

Name : Dr.P.Sakthivel
Designation : Assistant Professor
Department : Physics
Qualification : M.Sc., M.Phil., B.Ed., Ph.D.
Experience : Teaching: 4.6 Years Research: 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	LOYOLA COLLEGE, CHENNAI	2017
M. Phil.	PHYSICS	LOYOLA COLLEGE, CHENNAI	2011
M.Sc	PHYSICS	BISHOP HEBER COLLEGE, TRICHY	2010
B.Ed	PHYSICS	AVS COLLEGE OF EDUCATION, SALEM	2007
B.Sc	PHYSICS	SVM COLLEGE, UTHANGARAI	2006

Research Publications (Indexed)

International:

- 1) P.Sakthivel, Alison Christina Fernandez & Joe Jesudurai, **hydrothermal synthesis of zinc oxide – aluminium oxide nanocomposite**, Elixir Nanocomposite Materials, Vol. 50, pp 10558-10560, August 2012, ISSN: 2229-712X.
(Indexed in Scopus)
- 2) P. Sakthivel, S. Sharon Tamilselvi, T. Arokiya Mary & Joe Jesudurai, **investigation of lead sulphide nanoparticles synthesized by hydrothermal method**, International Journal of Scientific & Engineering Research, Vol. 5, Issue 3, March 2014, ISSN: 2229-5518. (Google Scholar)
- 3) P. Sakthivel, Alison Christina Fernandez & Joe Jesudurai, **structural, optical and photoconductivity characteristics of SnO₂-ZnS nanocomposite synthesized by a hydrothermal method**. International Journal Of Engineering Sciences & Research Technology, Vol. 4, Issue11 November 2015, ISSN: 2277-9655.(Google Scholar)
- 4) Alison Christina Fernandez, P.Sakthivel & Joe Jesudurai, **a novel approach towards gas sensing through a.c.conductivity of tin oxide-aluminum oxide composite**, IJESRT, Vol. 3, Issue 6, pp. 344-354 January 2014, ISSN: 2277-9655. (Google Scholar)

- 5) Alison Christina Fernandez, P.Sakthivel, K. Saravana Kumar & Joe Jesudurai, **A new approach towards gas sensing through a.c. conductivity of tin oxide-copper oxide composite**, IJESRT, Vol. 3, Issue 8, pp. 324-338, January 2014, ISSN:2277-9655 (Google Scholar)
- 6) T. Arokiya Mary, Alison Christina Fernandez, P. Sakthivel & Joe G. M. Jesudurai, **A study on the role of surfactant on the layered growth of SnSe₂ for electrical applications**, Journal of Materials Science: Materials in Electronics, pp 1-8, June 2016. ISSN: 0957-4522 (Print) 1573-482X (Online) (Indexed in Scopus).
- 7) Alison Christina Fernandez, P. Sakthivel & Joe Jesudurai, **semiconducting metal oxides for gas sensor applications**, J Mater Sci: Mater Electron, Vol. 10854, Issue 017-7924-0, DOI 10.1007/s ISSN: 0957-4522 (Print) 1573-482X (Online) (Indexed in Scopus).
- 8) M. Sundararajan , P. Sakthivel & Alison Christina Fernandez, **Structural, optical and electrical properties of ZnO-ZnS nanocomposites prepared by simple hydrothermal method**, Journal of Alloys and Compounds, Vol.768, pp. 553-562, August 2018, ISSN: 0925-8388, (Indexed in Scopus).
- 9) S Yuvaraj, Alison Christina Fernandez, M Sundararajan, Chandra Sekhar Dash, P Sakthivel, hydrothermal synthesis of ZnO–CdS nanocomposites: structural, optical and electrical behavior, Ceramics International, Vol.46, pp 391-402, January 2020, ISSN: 0272-8842(Indexed in Scopus).

Presentations in Conference

- 1) Synthesis and characterisation of ZnO-Al₂O₃ COMPOSITES, National Seminar on Recent Trends in Crystal Growth and Nano Materials (NSCGNM 2012), National College, Trichy 15-Mar-12 to 17-Mar-12.
- 2) A simple hydrothermal route for synthesising cadmium sulphide nanoparticles, National Conference on Advances in science and technology (NCAST'12), Saveetha University, Chennai 31-Oct -12.
- 3) Hydrothermal synthesis of zinc oxide-aluminium nanocomposite, National Conference on Recent Advancement in nanoscale research (NCRNR 2012), Anna University, Madurai, 24- Aug-12 to 25-Aug-12.
- 4) Synthesis of copper sulphide nanoparticles by a versatile hydrothermal method and its characterization, National Conference on Nanomaterials [NCN 2012] Karunya University, Coimbatore, 3- Dec-12.

- 5) A simple synthesis and characterization of copper sulphide nanoparticles, International Conference On Emerging Trends In Physics [ICETP-2013] St. Joseph's College of Arts and Science (Autonomous) Cuddalore 21-Feb-13 to 22-Feb-13.
- 6) Investigation of lead sulphide nanoparticles synthesized by hydrothermal method, International Conference On Recent Advances in Physics for Interdisciplinary Developments (ICRAPID-2014), Sathyabama University, Chennai 12-Feb-14

Participation in Conference

International:

- 1) International Conference on Advanced Materials (ICAM 2012), Loyola College Chennai-34, 5-Jan-12 to 7-Jan-12.
- 2) International Conference on Recent Trends in Advanced Materials (ICRAM-2012), VIT University, 20-Feb-12 to 22-Feb-12.

National:

- 1) Nano Materials for Energy Conversion and Conservation, organized by PG department of Physics, Bishop Heber College (Autonomous), Trichy-17, 26-Mar-09.
- 2) Recent Trends in Nanoscience & Technology, Vivekanandha College of Arts and Science for women (Autonomous) Namakkal, 23-Jan-12 to 24-Jan-12.
- 3) National Symposium on Pulsed Laser Deposition of Thin Films and Nanostructured Materials (PLD 2011)" organized by jointly by RRCAT, Indore and IISC Bangalore, November 09-Nov-11 to 11-Nov-11.
- 4) 6th Science Conclave 2013, "A congregation of Nobel Laureates and Eminent Scientists"- An MHRD-DST initiative at IIIT, Allahabad, Dec-08-13 to 14-Dec-13.

Participation in Seminars

- 1) State level programme on IPR/WTO, SVM College, Uthangarai, 20-Jun-05 to 22-Jun-05.
- 2) Cryogenics and its applications, PG department of Physics, Bishop Heber College (Autonomous), Trichy-17, 29-Jan-09.

Participation in Workshop

- 1) TOTAL SOLAR ECLIPSE-2009, National College, Trichy, 31-Aug-09.
- 2) NANOSCIENCE AND NANOTECHNOLOGY, Science city Chennai (Dept. of Higher Education, Govt of Tamilnadu), 24-Aug-10 to 27-Aug-10.

- 3) NUCLEAR TECHNOLOGY, Science city Chennai (Dept. of Higher Education, Govt of Tamilnadu), 17-Aug-10 to 19-Aug-10.
- 4) NANOFABRICATION TECHNOLOGIES, Centre for Nano Science & Engineering, IISc Bangalore, 16-Apr-12 to 18-Apr-12.
- 5) NANOMATERIALS CHARACTERIZATION, National Centre for Nanoscience and Nanotechnology University of Madras, 5-Nov-13 to 6-Nov-13.
- 6) POWDER X-RAY DIFFRACTION DATA ANALYSIS, Department of Physics SRM University Chennai-89, 3-Jul-15 to 4- Jul-15.

Participation in Faculty Development Programme

- 1) QUALITY INITIATIVES IN HIGHER EDUCATION, Dr. N.G.P. Arts and Science College, Coimbatore, 3-Dec-18 to 9-Dec-18.
- 2) NAAC REVISED ACCREDITATION FRAMWORK & OBE ASSESSMENT METHODOLOGY, Dr. N.G.P. Arts and Science College, Coimbatore, 27-May-19 to 2-Jun-19.
- 3) NPTEL Online Certification Course, Selection of Nanomaterials for Energy Harvesting and Storage Application, Jul-Aug-19 (4 Week Course).