Pandey, Poongodi J., and Jessie Fernando | Macromolecular Symposia | 2023 | 407 | | 2200004 |
| Evaluation of Sound Velocity and Molar Refraction in Binary Liquid Mixtures through Ultrasonic Measurement | Padmavathi P. ,MathanaGopal A, IrudayaSahayaLancy A, Krishna Kumar Pandey, Poongodi J, and Jessie Fernando | Macromolecular Symposia | 2023 | 407 | | 2200006 |
| An Investigation in the Binary Mixture of N-Butyl Acetate with CCl ₄ using Ultrasonic Techniques | IrudayaSahayaLancy, Padmavathi P. ,MathanaGopal A., Krishna Kumar Pandey, and Poongodi J. | Macromolecular Symposia | 2023 | 407 | | 2200001 |
| Thermo Acoustical Analysis of Nickel Sulfamate with DMSO at Varying Temperatures | IrudayaSahayaLancy S., Padmavathi P. ,MathanaGopal A., Krishna Kumar Pandey, and Poongodi J. | Macromolecular Symposia | 2023 | 407 | | 2200003 |

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| Using Ultrasonic Techniques | | | | | | |
| Pseudo-Gruneisen Parameters for Binary Liquid Mixtures at Different Temperature | MathanaGopalArunac halem, Padmavathi Paulraj, IrudayaSahayaLancy Sreedharan, Krishna Kumar Pandey, Poongodi Jawaharlal, and James C | Macromole cular Symposia | 2023 | 407 | | 2200009 |
| Synthesis of Novel CuO–GelatinNanofluids Using Ultrasonic Technique | MathanaGopalArunac halem, Padmavathi Paulraj, IrudayaSahayaLancy Sreedharan, Krishna Kumar Pandey, Poongodi Jawaharlal, and James C | Macromole cular Symposia | 2023 | 407 | | 2200007 |
| Molecular interaction between ester with ethanol at different temperature using ultrasonic technique | P. Padmavathi, C. Zo zimusDivya Lobo, Krishna Kumar Pandey ^b , Manoj Trip athi ^c , S IrudayaSahay aLancy, A. MathanaG opal, J. Poongodi | Materials Today: Proceedings | 2023 | | | |
| Investigation of excess thermo-acoustic behaviour of binary liquid mixture with various temperatures using ultrasonic technique | P.Padmavathi ,Jeeva Rani Thangam G, Lucas Rexceline A, IrudayaSahayaLancy S, Krishna Kumar Pandey, Poongodi J, | Macromole cular Symposia | 2024 | 413 | | 2300048 |
| Green Synthesis and Characterization of Zinc oxide Carica Papaya leaf Extract | P, Padmavathi , IrudayaSahayaLancy S, Jeeva Rani Thangam G, Krishna Kumar Pandey, Poongodi J, | Macromole cular Symposia | 2024 | 413 | | 2300047 |

Books Published

| Date | Book Title | Author(s) | ISBN Code | Editions | Publisher |
|--------------------------------|--|---|-------------------|-----------------|------------------|
| 16 th June 2022 | Nanovaccinology as targeted therapeutics | K. Senthil Kannan, Prabhjeet Kaur Dhillon, Jemma Hermelin Jesy Diaz, P. Padmavathi , G. Flora, S. Irudhya Sahaya Lancy, G. Jeeva Rani Thangam, M. Sheeba | 9781119857341 | First | Wiley |
| 5 th September 2023 | Microbial Processes for Synthesizing Nanomaterials | C. Zozimus Divya Lobo, J. Maalmarugan, R. Divya, S. Irudhya Sahaya Lancy, P. Padmavathi, K. SenthilKannan & M. Vimalan | 978-981-99-2808-8 | First | Springer Nature |
| 5 th September 2023 | Microbial Processes for Synthesizing Nanomaterials | R. Krishnaveni, H. Ganesan, G. Jeeva Rani Thangam, C. Zozimus Divya Lobo, P. Padmavathi, K. SenthilKannan & M. Vimalan | 978-981-99-2808-8 | First | Springer Nature |

As Resource Person

| Date | Name of the Institution | Invited As | Topic/Event |
|-----------------------|--|--|---|
| 11.09.2023 | Department of Physics, APC Mahalakshmi College for Women, Thoothukudi. | Resource Person | Frontiers of Ultrasonic Technology in Research and Applications |
| 28.08.2017-01.09.2017 | Department of Zoology, St. Mary's College, Thoothukudi | resource person for the "In Service Training Programme For Secondary Grade Teachers" | Electricity |

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|---------------------|--|--|-----------------|
| Oct. 2016- May 2018 | Maritime Academy, Thoothukudi Affiliated by Indian Maritime university | Visiting faculty for the Diploma in Nautical Science(DNS) cadets | Applied Science |
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Others:

1. SSC Physics coordinator.
2. Member of AICUF.
3. Life member of Ultrasonic Society of India (USI) - LM No.375
4. Organized two webinars (1-National, 1- State level)
5. Member of carrier guidance and placement cell.
6. Assistant co-ordinator for Inservice Training Programme for School Teachers Catalysed and Supported by Tamilnadu State Council for Science and Technology (TNSCST)