

Faculty Profile



Dr. S. THENNARASU M.Sc, M.Phil, Ph.D
ASSOCIATE PROFESSOR

HIGHLIGHTS:

- Number of Journal Publications: 13
- H-Index: 4
- Patents Published: 5

PROFESSIONAL LINKS:

- Scopus ID: 57509245500
- Scopus Link: <https://www.scopus.com/authid/detail.uri?authorId=57509245500>
- Google Scholar ID: https://scholar.google.com/citations?user=oAqeJ_MAAAAJ&hl=en
- Anna University Faculty ID: 281842
- AICTE Faculty ID: 1-4146101156
- Anna University Supervisor ID: 2670037
- LinkedIn: <https://www.linkedin.com/feed/>

PROFESSIONAL BACKGROUND:

- Teaching Experience till date: 15.5 years

Academic Experience:

- Assistant Professor (OG) - Saveetha Engineering College, Chennai. (from July 2018)
- Assistant Professor - Bannari Amman Institute of Technology, Erode. (Apr 2015 to Apr 2018)
- Senior Engineering Research Fellow, Department of Physics, Anna University, Regional Campus, Coimbatore. (July 2009 – Sep 2012)
- Lecturer in Physics, Department of Physics, Paavendhar College of Arts and Science, Salem. (June 2006 to Mar 2009)

AREA OF SPECIALIZATION:

Multi-functional nanomaterials and nanocomposites preparation and their energy applications.

Research Interests:

- Nanomaterials synthesis
- Nanocomposites, Catalysis
- Photocatalysis-Advanced oxidation process
- Studies of electrochemical properties using cyclic voltammetry
- Solar Photovoltaic
- Novel materials-Super capacitor, Fuel cell and Batteries
- Carbon materials-Graphene, CNT, Mesoporous carbon

Selected Publications:

- P. Vinothkumar, S. Praveenkumar, **S. Thennarasu**, M. Harirajan, 2024 ‘Growth, mechanical, thermal, electrical, linear, and nonlinear optical studies of urea resorcinol single crystals for NLO applications’, Chemical Physics Impact, Elsevier, vol. 8, pp100554, 2024. (IF-3.8)
- R. Jayaseelan, **S. Thennarasu**, P. Rajaji, P. Nethaji, P. Revathi, R. Jothi Ramalingam, S. Arokiyaraj, Long-life stability and high energy density storage MnCoPB-PDA/NF electrode material in hybrid supercapacitors, Journal of Energy Storage, vol.72, pp108303, 2023.(IF-8.9)
- Abirami R, Kabilan R, Nagaraju P, Hariharan V, **Thennarasu S***, Enhanced Electrochemical Performance of Mn₃O₄/Multiwalled Carbon Nanotubes nanocomposite for Supercapacitor Applications, Journal of Electronic Materials, vol. 50, pp.6467-6474, 2021. (IF-2.2)
- Kalpana R, Ashokan S, Subbaramaniyan P, Shanmugasundaram P, Sudha D, **Thennarasu S**, Jesbin J, ‘Preparation and Characterization of Graphene Doped Molybdenum Trioxide / Manganese Oxide Ternary Nanocomposite for Supercapacitor Performance’, Brazilian Journal of Physics,-Springer, vol. 51, pp.1597-1602, 2021. (IF-1.5)
- **Thennarasu, S***, Rajasekar, K & BalkisAmeen, K, ‘Hydrothermal temperature as a morphological control factor: Preparation, characterization and photocatalytic activity of titanate nanotubes and nanoribbons’, Journal of Molecular Structure- Elsevier, vol. 1049, pp. 446–457, 2013. (IF-4.0)
- Rajasekar, K, **Thennarasu, S**, Rajesh, R, Abirami, R, BalkisAmeen, K & Ramasubbu, A, ‘Preparation of mesoporous TiO₂/CNT nanocomposites by synthesis of mesoporous titania via EISA and their photocatalytic degradation under visible light irradiation’, Solid State Sciences - Elsevier, vol. 26, pp. 45–52, 2013. (IF-3.4)

PATENTS PUBLISHED/GRANTED:

- Nano Fabrication and Nanoparticles Analysis to Solar Cells for Maximum Absorption of Solar Energy (202341074404 A) Publication Date: 15/12/2023
- Rain Detection System for Convertible Top Cars Using Humidity Sensor (202341081349-filed on 30-11-2023).
- A nano technology based technique to analysis growing metallic nano clusters and compositions (No.202341068047 A) Publication Date: 20/10/2023

- Machine Learning Technique in Perovskite Solar Cell Crystal Size Distribution Analysis (202311006159) - 31/01/2023- Published.
- Pop-out & Sink-in Holographic Augmented Reality and Virtual Reality Device for use without 3D glasses for simultaneous viewing by multiple persons (Ref. No.202141047296 A) - 18/10/2021- Published.

COURSES CERTIFIED:

- ✓ Successfully completed NPTEL-AICTE course on "Sensor Technologies: Physics, Fabrication, and Circuits" during, July to September 2023.
- ✓ Successfully completed NPTEL-AICTE course on "Introduction to Machine Learning" during, Jan to Mar 2023.
- ✓ Successfully completed (topper 5%) NPTEL-AICTE course on Solar Photovoltaics: Fundamentals, Technology and Applications organized by IIT Roorkee, during July-December 2022 session.

ACHIEVEMENTS AND AWARDS:

- TOPPER (Top 5%) Award in the SWAYAM – NPTEL Online Certification Course on Solar Photovoltaics: Fundamentals, Technology and Applications, organized by IIT Roorkee, during July-December 2022 session.
- Senior Engineering Research Fellow (SERF) from Anna University during July 2009 to July 2012.
- First Prize for BEST PAPER Award in the National Conference on Materials for Future Technology (NCMFT'12), Sacred Heart College, Tirupattur, 28, September 2012.

CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:

- International conference on Advances in nano material-based sensor:impacting environmental pollution detection through AI(ICANS-2024), Saveetha Engineering College, Chennai-602105, held on 19-20 Dec 2024.
- InterNational Webinar on Multifunctional Materials- 2024 organized by SRM-CSIR on 28 Sept 2024.
- National symposium on futuristic green energy Technology organized by SRM-CSIR on 23 July 2024.
- International conference on Innovation in Science and Humanities(ICISH-2024), Saveetha Engineering College, Chennai-602105, held on 18-19 July 2024.
- NPTEL-AICTE FDP (one week) on "Sensor Technologies: Physics, Fabrication, and Circuits" during, July to September 2023.
- NPTEL-AICTE FDP (one week) on "Introduction to Machine Learning" during, Jan to Mar 2023.
- NPTEL-AICTE FDP (one week) on Solar Photovoltaics: Fundamentals, Technology and Applications organized by IIT Roorkee, during July-December 2022 session.
- International virtual workshop on Astrophotography organized by PG&Research department of physics, The New College, Chennai, held on 24&25th Sep 2021.
- International web conference on materials science and its Technological advancements Organized by the Department of Physics, Voorhees College, Vellore, held on 22 September, 2021.

- NAAC Sponsored One-day Online Seminar on “Qualitative & Quantitative Metrics in RAAF of NAAC” organized by Rajalakshmi Engineering College, Chennai, 17 Sep 2021.
- AICTE Training & Learning Academy FDP on UHV Refresher-1 course, 30-3 Sep 2021.
- AICTE Training & Learning Academy FDP on UHV Introductory course, 12-16 July 2021.
- National webinar on Research Publications Projects & Patents-An Overview, organized by Department of Science and Humanities, Saveetha Engineering College, Chennai, 10th July 2021.
- National webinar on Introduction to Data Science, organized by Department of Science and Humanities, Saveetha Engineering College, Chennai, 25th June 2021.
- Webinar on RIGHT TO INFORMATION ACT organized by Sathyabama Institute of Science and Technology, Chennai on 23rd June 2021.
- AICTE Training and Learning Academy (ATAL) -FDP on Sensors Technology, 8-12 February 2021.
- International virtual conference on Advanced Materials for Energy and Environmental Applications (ICAMEEA-2020), Bharath Institute of Higher Education & Research, Chennai, 3-4 December 2020.
- Two days IGEN GREEN9 SDG CONCLAVE 2020, organized by The Institution of Green Engineers, 2-3 October 2020.
- National webinar on Electrospun 1D-nanomaterials and their applications in DSSC, Dept.of physics, Saveetha Engineering College, Chennai, 23rd June 2020.
- National webinar on Essentials of nanotechnology and nanoelectronics, Dept.of physics, Saveetha Engineering College, Chennai, 13th June 2020.
- FDP on Advanced Materials and their Applications, Auxilium College, 2-6 June 2020.
- National webinar on recent trends in material science and training on related software tools, Stella Maris College, Chennai, 1-3 June 2020.
- National Seminar cum workshop on Frontiers in Photonics and optical communication (IEEE Photonics Society), Saveetha Engineering College, Chennai, 24-09-2019 to 26-09-2019.
- One day Awareness workshop on IPR in Industry & Academia, Saveetha Engineering College, Chennai, 27th December 2018.
- National workshop on Engineering Instruments and Applications, Saveetha Engineering College, Chennai, 31st August 2018.
- National workshop on Recent Advancements in Nanotechnology (RAN-2017), National Institute of Technology, Puducherry, 14th April 2017.
- National Seminar on Sustainable Energy for Development-Opportunities and Challenges Ahead, St. Xavier’s College, Palayamkottai, 13-14, December 2012.
- National Seminar on New Material Research and Nanotechnology (NSNMNRN-2012), Government Arts College, Ooty, 12-14, September 2012.
- National workshop on Advanced Instruments for Characterization, organized by Department of Nanoscience and Technology, Bharathiar University, Coimbatore, India, March 27, 2012.
- One day national workshop on Nanomaterials and device modeling, organized by the Department of Biomedical Engineering, PSG college of Technology, Coimbatore, India, March 4, 2011.
- Workshop on Research in Engineering and Technology-Recent Trends, organized by Coimbatore Institute of Engineering and Technology, Coimbatore, India, November 9-10, 2010.
- National workshop on Opportunities of Government Funded R&D Projects for Academic Institutions, organized by the Research Department, Anna University Coimbatore, during October 30-31, 2009.

- National workshop on Quantum Confined Systems and Nanoscale Devices, organized by the Post Graduate and Research Department of Physics, St.Thomas College, Palai, Kerala, during December 3-5, 2009.
- FDP on Advanced materials and their applications, from 02/06/2020 to 06/06/2020 at Auxilium College, Vellore.
- FDP on Research Methodology – Tools and Techniques in Engineering, Saveetha Engineering College, Chennai, 26 & 27th November 2018.
- Two-day Faculty Development Program in Physics, organized by the Dept. of Physical Sciences, Bannari Amman Institute of Technology, Erode, during July 16-17, 2015.
- STTP workshop on Environmental Studies, under the National Mission on Education through ICT (MHRD, Govt. of India) from 02/06/2015 to 12/06/2015 at Bannari Amman Institute of Technology, Erode.

PROFESSIONAL MEMBERSHIPS:

- Life Member - Society of Environmental Chemistry and Allied Sciences (SECAS, LM-129)
- Life Member - International Association of Engineers (IAENG-138636)
- Life Member – The Indian Science Congress Association (L33902)
- Life Member – Indian Association for Crystal Growth (IACG-No.30/2023)

OTHER DETAILS (If any):

Reviewer of International Journals:

- Chemical Engineering Journal
- Journal of Hazardous Materials
- Journal of Photochemistry and Photobiology A: Chemistry
- IEEE