


Name: Dr. A. SATHIYA PRIYA	Photo 			
Designation:	<i>Associate Professor</i>			
Qualification:	<i>M.Sc., M.Phil., Ph.D., Post-Doc (PR China)</i>			
Area of specialization:	<i>Multiferroic, 2D materials, Solar cells, Photo-catalytic activity Energy Harvesting, Nanogenerator.</i>			
Experience:	Industrial Experience		Teaching Experience	
	<i>Post Doctoral Fellow (PDF)- 2 years</i>		<i>8 years 10 months</i>	
Number of workshops / FDP attended:	Number of Workshops		Number of FDPs	
	3		11	
Publications:	Conference		Journal	
	National	International	National	International
	4	12	-	30
Books / Book Chapters	Book-1; Book chapter-1			
Patents:	National		International	
	-		-	
Professional Body Membership	IEEE			
Research Guidance	<i>Yes - (Full time Research scholar-1) (4170069- Anna University Guideship)</i>			
Staff Achievements	<i>International Centre for Diffraction Data (ICDD) has approved and certified the XRD PATTERNS of (La, Cu) co-doped BiFeO3 materials reported by me. They were added in ICDD files (Powder Diffraction File -2020). File number:</i>			

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	2009	Sri Paramakalyani College	M S University	71	First
PG	M.Sc.,	Physics	2011	Sri Paramakalyani College	M S University	73.18	First
	M.Phil.	Physics	2012	Ayya Nadar Janaki Ammal College	M K University	7.2 (CGPA)	First
Research	Ph.D	Physics	2018	B S Abdur Rahman Crescent Institute of Science and Technology	B S Abdur Rahman Crescent Institute of Science and Technology Chennai	NA	Ph.D

Academic Experience:

Name of the College	Designation	Joining Date	Relieving Date	Experience		
				Years	Months	Days
B S Abdur Rahman Crescent Institute of Science and Technology	Research Fellow	13.01.2013	17.06.2014	1	5	4
Madras Institute of Technology, Chennai	Teaching Fellow	18.06.2014	30.04.2019	4	10	12
Hubei University	PDF	01.07.2019	30.06.2021	2	0	0
Sri Sairam Engineering College	Assistant Professor	10.08.2022	31. 07.2024	1	11	21
	Associate Professor	01.08.2024	Till date	0	4	17
				10	7	24

Journal Publications:

- **A. Sathiya Priya**, Muhammad Idzdihar Idris, J. Henry, R. Indhumathi, Radhamanohar Aepuru, Advancements in Hybrid Energy Harvesting: Combining Triboelectric Nanogenerators and Photovoltaic Cells for Next-Generation Energy Solutions, Mater. Today Energy, Accepted. (Q1; SCIE) (Impact factor (IF)-9.0)
- **A. Sathiya Priya**, R. Premanand, Indhumathi Ragupathi, Vijayabhaskara Rao Bhaviripudi, Radhamanohar Aepuru, Karthik Kannan, Krishnamoorthy Shanmugaraj, Comprehensive Review

of Hydrogel Synthesis, Characterization, and Emerging Applications, *J. Compos. Sci.*, 8, 457 (2024). (Q2; SCIE) (IF-3)

- Naresh Raj K, Vidhya Lakshmi Sivakumar, Pamila Ramesh, **Sathiya Priya A**, Anand Raju, Towards Sustainable Development: Harnessing the Role of Trees for Environmental Conservation and Economic Growth, *Nanotechnology Perceptions* 20, 139–153 (2024). (Q4; SCOPUS) (IF-0.6)
- **A. Sathiya Priya**, J.Henry, Radhamanohar Aepuru, K. V.Arivizhivendhan, S Manda: Advancements in Carbon Dot Production and Characterization for Food Packaging: A Comprehensive Review, *Brazilian J Phys.* 54, 139 (2024). (Q4; SCIE) (IF-1.5)
- **A. Sathiya Priya**, D.Geetha, D P Pabba, R Aepuru, Ştefan Țălu, Varalakshmi, Prominent ferroelectric properties in multi-layered TiO₂ Mn-doped BiFeO₃ spin-coated thin films, *Ferroelectrics*, 618, 957-969 (2024). (Q4; SCIE) (IF-1.3)
- **A. Sathiya Priya**, D.Geetha, Jesus M Siqueiros, Ştefan Țălu, Tunable optical and multiferroic properties of zirconium and dysprosium substituted bismuth ferrite thin films, *Molecules*, 27, 7565, (2022). (Q2;SCIE) (IF-4.2)
- I B Shameem Banu, Rajesh Raman, M Hafiz Mamat, P Komalavalli, B H Poornima, S Divyalakshmi, S Sathik Basha, **A Sathiya Priya**, Shamima Hussain, Strain-mediated electrical and optical properties of novel lead-free CuFe₂O₄-KNbO₃ nanocomposite solid solutions: A combined experimental and Density Functional Theory studies, *Microsc. Res. Tech.*, 85, 3140-3152, (2022). (Q2; SCIE) (IF-2)
- **A. Sathiya Priya**, D.Geetha, Structural and frequency dependent dielectric properties of Ba doped Ni-Zn ferrite powders, *Phosphorous, Sulfur Silicon Relat Elems.* 197, 186-191, (2022). (Q3;SCIE) (IF-1.4)
- **A. Sathiya Priya**, D.Geetha, J.Henry, Effect of Cu and Sm doping on the ferroelectric character of bismuth ferrite thin films, *Phosphorous, Sulfur Silicon Relat Elems.* 197, 158-163, (2022). (Q4;SCIE) (IF-1.4)
- **A. Sathiya Priya**, D.Geetha, Madhavan, Synthesis, structural, dielectric, and photocatalytic properties of (Ti, La) co-doped calcium ferrite ceramic powders, *Arab. J. Sci. Eng.*, 47, 7657-7667, (2022). (Q1; SCIE) (IF-3.43)
- **A. Sathiya Priya**, D. Geetha, I.B.Shameem Banu, “Structural, dielectric and impedance analysis of (Dy, Cu) co-doped BiFeO₃” *Brazilian J Phys.* 51, 14338- 1447, (2021). (Q4;SCIE) (IF-1.5)
- Ştefan Țălu, **A. Sathiya Priya**, D.Geetha, Topographic characterization of of (Zr, Mn) co-doped bismuth ferrite thin film surfaces, *Microsc. Res. Tech*, 84 (10), 2494-2500 (2021). (Q3;SCIE) (IF-2)
- **A. Sathiya Priya**, D. Geetha, Studies on the multiferroic properties and impedance analysis of BiFeO₃ by (La, Cu) prepared by sol-gel method, *Ferroelectrics*, 573, 104-116 (2021).(Q4; SCIE) (IF-1.3)
- **A. Sathiya Priya**, D. Geetha, Impact of (Zr, Cu) ions substitution on the optical, dielectric and impedance behavior of BiFeO₃, *Brazilian J phys.* 51, 175-181 (2020). (Q4;SCIE) (IF-1.5)
- **A. Sathiya Priya**, D.Geetha, Ştefan Țălu, Advanced micromorphology study of the Mn-doped

bismuth ferrite thin films, *Mater. Lett*, 281, 128615 (2020). (Q2;SCIE) (IF-3.02)

- M. Rajamoorthy, D. Geetha, **A. Sathiya Priya**, “Synthesis of cobalt doped Bi₁₂NiO₁₉: structural, morphological, dielectric and magnetic properties”, *Arab. J. Sci. Eng.*, 46, 737-744,(2020).(Q1; SCIE) (IF-3.43)
- Jian Chen, **A. Sathiya Priya**, Di You, Weijie Pei, Qingfeng Zhang, Yinmei Lu, Mingkai li, Jinming Guo, Yunbin He, “Self-driven ultraviolet photodetectors based on ferroelectric depolarization field and interfacial potential”, *Sens. Actuators, A: Physical*, 315, 112267, (2020). (Q1; SCIE) (IF-4.1)
- **A. Sathiya Priya**, D. Geetha, K.Karthik, M.Rajamoorthy, “Investigations on the enhanced photocatalytic activity of (Ag, La) substituted nickel cobaltite spinels”, *Solid State Sci.*, 98, 105992 (2019). (Q2;SCIE) (IF-3.4)
- **A. Sathiya Priya**, I. B. Shameem Banu, D. Geetha, S. Sankar, “Investigations of the magnetic and dielectric behavior of (Zr, Cu) co-doped BiFeO₃-BaTiO₃ composite”, *Mater. Res. Express*, 6, 106116 (2019). (Q2; SCIE) (IF-1.8)
- **A. Sathiya Priya**, D. Geetha and N. Kavitha, “Effect of Al substitution on the structural, electric and impedance behavior of cobalt ferrite”, *Vacuum*, 160, 453-460 (2019). (Q2;SCIE) (IF-3.8)
- **A. Sathiya Priya**, D. Geetha and N. Kavitha, “Evaluation of the structural and dielectric properties of Al, Ce co-doped Cobalt ferrites”, *Mater. Research express*, 5, 066109 (2018). (Q2;SCIE) (IF-1.8)
- **A. Sathiya Priya**, I. B. Shameem Banu and Zulaikha Mohammed “Effect of novel (Gd, Cu) substitution on the electrical properties and magnetoelectric coupling bismuth ferrite ceramics”, *J. Mater. Sci: Mater. Electr.*, 28, 8467-8472 (2017). (Q2;SCIE) (IF-2.8)
- **A. Sathiya Priya**, I. B. Shameem Banu, Shahid Anwar and Shamima Hussain, “Studies on the multiferroic properties of (Zr, Cu) co-doped BiFeO₃ prepared by sol- gel method”, *J Sol-Gel Sci Technol.*, 80, 579-586, (2016). (Q2; SCIE) (IF-2.3)
- **A. Sathiya Priya**, I. B. Shameem Banu and Shahid Anwar, “Influence of Dy, Cu doping on the room temperature multiferroic properties of BiFeO₃”, *J Magn. Magn.Mater.* 401, 333-338 (2016). (Q3; SCIE) (IF-2.5)
- **A. Sathiya Priya**, I. B. Shameem Banu and Murthy Chavali, “Influence of (La, Cu) doping on the room temperature multiferroic properties of BiFeO₃ ceramics”, *Arab. J. Sci. Eng.*, 40, 2079-2084 (2015).(Q1; SCIE) (IF-3.43)
- **A. Sathiya Priya**, I. B. Shameem Banu and Shahid Anwar, “Investigation of multiferroic properties of doped BiFeO₃- BaTiO₃ composite ceramics”, *Mater. Lett.* 142, 42-44 (2015). (Q2;SCIE) (IF-2.7)
- I. B. Shameem Banu, **A. Sathiya Priya**, P. Komalavalli, and Shanmuganathan, “Investigation of Structural and magnetic properties of doped BaFeO₃- BaTiO₃ multiferroic composites”, *J. Materials sci. Mater. Electron.* 26, 98-102 (2014). (Q2;SCIE) (IF-2.8)
- **A. Sathiya Priya**, I. B. Shameem Banu, “Effect of doping and annealing on the room temperature magnetic and dielectric properties of La modified BiFeO₃ multiferroic nanoparticles synthesized by sol-gel citrate combustion method”, *Chemtech*, 6 (11), 4643-4649 (2014).
- **A. Sathiya Priya**, I. B. Shameem Banu, J. Thirumalai, A. Alagar, “Optical characterization of Mn doped CdS nanoparticles synthesized by simple chemical route”, *Opt. Electron. Adv. Mater.* –

Rapid Comm., 7 (3-4), 191 – 195(2013). (Q4; Scopus) (IF-0.5)

Program Organized

- **A.Sathiya Priya (Convenor)**, SERB sponsored 2nd 2 days International Hybrid mode conference on challenges & New trends in Solar cell technology (ICSCT'24), Sri Sai Ram Engineering College, 21st & 22nd March 2024.
- **A.Sathiya Priya (Convenor)**, One day National level Internship Program to Explore New Research Insights, Sri Sai Ram Engineering College, 24th August 2023.
- **A.Sathiya Priya (Convenor)**, SERB sponsored 2 days International Hybrid mode conference on challenges & New trends in Solar cell technology (ICSCT'23), Sri Sai Ram Engineering College, 8th January to 9th June 2023.
- **A.Sathiya Priya (Convenor)**, 5 days Academic Guest Lecture and Faculty interaction program on higher Studies Planning and International Research Collaboration, Sri Sai Ram Engineering College, 30th January to 3rd February 2023.
- **A.Sathiya Priya (Convenor)**, Invited talk by international research collaborators, Sri Sai Ram Engineering College, 26th September 2022.

Books / Book Chapters:

- R Aepuru, M Aleksandrova, V M Gaikwad, **A Sathiya Priya**, P K Sahoo, Krishnamoorthy Shanmugaraj and R V Mangalaraja, An introduction to the role of materials in the energy–environment nexus (Materials Technology for the Energy and Environmental Nexus, Volume 2), IOP Science (2023).
- **A Sathiya Priya**, N. Srinivasan, Principles of Electronics, Publisher: Sri Sairam Engineering College, ISSN : 9789334021622, April 2024.
Awarding Body: Founder's Day at Sri Sairam Engineering College Date: April 2024

Resource Person:

- **A.Sathiya Priya**, research opportunities for blooming young minds, sathyabama institute of science and technology, Chennai, 5th jan 2024.
- **A.Sathiya Priya**, Energy conservation, National energy conservation day by bureau of energy efficiency, Annai Violet arts & Science College, 20th Dec 2023.
- **A.Sathiya Priya**, Bio-solar cell: current scenario and future Trends”, Virtuthunagar District Cluster of Colleges Joint Faculty Program in Physics, A. K. D. Dharamaraja Women's College, 7th October 2023.
- **A.Sathiya Priya**, Perovskite solar cell, Research Internship Training Program (RITP), Sri Sai Ram Engineering College, 23rd December 2022.
- **A.Sathiya Priya**, “Ferroelectric multilayer films based high efficiency, low cost solar cell fabrication”, International conference on novel materials for evolving technological applications (ICNM-2020) by Holy Cross College, Nagercoil, 2020.

Workshops/Seminars attended:

- Participated one day workshop on “ Synthesis of Nano materials using electrochemical methods, characterization and applications”, Sri Sairam Engineering College, Chennai during 26th July 2024.
- Participated one day seminar on “Trends and Advances in Renewable Energy with Focus on Solar Thermal”, CSIR-CSMCRI- Marine Algal Research Station & Process Design and Engineering Division, Ramanathapuram during 19th June 2024.

- Attended two days International level workshop on “IWAM - 2014” Alagappa University, Karaikudi.

FDP/STTP Attended:

- Completed a 8-weeks course on Solar Photovoltaics Fundamentals, Technology and Applications NPTEL-AICTE, Jul-Sep 2024.
- Participated 6 days faculty development program on “Recent Advances, Trends and Challenges in Nanomaterials Characterization and Techniques (RCNMCT-2024), Department of Physics, Koneru Lakshmaiah Education Foundation, Guntur, Andhra Pradesh during 9th -14th September 2024.
- Participated 2 weeks online faculty development programme on “Frontiers in Materials Research, Innovations and Entrepreneurship”, Department of Humanities and Sciences, Sri Sairam Engineering College, Chennai during 25th July – 8th August 2024.
- Completed a 6 days online short term programme on Functional Materials and Devices, IITDM Chennai, July1-6, 2024.
- Completed a 12-weeks course on Material Characterization, NPTEL-AICTE, Jan-Apr 2024.
- Participated 7 days online faculty development programme on “Sustainable Energy Spectrum: Exploring Trends and applications in Renewable Resources”, Department of Mechanical Engineering, Army Institute of Technology, Pune during 14th May – 20th May 2024.
- Participated 7 days virtual faculty development programme on “Recent Advances in Chemical Sciences”, Department of Chemistry, K S R College of Arts and Science for Women, Tiruchegode during 27th Nov – 1st Dec 2023.
- Participated 7 days National level online faculty development programme on “Advanced Research Methodology in Physical Sciences, Department of Physics & IQAC, Rajapalayam Raju’s College, Rajapalayam during 3rd -09th October 2023.
- Participated 5 days faculty development program on “Recent Advances, Trends and Challenges in Nanomaterials Characterization and Techniques (RCNMCT-2023), Department of Physics, Koneru Lakshmaiah Education Foundation, Guntur, Andhra Pradesh during 25th -29th September 2023.
- Participated 5 days online faculty development programme on Current Scenario in Advanced Materials Research and Nanotechnology, Department of Physics & IQAC, Rajapalayam Raju’s College, Rajapalayam during 14th -18th November 2022.
- Participated two weeks (40 hours) online faculty development programme on MATLAB programming, Electronics and ICT Academies at MNIT Jaipur, NIT Patna, and PDPM IITDM Jabalpur during August 22-September 02, 2022 (recognized by AICTE/UGC).

Conference Attended:

- Attended one day special lecture on Trends and Advances in Renewable Energy with Focus on Solar Thermal”, CSIR-CSMCRI-Marine Algal Research Station & Process Design and Engineering Division, Chennai (19th June 2024)
- Attended one day international conference on Functional Nanomaterials and Nanodevices (ICFNN 2023), Chettinad Academy of Research and Education, Chennai

(26th Sep 2023).

- Attended two-day national level conference on “**NCAMA 2013**” at National Institute of Technology, Trichy

Completed / Ongoing Projects:

- Collaborative Research Project, University of Chile, Chile
- Collaborative Research Project, Metropolia University, Chile
- Collaborative research project, Northern forestry University, China

Training Program Attended

- Attended National intellectual property awareness/training program on 16th March 2023, Intellectual property office, India.
- Attended 3days Training Program on Thin Film synthesis and characterization Techniques conducted by Center for Nanoscience and Nanotechnology, Sathyabama University (2013).

Awards:

- Recipient: **Best Young Researcher Award**

Awarding Body: Women’s Day at Sri Sairam Engineering College Date: March 2024

- Recipient: **Best Department Performance Award**

Online Courses:

- *NITTTR-Module 1*
- *NITTTR-Module 2*
- *NITTTR-Module 3*
- *NITTTR Module 4*
- *NITTTR-Module 5*
- *NITTTR-Module 6*
- *NITTTR-Module 7*
- *NITTTR-Module 8*
- *NPTEL- Solar Photovoltaics Fundamentals, Technology and Applications*
- *NPTEL -Materials and Characterization*

International Visit

Collaborative research visit to the National Research Center, Egypt, from December 3rd to December 13th, 2024.

Technical Skills

- Languages – C, C++, Java
- Web Technologies – HTML, CSS, JavaScript

Reviewer of The Journal

- Archives of Thermodynamics
- Springer Nature

- Crystals
- Molecules
- Materials
- Processes
- Materials Letters
- Journal of Alloys and Compounds
- Vacuum
- Journal of sol-gel
- The European Physical Journal B
- Journal of Inorganic and Organometallic Polymers and Materials

