

<p style="text-align: center;">Name:</p> <p style="text-align: center;">Dr. Saravanan K</p>				
Designation:	Assistant Professor			
Qualification:	M.Sc., Ph.D.			
Area of specialization:	Materials science, Semiconductors, Energy materials			
Experience:	Industrial Experience	Postdoctoral Experience	Teaching Experience	
	-	-	4 years 6 months	
Number of workshops / FDP attended:	Number of Workshops		Number of FDPs	
	3		6	
Publications:	Conference		Journal	
	National	International	National	International
	2	2	-	7
Books / Book Chapters	3			
Patents:	National		International	
	-		-	
Research Guidance	Completed		Ongoing	
	-		2	
Professional Body Membership	IEEE			

Research	Google Scholar ID: wC-BwnYAAAAJ Researcher ID: GZE-6505-2022 Orcid ID: 0000-0002-0526-1782 Scopus ID: 57205756111 Anna University Guideship: 4170118
Staff Achievements	1. NPTEL Domain certification – Electronic Materials 2. NPTEL Discipline star

Educational Qualifications:

Category	Name of the Degree	Specialization	Year of Passing	Name of the College	Name of the University	% of Marks / Grades obtained	Class obtained
UG	B.Sc.	Physics	2012	St. Xavier's College	Manonmanium sundaranar university	68	I
PG	M.Sc.	Physics	2014	St. Joseph's College	Bharthidasan University	74	I
Doctorate	Ph.D.	Physics	2021	College of Engineering Guindy	Anna University	Highly Commented	

Academic Experience:

Name of the College	Designation	Joining Date	Relieving Date	Experience		
				Years	Months	Days
Sri Sairam Engineering College, Chennai	Assistant Professor	01.07.2025	Till Date	0	8	0
Sri Sairam Institute of Technology, Chennai	Assistant Professor	05.11.2022	31.06.2025	2	7	26
Dhanalakshmi Srinivasan Arts and Science College, Mamallapuram	Assistant Professor	18.08.2021	03.11.2022	1	2	17
Total				4	6	12

Workshops/Seminars attended:

1. Participated at Workshop on 'Preparation, Characterization of crystalline materials and their applications (WPCMA – 2015)', Department of Physics, Anna University, Chennai, November 2015.
2. Participated at 'Two Advanced Tools of Characterizations', Division of Physics, School of Advanced

Sciences, Vellore Institute of Technology, Chennai on 20th June, 2020.

3. Participated at “Technical workshop for NPTEL stars”, IIT Madras, 06th July 2025.

FDP/STTP Attended:

1. Participated Five day Online Faculty development program on “Inculcating Universal Human values in Technical education”, AICTE, 5-9th August, 2024.
2. Participated Five day online faculty development program on “Theoretical and Experimental Approaches on Materials (TEAM2025), Anna University – Tirunelveli campus, 27-01-2025 to 01-02-2025.
3. Participated in the NPTEL SWAYAM FDP course of Material Characterization on Jan-Apr 2024.
4. Participated in the NPTEL SWAYAM FDP course of Physics of Materials on Jan-Apr 2024.
5. Participated in the NPTEL SWAYAM FDP course of Energy Materials on July-Oct 2025.
6. Participated in the NPTEL SWAYAM FDP course of Nanomaterials and their Properties on July-Oct 2025.

Papers presented in International / National Conferences:

1. Oral presentation at National Conference on Advanced materials (NCAM - 2014), St. Joseph’s arts and science college, Trichy, ‘Preparation and characterization of CuSbSe_2 thin films deposited by Chemical spray pyrolysis method’, Feb 2014.
2. Oral presentation at SCINO’13, Department of nanoscience and technology, Bharathiar University, Coimbatore, ‘Deposition of CuSbS_2 thin films via chemical spray pyrolysis method’, December 2013.
3. Oral presentation at International conference on Advances in Functional materials (ICAFM-2017), Department of medical physics, Anna University, Chennai, ‘Deposition and characterization of CZTS thin film on porous silicon for energy applications’, January 2017.
4. Poster presented at Chennai nanogathering, National conference on Nanomaterials and nanobiotechnology (CNG-NCNN), National centre for nanoscience and nanotechnology, University of Madras, ‘Synthesis of ternary CuCdS_2 nanoparticles via chemical method and its structural, optical and morphological properties’, February 2017.

Conference/ Symposium Attended:

1. Participated at ‘National level physics symposium (INPHYNIT -13)’, Department of Physics, National institute of technology, Trichy, March 2013.

Resource Person:

1. ‘Energy conversion through solar cells’, One week international faculty development program on frontiers in physics research, Department of Physics, Easwari Engineering college (Autonomous),

Ramapuram, Chennai, 25.07.2023.

2. 'Six-Day Online International Faculty Development Program on Recent Trends in Applied Physics' Department of Physics, Easwari Engineering College (Autonomous), Ramapuram, Chennai, 25 - 30.07.2022.

Journal Publications:

1. Synergistic effect of Li, La co-doping on photocatalytic activity of BaTiO₃ ferroelectric material for effective degradation of toxic NO_x for environmental remediation', Madhan Kuppasamy, Manjusha Passi, Saravanan Krishna Sundaram, Govindan Vadivel, Murugaraj Rathinasamy, Kwang-Pill Lee, Wha-Jung Kim, Journal of Environmental Chemical Engineering, June 2024, vol. 12(3), pp. 112801.
2. 'Controlled growth of 2D structured Cu₂WS₄ nanoflakes for high-performance all-solid-state supercapacitors' Ranjith Balu, Saravanan Krishna Sundaram, Sundaramurthy Rameshkumar, Karuppanan Aravinth, Perumalsamy Ramasamy, Journal of Electroanalytical Chemistry, October 2022, vol. 922, pp. 116718.
3. 'Thermoelectric transport properties in ternary chalcogenide (CuBiSe₂) crystal grown by Bridgman-Stockbarger method for thermo-electric applications' RO. MU. Jauhar, A. Raja, R. Rajkumar, K. Ramachandran, V. Viswanathan, Saravanan Krishna Sundaram, Paavai Era V. Malarvizhi, G.Anbalagan, Muthu Senthil Pandian, P. Ramasamy, Journal of Crystal Growth, January 2022, vol. 578, pp. 126427.
4. 'Temperature dependent phase transition on CuZnS thin films and its effects on morphological, optical and electrical properties', Saravanan Krishna Sundaram, Selladurai S, Vengatesh P, Shyju TS, Thin solid Films, 2021, vol. 733, pp. 138810.
5. 'Solvothermal synthesis of copper cadmium sulphide (CuCdS₂) nanoparticles and its structural, optical and morphological properties', Saravanan Krishna Sundaram, Selladurai S, Ananthakumar S, Moorthy Babu S, Suriakarthick R, Materials science in semiconductor processing, 2019, vol. 93, pp. 345 – 356.
6. 'Preferentially oriented CuCdS₂ thin films and thickness effects on structural, optical and electrical properties', Saravanan Krishna Sundaram, Selladurai S, Vengatesh P, Shyju TS, Applied Physics A, 2019, vol. 125, issue no. 356, pp. 1 – 12.
7. 'Colloidal synthesis of copper cadmium sulphide (CuCdS₂) nanoparticles and its structural, optical and morphological properties', Saravanan Krishna Sundaram, Suriakarthick R, Ananthakumar S, Moorthy Babu S, Selladurai S, Materials science in semiconductor processing, 2017, vol. 66, pp. 123-130.

Books / Book Chapters:

1. Ananthakumar Soosaimanickam, Paulraj Manidurai, Saravanan Krishna Sundaram & Moorthy Babu Sridharan, 'Advancements and Challenges in Synthesizing Colloidal Semiconductor Nanocrystals by

Hot-Injection Method', Nanomaterials: The Building Blocks of Modern Technology, Springer Singapore, August 2023, pp. 143–179. eBook ISBN: 978-981-99-4149-0

2. R. Sharan, Saravanan Krishna Sundaram, 'Sensor materials for Environmental monitoring' Novel materials for Emerging Applications, Shanlax publications, October 2021.
3. Ananthakumar Soosaimanickam, Saravanan Krishna Sundaram, Moorthy Babu Sridharan, 'Hybrid Perovskite Solar cells: Principle, processing and perspectives' Nanotechnology Device Design and Applications, CRC press: Taylor and Francis, Chapter No.: 17, eISBN: 9781003220350, February 2022. PP: 315.

Awards:

1. NPTEL Discipline Star, JAN- APR 2025
2. NPTEL Domain Scholar, Electronic Materials

Online Courses:

1. Completed NPTEL SWAYAM course of Advanced Materials and Processes on Jul-Oct, 2023 with Elite.
2. Completed NPTEL SWAYAM course of Solar Photovoltaics: Principles, Technologies & Materials on Jan-March 2024 with Elite.
3. Completed NPTEL SWAYAM course of Material Characterization on Jan-Apr 2024 with Elite.
4. Completed NPTEL SWAYAM course of Fundamentals of Electronic Device Fabrication on July – Aug 2024 with Elite+Silver and Secured Top 5% position.
5. Completed NPTEL SWAYAM course of Physics of Materials on Jul-Oct 2024 with Elite+Silver.
6. Completed NPTEL SWAYAM course of Fundamentals of Electronic Materials And Devices on 2024 with Elite and secured Topper in the course.
7. Completed NPTEL SWAYAM course of Energy Materials on July-Oct 2025 with Elite.
8. Completed NPTEL SWAYAM course of Nanomaterials and their Properties on July-Oct 2025 with Elite and Secured Top 2%.
9. Completed NITTT - Module 1: Orientation towards Technical Education and Curriculum Aspects
10. Completed NITTT - Module 2: Professional Ethics and Sustainability
11. Completed NITTT - Module 3: Communication Skills, Modes and Knowledge Dissemination
12. Completed NITTT - Module 4: Instructional Planning and Delivery
13. Completed NITTT - Module 5: Technology Enabled Learning and Life-Long Self Learning
14. Completed NITTT - Module 6: Student Assessment and Evaluation
15. Completed NITTT - Module 7: Creative problem solving, Innovation and Meaningful R & D
16. Completed NITTT - Module 8: Institutional Management and Administrative Procedures.