

**Name** : Dr. P. Sakthivel  
**Designation** : Assistant Professor  
**Department** : Physics  
**Qualification** : M. Sc., M. Phil., B. Ed., Ph. D.

**Experience:**

Teaching: 2 Years                      Industry: 1 Year                      Research: 5 Years

**Area of Specialization(s)** : Nanomaterials, Nanocomposites

**Email (Official ID)** : sakthivel@drngpasc.ac.in

**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, pp10558-10560, 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 SNO<sub>2</sub>-ZnS Nanocomposite Synthesized by a Hydrothermal Method**, International Journal of Engineering Sciences, Research Technology, Vol. 4, Issue 11 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 SnSe<sub>2</sub> 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/sISSN: 0957-4522 (Print) 1573-482X (Online) (Indexed in Scopus).
- 8) M. Sundararaja, 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).

#### **Presentations in Conference**

- 1) **Synthesis and Characterisation of ZnO-Al<sub>2</sub>O<sub>3</sub> Composites**, National Seminar on Recent Trends in Crystal Growth and Nano Materials (NSCGNM 2012), National College, Trichy, 15 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, Cuddalore, 21 & 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) Advanced Materials (ICAM 2012), Loyola College, Chennai, 5 to 7-Jan-12.
- 2) Recent Trends in Advanced Materials (ICRAM-2012), VIT University, 20 to 22-Feb-12.

#### *National*

- 1) Nano Materials for Energy Conversion and Conservation, Bishop Heber College, Trichy, 26-Mar-09.
- 2) Recent Trends in Nanoscience, Technology, Vivekanandha College of Arts and Science for Women, Namakkal, 23 & 24-Jan-12.
- 3) Pulsed Laser Deposition of Thin Films and Nanostructured Materials (PLD 2011), RRCAT, Indore and IISc Bangalore, 9 to 11-Nov-11.
- 4) 6th Science Conclave 2013, A Congregation of Nobel Laureates and Eminent Scientists - An MHRD - DST initiative at IIT, Allahabad, 8 to 14-Dec-13.

### **Participation in Seminars**

- 1) State Level Programme on **IPR/WTO**, SVM College, Uthangarai, 20 to 22-Jun-05.
- 2) **Cryogenics and its Applications**, Bishop Heber College, Trichy, 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 to 27-Aug-10.

- 3) **Nuclear Technology**, Science City Chennai (Dept. of Higher Education, Govt. of Tamilnadu), 17 to 19-Aug-10.
- 4) **Nanofabrication Technologies**, Centre for Nano Science, Engineering, IISC Bangalore, 16 to 18-Apr-12.
- 5) **Nanomaterials Characterization**, National Centre for Nanoscience and Nanotechnology University of Madras, 5 & 6-Nov-13.
- 6) **Powder X-Ray Diffraction Data Analysis**, SRM University Chennai, 3 & 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.