

Name : Dr. N. Priyadharsini

Designation : Assistant Professor

Department : Physics

Qualification : M.Sc., Ph.D., D.ICT., PGDCA.,

Experience : Teaching: 4.11 Years Research: 5.5 Years

Area of Specialization(s) : Nanomaterials, Nanocomposites

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Academic Qualifications

Degree	Branch	Institution / University Name	Year of Graduation
Ph.D.	Physics	Govt. College of Technology Coimbatore, (Under- Anna University –Chennai)	2017
PG	Physics	PSG College of Arts and Science, Coimbatore	2011
UG	Physics	Vellalar College For Women, Erode	2009

Additional Qualifications

Diploma / Vocational / Certification	Area of Specialization	Institution / University / Agency Name	Year
DICT	Information and Technology	Bharathiar University	2009
PGDCA	Computer Science	Bharathiar University	2011
Online certificate	Structural Analysis of Nanomaterials	NPTEL(IIT Roorkee)	2018
Online certificate	Selection of Nanomaterials for energy harvesting and storage application	NPTEL(IIT Roorkee)	2019
Online	Biomedical	NPTEL(IIT Roorkee)	2020

certificate	Nanotechnology		
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Research Publications (Indexed)

International:

- 1) N.Priyadharsini, N.Bhuvaneswari and Jomin Joshy, “**Plant Mediated synthesis of ZnO and Mn doped ZnO Nanoparticles using Carica Papaya Leaf Extract for Antibacterial applications**”, Asian Journal of Applied Science and Technology, Vol.5, Issue 4, pp-69-81, Dec-2021. DOI: <http://doi.org/10.38177/ajast.2021.5409>
- 2) N. Bhuvaneswari, N.Priyadharsini, S.Sivakumar, K.Venkatachalam & V.Siva, “**Growth, Vibrational, Optical, Thermal, Magnetic And Dielectric Behavior Of Organo-Metallic Tetramethylammonium Cadmium Chloride Crystal**”, Journal of Thermal Analysis and Calorimetry, Vol. 136, pp 411-417, April 2019. DOI: <https://doi.org/10.1007/s10973-018-7908-1> (Indexed in Scopus).
- 3) V. Manikandan, N. Priyadharsini, S. Kavita, & J. Chandrasekaran, “**Sintering Treatment Effects On Structural, Dielectric And Magnetic Properties Of Sn Substituted NiFeO Nanoparticles**”, Superlattices and Microstructures, Vol.109, pp.648-654, May 2017, DOI: 10.1016/j.spmi.2017.05.058, (Indexed in Scopus).
- 4) N. Priyadharsini, M. Elango, S. Vairam & M. Thamilselvan, “**Effect Of Nickel Substitution On Structural, Optical, Magnetic Properties And Photocatalytic Activity Of ZnS Nanoparticles**”, Materials Science and Semiconductor processing, Vol. 49, pp. 68–75, March-2016, DOI: 10.1016/j.mssp.2016.03.033, (Indexed in Scopus).
- 5) N. Priyadharsini, S.Vairam & M. Thamilselvan, “**Structural And Optical Properties Of Neodymium Doped Lead Chalcogenide (PbSe) Nanoparticles**”, Optik, Vol. 127, pp. 5046–5049, January- 2016, DOI: 10.1016/j.ijleo.2016.01.192, (Indexed in Scopus).
- 6) N. Priyadharsini, M. Elango, S.Vairam, T. Venkatachalam & M. Thamilselvan, “**Effect Of Temperature And Ph On Structural, Optical And Electrical Properties Of Ni Doped ZnSe Nanoparticles**”, Optik, Vol. 127, pp. 7543–7549, May- 2016, DOI: 10.1016/j.ijleo.2016.05.079, (Indexed in Scopus).
- 7) N. Priyadharsini, M. Thamilselvan, S.Sangeetha & S.Vairam, “**Effect Of Neodymium Substitution On Structural, Optical, Magnetic And Antibacterial Activity Of Zinc Selenide Nanoparticles**”, Journal of Ovonic Research, Vol. 12, no. 2, pp. 87-93, April-2016, (Indexed in Scopus).
- 8) N. Priyadharsini, S. Vairam & M. Thamilselvan, “**Effect Of Nickel Substitution On Structural, Optical And Dielectric Properties Of Lead Chalcogenide (PbSe) Nanoparticles**”,

Optoelectronics and Advanced Materials- Rapid Communications, Vol. 10, no. 11-12, pp. 916-920, December-2016, (Indexed in Scopus).

- 9) K. Ahalya, N. Suriyanarayanan, & N. Priyadharsini, **“Effect Of Sintering On Structural, Morphological, Magnetic Properties And Cr(Vi) Adsorption Of Cobalt Substituted MnFe₂O₄ Nanoparticles”**, Nanoscience and Nanotechnology Letters, Vol.6, pp.1-4, February-2016, DOI: 10.1166/nnl.2015.1925, (Indexed in Scopus).

National:

- 1) **N. Priyadharsini**, M. Thamilselvan, S. Sangeetha & S. Vairam, “WET CHEMICAL GROWN OF ND DOPED ZINC SELENIDE NANOPARTICLES: SYNTHESIS AND CHARACTERIZATION”, International Journal of applied Engineering Research, Vol. 10, No. 67, June-2015, ISSN 0973-4562, (Indexed in Scopus).
- 2) **N. Priyadharsini**, M. Thamilselvan, S. Sangeetha & S. Vairam, “SYNTHESIS AND CHARACTERIZATION OF METAL SULFIDE IN AQUEOUS MEDIUM AT ROOM TEMPERATURE”, Journal of nanoscience and nanotechnology, Vol. 2, no. 4, pp. 400-403, February -2014, ISSN 2279-0381, (Indexed in Scopus).

Presentations in Conference

- 1) **Synthesis, characterization of CdS nanostructures**, International conference on recent trends in advanced materials, VIT University, Vellore, 20-22-Feb-12.
- 2) PRESENTED ORAL PAPER in International Conference on Emerging Technologies: Micro to Nano (ETMN-2013), Birla Institute of Technology & Science, Pilani, K.K.Birla Goa Campus, Goa, India, 23-24-Feb-13.
- 3) **Wet chemical grown of Mn doped CdS nanoparticles**, International Conference on Nanomaterials For Frontier Application and Indo-Norwegian Workshop on Advanced materials for Solar Cell Applications(ICNFA-2013),Coimbatore Institute of Technology, Coimbatore, India, 10-12, July-13.
- 4) PRESENTED POSTER at National Symposium on Nanoscience and Nanotechnology (NSNN-2013), Karunya University, Coimbatore-114, India, 30-Sep-13 to 1-Oct-13.
- 5) **Synthesis and characterization of CdSe nanoparticles in aqueous phase**, National Conference on Fundamental and Applied Chemistry (NACFAC-2013), Dhirajlal Gandhi College of Technology, Salem-09, India, 4-Oct-13.
- 6) **Synthesis and characterization of lead selenide nanoparticles in aqueous media**, National conference on advanced functional materials-NCAFM-2104, Bharathiar University, Coimbatore, India, 30- Jan-14 to 31-Jan-14.

- 7) **Synthesis and characterization of metal selenide nanoparticles in aqueous medium at room temperature**, International Conference on nano Electronics Science & Technology (ICNEST-14), Sri Vasavi College, Erode, India, 14-Feb-14 to 15- Feb-14.
- 8) **Synthesis and characterization of PbSe at room temperature for solar cell application**, TEQIP-II sponsored International conference on green technology for environmental pollution prevention and control, National Institute of Technology, Tiruchirapalli, Tamilnadu, India, 27-Sep-14 to 29-Sep-14.
- 9) **Structural and optical properties of Ni doped ZnSe nanoparticles**, International Conference on smart materials ICSM-2015, Sacred heart college, vellore, India, 11- Feb-15 to 12 -Feb-15.
- 10) **Structural, optical and electric studies of Nd doped ZnSe nanoparticles**, National Conference on Advanced Functional Materials (NCAFM-15), SRM University, Chennai, India, 8- May-15 to 9- May-15.
- 11) PRESENTED ORAL PAPER in National Conference on Nanomaterials and their Applications NCNMA-2015, Government College of Technology, Coimbatore, India, 15-July-15.
- 12) PRESENTED POSTER at International conference on advances in micro/nanotechnologies for biological applications ICAMB-2015, NCNMA-2015, PSG Tech, Coimbatore, India, 7-Aug-15 to 8-Aug-15.
- 13) PRESENTED ORAL PAPER in National seminar on advanced materials NSAM-2016, Marudhar Kesari Jain College for Women, Vellore-51, India, 20-Feb-16.
- 14) **Wet chemical synthesis of structural & thermal properties of ZnSe & ZnS nanoparticles**, International conference on thermal analysis and Energy systems, Hindusthan College of engineering and technology, Coimbatore, 12-April-18 to 13- April-18.
- 15) **A review on wastewater treatment**, SERB Sponsored National level Conference on Advanced Materials In waste Management (NCAMWM-2019), Dr.N.G.P.Institute of Technology, Coimbatore, 8-Feb-2019.
- 16) **Synthesis and characterization of TiO₂ thin film sensitized using pterocarpus soyauxii as natural dye for energy storage systems**, DST-SERB sponsored National Conference on Transition Metal based Sodium Ion Batteries (SIBs) for Ultra fast Energy Storage systems (NCTMSIB `19), Dr.N.G.P Institute of Technology, Coimbatore, 13-Nov-2019.
- 17) **Green synthesis of ZnO nanoparticles using papaya leaf extract for the study of antibacterial activity**, two days International virtual conference on Novel Nanomaterials for Innovative Research (ICNNIR-2021), Rathinam College of Arts and Science College, Coimbatore, 29-Apr-21 to 30-Apr-21.

- 18) Plant Mediated Synthesis of pure and Ni Doped ZnO Nanoparticles Using Azadirachta indica for Antibacterial Application**, International Virtual Conference on “Recent Trends in Applied Mathematics, Physical Sciences and humanities”, Sri Ramakrishna Institute of Technology, 21 October 2021.

Participation in Seminars

- 1) **National seminar on hundred years of superconductivity and its applications**, Vellalar college for women, Erode, 12-Sep-11.
- 2) **National seminar on nanomaterials research on vision nano 2014**, Sri Ramakrishana engineering College, Coimbatore, 22-Feb-14.
- 3) **DRDO & ISTE sponsored national seminar on advances in materials research for armaments applications**, Dr.Mahalingam College of Engineering and Technology, Pollachi, 15-Feb-19 to 16-Feb-19.
- 4) **National seminar on photonics for medical diagnostics**, Dr.N.G.P Institute of Technology, Coimbatore, 03-July-19.
- 5) **One day seminar on Energy Materials**, Sathyabama Institute of Science and Technology, Chennai, 04-Jul-21.

Participation in Workshop

- 1) Workshop on soft skills, Vellalar college for women, Erode, 21-Nov-11 to 23-Nov-11.
- 2) TEQIP-II one day workshop on spectroscopy: instrumentation and applications, NIT, Calicut, 11-Jan-14.
- 3) TEQIP-II one day workshop on training and demonstration on surface area analyzer, GCT, Coimbatore, 21-Jan-16.
- 4) National workshop on nano characterization and applications of biosensor 2020, Dr.N.G.P Arts and Science College, Coimbatore, 20-Feb-20 to 21-Feb-20.
- 5) One week workshop on materials technology advancement in current scenario- MTACS2020, Sathyabama Institute of Science and Technology, Chennai, 4- July 20 to 10-July -20.
- 6) Two day national e- workshop on introduction to origin software, K.L University, Vijayawada, Andra Pradesh, India, 29-Sep-20 to 30-Sep-20.
- 7) International Workshop on Introduction to research based characterization tools and techniques- IRCTT, Rathinam College of Arts and Science College, Coimbatore, 23-Aug-21 to 27-Aug-21.
- 8) E-Workshop on Phase Identification of polycrystalline materials using XRD data in software, Dr.N.G.P Arts and Science College, Coimbatore, 25-Sep-21.

- 9) An International Online Workshop on Materials Science and Computational Methods, Jamal Mohamed College, Tiruchiappalli, 15-Feb-22 to 16-Feb-22.
- 10) Two day online international workshop on Nanomaterials for clean energy and space astronomy, 22-Feb-22 to 23-Feb-22, Department of Physics and Astronomy Club of Ethiraj College for Women in association with Indian Science Congress.

Participation in Faculty Development Programme

- 1) Current research trends in nanoscience and technology and application in solar cells, Government College of technology, Coimbatore, India, 15- may-13 to 21- may-13.
- 2) Energy storage devices, Government College of technology, Coimbatore, India, 31-July-15 to 1-Aug-15.
- 3) Engineering materials and its applications, Dr.NGP IT, Coimbatore, India, 11-Jan-18.
- 4) Quality initiatives in higher education, Dr. N.G.P. Arts and Science College, Coimbatore, 3-Dec-18 to 9-Dec-18.
- 5) NAAC revised accreditation framework & OBE assessment methodology, Dr. N.G.P. Arts and Science College, Coimbatore, 27-May-19 to 2-Jun-19.
- 6) NPTEL Online Certification Course, Selection of Nanomaterials for Energy Harvesting and Storage Application, Jul-Aug-19 (4 Week Course).
- 7) Innovation and entrepreneurship development center (IEDC), PSGR Krishnammal College for women, Coimbatore, 16-Sep-19 to 28-Sep-19.
- 8) Quality initiatives in higher education, Dr. N.G.P. Arts and Science College, Coimbatore, 13-Apr-20 to 20-Apr-20.
- 9) Spoken tutorial free open source software (foss) on scilab, Dr.N.G.P ASC and Spoken tutorial, Coimbatore, 04-May-20 to 10-May-20.
- 10) Spoken tutorial free open source software (foss) on arduino, Dr.N.G.P ASC and Spoken tutorial, Coimbatore, 04-May-20 to 10-May-20.
- 11) Novel materials for energy and biomedical healthcare applications, M.Kumarasamy College of Engineering, Karur, 11-May-20 to 16-May-20.
- 12) Recent trends in Physics, Holy Cross College, Nagercoil, 03-June-20 to 06-June-20.
- 13) Application of new materials in emerging field, Sathyabama Institute of Science and Technology, Chennai, 24-June-20 to 30-June-20.
- 14) ICT tools and techniques for education, Vellalar College for women, Erode, 21-Aug-20.
- 15) Recent Trends in Nano Materials and its applications(NANO-APP 2021), Coimbatore Institute of

Technology, Coimbatore, 15-Feb-21 to 27-Feb-21.

- 16) Online FDP on Research methodology and pedagogy for tertiary education, Dr.N.G.P Arts and Science College, Coimbatore, 15-Jun-21 to 21-Jun-21.
- 17) FDP on Advance topics in Physics, St.Mary College, Thoothukudi, 17-Jul-21.
- 18) FDP on recent trends in Solar cells, PPG College of Arts and Science college, Coimbatore, 13-Jul-21 to 20-Jul-21.
- 19) FDP on Emerging Innovative Trends in Quality Research Paper Writing and Publishing in Right Journals, Sri G.V.G Visalakshi College for Women, Udumalper, 25-Jan-22.

Conference / Seminar / Workshop Organized

- 1) Worked as Organizing In-Charge, National Conference of Hundred Years of Superconductivity and its applications, Vellalar College for Women, Erode, 12-Sep-11.
- 2) Worked with the organizing team, Faculty development programme (FDP) on current research trends in Nanoscience and technology and application in solar cells, Government College of Technology, Coimbatore, 15-May-13 to 21-May-13.
- 3) Worked with the organizing team for the Faculty development programme (FDP) on National conference on NCMNA-2015, Government College of Technology, Coimbatore, 22-Jun-15 to 28-Jun-15.
- 4) Worked as organized member, Faculty development programmed (FDP), Energy Storage devices, Government College of Technology, Coimbatore, 31-July-15 to 1-Aug-15.
- 5) Committee Member, National Conference on Recent Trends in Basic and Applied Sciences, Dr. N.G.P. Arts and Science College, Coimbatore, 02-Mar-20 to 03-Mar-20.
- 6) Worked as Organized member, Seminars in Dr. N.G.P Arts and Science College, Coimbatore.
- 7) Organized an Intercollegiate Spectra`22 in Dr.N.G.P Arts and Science College, Coimbatore on 28-feb-22.

Invited Speaker / Session Chair- Conference / Seminar / Workshop

1. Resource Person, Entrepreneurship Awareness Camp, Dr. N.G.P. Arts and Science College, Coimbatore, 08- Jan-20.
2. Session Chair, National Conference on Recent Trends in Basic and Applied Sciences, Dr. N.G.P. Arts and Science College, Coimbatore, 2 & 3rd March 2020.

3. Resource person, Webinar on Energy Storage and Career Opportunities, Hindustan College of Arts and Science, Coimbatore, 12-Feb-2021.
4. Resource person, Lecture on Aspiring Science field for future generation, Rathinam College of Arts and Science, Coimbatore-21, 05-Aug-21.
5. Session Chair, International Conference on Recent Advances in Engineering Materials, Alva's Institute of Engineering & Technology, Karnataka, 03-05-Mar-22.

Awards / Honors

Awards / Honors	Agency / Institute	Year of Award
Best Women Faculty	Natural Science Foundation	2020
NPTEL- Silver	NPTEL	2019