

<p><b>Name:</b></p> <p><b>Dr. N. Sivakumar</b></p>				
<b>Designation:</b>	Associate Professor			
<b>Qualification:</b>	M.Sc., Ph.D., Post doc. (UGC)			
<b>Area of specialization:</b>	Nonmaterial's, Thermoelectric, Solar cells, Single crystals			
<b>Experience:</b>	<b>Industrial Experience</b>	<b>Postdoctoral Experience</b>	<b>Teaching Experience</b>	
	-	3 years	9 years	
<b>Number of workshops / FDP attended:</b>	<b>Number of Workshops</b>		<b>Number of FDPs</b>	
	68		20	
<b>Publications:</b>	<b>Conference</b>		<b>Journal</b>	
	<b>National</b>	<b>International</b>	<b>National</b>	<b>International</b>
	5	2	2	59
<b>Books / Book Chapters</b>	3			
<b>Patents:</b>	<b>National</b>		<b>International</b>	
	1		-	
<b>Research Guidance</b>	<b>Completed</b>		<b>Ongoing</b>	
	-		3	
<b>Professional Body Membership</b>	Indian Association for Crystal Growth Indian Association of Physics Teachers IEEE			
<b>Research</b>	<b>Google Scholar ID:</b> WLTJJ4AAAAJ <b>Researcher ID:</b> AAB-4872-2022 <b>Orcid ID:</b> 0000-0002-6113-2993 <b>Scopus ID:</b> 55371981600 <b>Anna University Guideship:</b> Yes			

**Staff Achievements**

1. Kalki krishnamurthy fellowship for UG,
2. Tamil Nadu Educational Trust fellowship for UG
3. Best student and University Rank Holder award-UG
4. Class Topper - PG, Presidency College (Autonomous), Chennai.
5. UGC-Dr. S. Kothari Postdoctoral Fellowship (2017)
6. Certificate of reviewing from the Journal Spectrochimica acta A, 2018.
7. Certificate of outstanding contribution in reviewing from the Journal Materials Letters, 2018.
8. National Award for Best thesis in Crystal Growth during Jan. 29-31, 2018 from Indian Association for Crystal Growth (IACG).
9. Best Oral Presentation Award - NewPhy 2020, held at The New College, Chennai, India, on 21st, Jan, 2020.
10. DST-TARE Faculty (2021), DST-SERB, New Delhi.
11. Indian SpectroPhysics Association (ISPA) Award 2022, During the International Virtual Conference on Materials Science and Technology (ICMAST -2022), 15th March 2022, Kandaswamy Kandar's College, Velur, Namakkal.
12. Funded Projects Award, During Teachers day, 5th September 2022 from Sri Sai Ram Engineering College, West Tambaram, Chennai.
13. IEEE Best Researcher Award 2024, IEEE Madras Section on 23rd Feb. 2024.
14. Young Research Award 2025 International Conference on Nanotechnology and Materials Sciences (NANO-25), ) 07th February 2025 Organized by the Department of Chemistry, K.S.R. College of Arts and Science for Women, Tiruchengodu -637215
15. Research Excellence Award, During Teachers day, 5th September 2025 from Sri Sai Ram Engineering College, West Tambaram, Chennai.

## 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	2007	Arignar Anna Govt. College	Thiruvalluvar University	87.56%	I Class with Distinction
PG	M.Sc.,	Physics	2009	Presidency College	University of Madras	86.46%	I Class with Distinction
Doctorate	Ph.D.	Physics	2015	Presidency College	University of Madras	Highly Commented	

## Academic Experience:

Name of the College	Designation	Joining Date	Relieving Date	Experience		
				Years	Months	Days
Sri Sai Ram Engineering College	Associate Professor	01.09.2022	Till Date	3	6	0
Sri Sai Ram Engineering College	Assistant Professor	02.11.2020	31.08.2022	1	9	29
Anna University	Postdoctoral Research Fellow	02.11.2017	01.11.2020	2	11	29
Saveetha School of Engineering	Assistant Professor (Senior)	04.06.2015	01.11.2017	2	4	28
VIT University, Vellore	Research Associate	01.08.2009	30.11.2010	1	3	31
Total				12	0	26

## Workshops/Seminars attended:

### FDP/STTP Attended:

1. N. Sivakumar participated in the One Day Interdisciplinary National Conference on "Climate Change and Youth: Time for action" held at B.K. Birla College of Arts, Science & Commerce, Kalyan during 12 Jan. 2026.
2. N. Sivakumar participated in the Five-Day Faculty Development Programme (FDP) on "Emerging Technologies in Nano Materials, Photonics and AI" held at Department of Physics with Computer Applications during 4-8 August. 2025.
3. N. Sivakumar participated in the Advanced Materials and Emerging Devices for Energy, Sensing, and

Biomedical Applications (AMED-2025) held at Department of Physics, Harcourt Butler Technical University (HBTU), Kanpur, Uttar Pradesh during 26-31 May. 2025.

4. N. Sivakumar participated in the Seven-Day International Faculty Development Program on “Frontiers in Physics: From Fundamentals to Emerging Technologies held at Department of Physics, AMET University during 12-19 May. 2025.
5. N. Sivakumar participated in the FDP on AICTE - ATAL sponsored a six days Faculty Development Program on Green Material and Methodology for Sustainable Development held at Mohamed Sathak AJ College of Engineering during 09-14 Dec. 2024.
6. N. Sivakumar participated in the FDP on “Two Weeks Online Faculty Development Program (FDP) on Frontiers in Materials Research, Innovations and Entrepreneurship (FMRIE’24)” held at Department of Humanities and Sciences (Physics), Sri Sairam Engineering college, Chennai-44, during 25th July 2024 to 8th August 2024.
7. N. Sivakumar participated in the FDP on “PH 3151 Engineering Physics”, held at Department of Physics, Anna University, Chennai, India, during 06-13, Aug. 2022.
8. N. Sivakumar participated in the AICTE-STC on “Advanced Materials Characterizations: From fundamentals towards applications: held at Department of Ceramic Engineering, IIT (BHU), And Department of Metallurgical Engineering, IIT (BHU) Varanasi-221005, during 22-26 Feb. 2021.
9. N. Sivakumar participated in the AICTE-STC on “Nanoelectronics Devices and Circuits” held at Indian Institute of Technology (BHU), Varanasi – 221005, (U.P.), during 4-9 January 2021
10. N. Sivakumar participated in the ATAL FDP “Green Technology and Sustainability” held at Engineering Department of Mechanical Engineering, National Institute of Technology, Raipur, India, during 8-12 December, 2020
11. N. Sivakumar participated in the FDP on “Astrophysics” JAMAL MOHAMED COLLEGE, Tiruchirappalli, India, during 11-12 November, 2020
12. N. Sivakumar participated in the FDP on “Advanced materials for energy storage applications” held at Department of Physics, Velammal Institute of Technology, Chennai 601204, Tamil Nadu, India, during 18-22, July, 2020.
13. N. Sivakumar participated in the FDP on “Evolution of functional materials and its effective characterization towards diverse engineering applications” held at Department of Physics, Kumaraguru Institute of Technology, Coimbatore, Tamil Nadu, India, during 22-29, June 2020.
14. N. Sivakumar participated in the FDP on “Smart materials sensor and energy devices” held at Department of ECE, SSN College of Engineering, Kalavakkam, 603 110, Tamil Nadu, India, during 25-30, May 2020
15. N. Sivakumar participated in the DST-SERB school on “Photoics Phenomena, Materials and Devices” held

- at Crystal Growth Centre, Anna University, Chennai-25, Tamil Nadu, India, during 02-21, December, 2019.
16. N. Sivakumar participated in the Refresher course “Two-dimensional Materials: Physics and Applications” held at Department of Physics, IITM Chennai-36, Tamil Nadu, India, during 21-26, September, 2019.
  17. N. Sivakumar participated in the GIAN course on “Scanning and Transmission Electron Microscopy: Basics and Applications to Low Dimensional Structures” held at Crystal Growth Centre, Anna University, Chennai -25, Tamil Nadu, India, during 03-07, December, 2018.
  18. N. Sivakumar participated in the GIAN course on “Advanced X-ray diffraction techniques for the characterization of materials” held at Crystal Growth Centre, Anna University, Chennai -25, Tamil Nadu, India, during 17-25, January, 2018.
  19. N. Sivakumar participated in the GIAN course on “Latest Methods in Protein Crystallization and Structural Biology” held at Crystal Growth Centre, Anna University, Chennai -25, Tamil Nadu, India, during 11-15, December, 2017.
  20. N. Sivakumar participated in the summer school on “Atmospheric Sciences” Organized Jointly by ISRO, Bangalore and Department of Physics, IIT Madras, Chennai, Tamil Nadu, India, during 5-10, May, 2008.

### **Papers presented in International / National Conferences:**

1. N. Sivakumar participated and presented the paper in the “30<sup>th</sup> International Conference on Amorphous and Nanoscale Semiconductors (ICANS 30)”, Conducted by University of Manchester, Manchester, United Kingdom during 5<sup>th</sup> – 8<sup>th</sup> August 2024.
2. N. Sivakumar participated and presented the paper in the EMRS Spring Meeting – 2024, Conducted by Exhibition & Convention Center in Strasbourg, France during 27<sup>th</sup> - 31<sup>th</sup> May 2024.
3. N. Sivakumar participated in the “International Online School on Functional Advanced Materials For Emerging Applications-2021”, held at Institute of Materials Science of Barcelona (ICMAB-CSIC), Campus of the Autonomous University of Barcelona (UAB), 08193 Bellaterra, Spain, during 28-2, June-July 2021.
4. N. Sivakumar participated in the “International E-Conference on Solar Power Technologies” held at Institute for Solar Fuels at the Helmholtz-Zentrum Berlin, Germany, during 5-8, July 2021.
5. N. Sivakumar participated in the “International Online Conference on Electron Beam Spectroscopy for Nano Optics 2021” held at Institut de Physique Nucleaire Orsay, Georges Clemenceau - 91406, Orsay, France, during 14-15 June 2021.
6. N. Sivakumar participated in the “IX International Scientific Conference “ Actual Problems of Solid State Physics” held at Scientific-Practical Materials Research Centre of National Academy of Science of Belarus Minsk 220072, Brovki 19, Belarus, during 22-26, November 2020.

7. N. Sivakumar participated in the “International Conference on Advanced Materials Science And Graphene Nanotechnology” held at The University of Manchester, United Kingdom, during 25-26, November 2020.
8. N. Sivakumar participated in the National Level Workshop “ Real world application of Quantum computing across industries” held at Grover Centre of Quantum Technology, Rajalakshmi Institute of Technology during 5<sup>th</sup> -10<sup>th</sup> Jan 2026.
9. N. Sivakumar participated and presented the paper in the New insights on the effect of 2D spacer (4FPEAI) treatment on 3D perovskites for the development of stable 2D/3D perovskite solar cells held at ICTN-KLC 2025 IIT Delhi during 11<sup>th</sup> -13<sup>th</sup> Dec 2025.
10. N. Sivakumar participated in the From Discovery to Deployment: What Will It Take to Scale Research Translation in India? Organized by Foundation for Advancing Science and Technology (FAST) during 3<sup>rd</sup> Dec 2025.
11. N. Sivakumar participated and presented the paper in the International Conference on Emerging Advanced Materials Conducted by Center for Nano Science and technology(CNST), Anna University, Chennai during 27<sup>th</sup>-28<sup>th</sup> March 2024.
12. N. Sivakumar participated and presented the paper in the International Conference on “Advances in Photovoltaic Materials and Devices (APMD 23)” Conducted by S&T Digital, IISER Pune, India, during 2-5 June, 2023
13. N. Sivakumar participated and presented the paper in the International Symposium on “Semiconductor Materials and Devices (ISSMD-2022)” held at Kalinga Institute of Industrial Technology (Deemed to be University), Bhubaneswar, India, during 16<sup>th</sup>-18<sup>th</sup> December, 2022
14. N. Sivakumar participated in the webinar on “Cryo and In-situ Electron Microscopy Diagnosis Guided Design of Rechargeable Battery Materials for Better Batteries” conducted by Materials Research Society (MRS), during 25<sup>th</sup> January 2022.
15. N. Sivakumar participated in the Indo-Japan workshop on “Silicon Crystal Growth for Photovoltaic Applications”, held at SSN College of Engineering, Chennai, Tamil Nadu, India, during 7<sup>th</sup> January 2022.
16. N. Sivakumar participated in the “International Virtual Conference on Thermoelectrics (VCT2021)” held at International Thermoelectric Society and Colorado School of Mines, Golden, CO 80401, United States, during 20-22, July 2021.
17. N. Sivakumar participated in the “International Summer Program 2021” held at Graduate School of Science, Osaka University, Japan, during 13-21, July 2021.
18. N. Sivakumar participated in the Webinar on “Benchtop NMR analysis and the future” held at Oxford Instruments, Abingdon, United Kingdom, during 9 June 2021.

19. N. Sivakumar participated in the Webinar on "Solving challenges in green energy research with Raman spectroscopy" Organized by Renishaw, Wotton-Under-Edge, United Kingdom, during 8 June 2021.
20. N. Sivakumar participated in the Webinar on "Corrosion Science and Technology 2021" held at IGCAR The Indian Institute of Metals (IIM), Kalpakkam Chapter, India, during 12 May, 2021
21. N. Sivakumar participated in the AICTE-Workshop on "Effective Research Paper writing & Patent Filing" held at PSGCAS Intellectual Property Rights (IPR) cell, PSG College of Arts & Science, Coimbatore, India, during 26, December 2020.
22. N. Sivakumar participated in "Grant Writing under Physical Sciences domain" organized by MHRD-STARS, IISc, Bangalore, during 7 December, 2020
23. N. Sivakumar participated in the Research Avenues in Alternate Energy Systems held at Government College of Technology, Coimbatore, India, during 23-27 November, 2020
24. N. Sivakumar, participated and presented a research paper entitled "A thermal kinetic approach of an Organic single crystal: p-nitrobenzylidene-p phenylamineaniline" in the "Virtual International Transdisciplinary Conference" held at Department of Physics, VIT University, Vellore, Tamil Nadu, India, during 26 -28<sup>th</sup> August, 2020.
25. N. Sivakumar, participated in the "International Webinar on recent advances in materials science and technology" held at Department of Physics, Aditanar College of Arts and Science, Tiruchendur, Tamil Nadu, India, during 26<sup>th</sup> June, 2020.
26. N. Sivakumar, participated in the "Webinar Basic author workshop research article writing and reference management using mendeley" held at Annamalai University, Chidambaram, Tamil Nadu, India, during 22<sup>nd</sup> June, 2020.
27. N. Sivakumar, participated in the "Virtual symposium on multifunctional materials" held at Department of Physics, SRM Institute of Science and Technology, Chennai, Tamil Nadu, India, during 17<sup>th</sup> June, 2020.
28. N. Sivakumar, participated in the "Webinar on Graphene based Nanocomposites for Energy storage" held at Department of Physics, V.O. Chidambaram College, Thoothukudi, Tamil Nadu, India, during 1<sup>st</sup> June, 2020.
29. N. Sivakumar, participated in the "International Webinar on functional novel materials for electrochemical sensors and energy storage devices" held at Thiyagarajar College, Madurai, India, during 15<sup>th</sup> May, 2020.
30. N. Sivakumar, participated and presented a research paper entitled "Crystal structure and thermal kinetic approach on benzylideneaniline derivative:p-nitrobenzylidene-p-phenylamineaniline" in the "24<sup>th</sup> National seminar on crystal growth and applications (XXIV NSCGA-2020)" held at Department of Physics, Periyar University, Salem, India, during 3-5, February, 2020.

31. N. Sivakumar, participated and presented a research paper entitled "Synthesis, structure crystalline perfection and mechanical hardness of pure and strontium substituted LaFeO<sub>3</sub> single crystals" in the "International conference on Recent Advancements in Material Science (NewPhy 2020)" held at The New College, Chennai, India, during 21<sup>st</sup>, January, 2020.
32. N. Sivakumar, participated and presented a research paper entitled "Synthesis, structure and thermal kinetics of an organic crystalline material: p-dinitrobenzylidene-p-diethylamineaniline" in the "International conference on Advances in chemistry with specific reference to catalysis, sensors, drug delivery and energy materials" held at University of Madras, Chennai, India, during 9 -10, January, 2020.
33. N. Sivakumar, participated and presented a research paper entitled "Synthesis, structure and spectroscopic investigations of a metal-organic crystal: Thiourea silver nitrate for optical devices" in the "64<sup>th</sup> DAE-Solid State Physics Symposium" held at Indian Institute of Technology Jodhpur, Rajasthan, India, during 18 -22, December, 2019.
34. N. Sivakumar, participated and presented a research paper entitled " Synthesis, structure and thermal decomposition behavior of an organic material: p-nitrobenzylidene-p-phenylamineaniline" in the "30<sup>th</sup> Annual General Meeting of MRSI" held at IISc, Bangalore, India, during 12-15, February, 2019.
35. N. Sivakumar, participated in "International Workshop on Crystalline Materials and Applications" held at Crystal Growth Centre, Anna University, Chennai, Tamil Nadu, India, during 03-05, January, 2019.
36. N. Sivakumar, participated in "Workshop on Research Methodology and Scientific Writing" held at Centre for Research, Anna University, Chennai, Tamil Nadu, India, during 11-12, July, 2018.
37. N. Sivakumar, participated in "Research for Resurgence" held at Centre for Research, Anna University, Chennai, Tamil Nadu, India, during 13, March, 2018.
38. N. Sivakumar, R. Jayavel and G. Anbalagan, participated and presented a research paper entitled "Nucleation studies and bulk growth of novel metal organic polymeric single crystal: thiourea silver nitrate  $\{7(\text{CH}_4\text{N}_2\text{S}).4(\text{AgNO}_3)\}_n$  for Nonlinear optical applications" in the "National Seminar on Crystal Growth and Applications" held at Sacred Heart College, Tirupattur, Vellore, Tamil Nadu, India, during 29-31, January, 2018.
39. N. Sivakumar, participated in the DST-PURSE and ANNA UNIVERSITY sponsored "International Workshop on recent materials for healthcare and industrial applications (IWRM-2018)" held at Anna University, Chennai, Tamil Nadu, India, during 22-23, January, 2018.
40. N. Sivakumar, participated in the "International Workshop on Advanced Materials and Device Technology (IWAMDT-2017)" held at Anna University, Chennai, Tamil Nadu, India, during 22-24, November, 2017.

41. N. Sivakumar participated in One day carrier oriented Workshop and Hands-on Training on 'NON-DESTRUCTIVE TESTING METHODOLOGIES & TECHNIQUES' Conducted by TWG GROUP, held at Saveetha University, Chennai, Tamil Nadu, India, During 25<sup>th</sup>, February, 2017.
42. N. Sivakumar participated and presented a Research Paper entitled 'Structural and spectroscopic characterization studies of metal organic material: poly bis (thiourea) silver (I) nitrate (TUSN) single crystal' in an International conference on recent advancements in materials chemistry (ICRAMC) held at SRM University, Chennai, Tamil Nadu, India, During 5-17, February, 2017.
43. N. Sivakumar participated and presented a Research Paper entitled 'Assessment of optimal combination of operating parameters using graph theory matrix approach' in an International conference on design, analysis, manufacturing and simulations (ICDAMS) held at Saveetha University, Chennai, Tamil Nadu, India, During 7-8, April, 2016.
44. N. Sivakumar participated and presented a Research Paper entitled 'Mechanical studies on pure and  $Fe^{3+}$  doped potassium hydrogen phthalate single crystals for device fabrications' in an International conference on design, analysis, manufacturing and simulations (ICDAMS), held at Saveeth University, Chennai, Tamil Nadu, India, During 7-8, April, 2016.
45. N. Sivakumar participated in the "National Workshop on luminescence materials devices and applications (LMDA-15)" in the IGCAR, Kalpakkam, Tamil Nadu, India, during 19-20, August, 2015.
46. N. Sivakumar participated and presented a paper entitled " Third harmonic generation studies on glycine phosphite (GPI) single crystals for optical device fabrications" in the National conference on Advanced materials science (NCMAS-2015)" held at Jerusalem College of Engineering, Chennai, Tamil Nadu, India, during 22nd July, 2015.
47. N. Sivakumar participated in the "Science Academies' Lecture workshop on Topics in Theoretical physics" in the Presidency College, Chennai, Tamil Nadu, India, during 10-11, March, 2014.
48. N. Sivakumar and G. Anbalagan, participated and presented the research work entitled "Growth, structural, optical, mechanical, laser damage threshold and SHG properties of  $\gamma$ -glycine single crystal" in the "National Seminar on Recent Advances in Physics-2014" held at Presidency College, Chennai, Tamil Nadu, India, during 7-8, March, 2014.
49. N. Sivakumar and G. Anbalagan, participated and presented a poster entitled "Structure, Crystal Growth and Characterization of LTPN crystal" in the "XVIII National Seminar on Crystal Growth" held at SSN College, Chennai, Tamil Nadu, India, during 24-26, February, 2014.
50. N. Sivakumar, N. Kanagathara, P. Krishnan, K. Gayathri, G. Anbalagan, participated and presented a paper entitled "Structural investigation on polymeric metal organic single crystal: poly bis(thiourea) silver nitrate" in the "International Conference on Advanced Materials and Manufacturing" held at Cape Institute of Technology, Leveingipuram, Tirunelveli, Tamil Nadu, India, during 11-12, April, 2013.

51. N. Sivakumar, N. Kanagathara, P. Krishnan, K. Gayathri, G. Anbalagan, participated and presented a paper entitled "Synthesis, Growth and Characterization of pure and succinic acid mixed glycine phosphite (GPI) single crystals" in the "National Seminar on Recent Trends in Crystal Growth and Nano Materials (NSCGNM-2013)" held at National College, Trichy, Tamil Nadu, India, during 13-15, March, 2013.
52. N. Sivakumar, N. Kanagathara, P. Krishnan, K. Gayathri, G. Anbalagan, participated and presented a paper entitled "Structural and Non-linear optical studies of new polymeric single crystal: Poly bis thiourea silver (I) nitrate" in the "National Conference on Perspectives in Lasers and spectroscopy (NCPLAS-2013)" held at Dr. MGR University, Adayalampattu, Chennai, Tamil Nadu, India, during 15<sup>th</sup> February, 2013.
53. N. Sivakumar participated in the seminar on "Higgs Boson and Neutrino" held at University of Madras, Chennai, Tamil Nadu, India, during 7, December, 2012.
54. N. Sivakumar, N. Kanagathara, K. Gayathri, P. Krishnan, S. Joshna and G. Anbalagan, participated and presented a poster entitled "Synthesis, Growth and Characterization of Non-linear Optical Single Crystal: Glycine Succinate" in the "International Conference on Research: Perspectives and procedures" held at Vaishnav College, Chennai, Tamil Nadu, India, during 23-24, August, 2012.
55. N. Sivakumar, R. Mohan Kumar and G. Anbalagan, participated and presented a poster entitled "Effect of Glycine doping in Potassium Hydrogen Phthalate (KHP) crystals on structural and optical properties" in the "International Conference on Recent Trends in Advanced Materials (ICRAM-2012)" held at VIT University, Vellore, India, during 20-22, February, 2012.
56. N. Sivakumar participated in the "National Conference on Green Chemistry" held at Presidency College, Chennai, Tamil Nadu, India, during 10<sup>th</sup> February, 2012.
57. N. Sivakumar, R. Mohan Kumar and G. Anbalagan, participated and presented a poster entitled "Optical and its related parameters of Glycine Phosphite (GPI) single crystals for Optical Devices" in the "National Conference on Recent Advances in Materials and Technology" held at Sathyabama University, Chennai, Tamil Nadu, India, during 6-7, January, 2012.
58. N. Sivakumar, N. Kanagathara, K. Gayathri, P. Krishnan and G. Anbalagan, participated and presented a paper entitled "Optical and its related parameters of pure and amino acid: Glycine doped Potassium Hydrogen Phthalate single crystals" in the "2<sup>nd</sup> International Conference on Science, Engineering and Technology" held at VIT University, Vellore, Tamil Nadu, India, during 20-21 April, 2011.
59. N. Sivakumar participated in "One day seminar on 50 years of lasers" held at RKM Vivekananda College, Chennai, Tamil Nadu, India, during 19<sup>th</sup> February, 2011.
60. N. Sivakumar participated in "National Workshop on Modern Techniques in Analytical Chemistry" held at SCSVM University, Enathur, Kanchipuram, Tamil Nadu, India, during 10-11, February, 2011.

61. N. Sivakumar participated in “National level conference on the recent trends in the field of Nanoscience and Technology-NANOMEET-2010” held at Anna University, Chennai, Tamil Nadu, India, during 25-26, March, 2010.
62. N. Sivakumar participated and presented a research paper in “Tamil conference on crystal growth” held at Anna University, Chennai, Tamil Nadu, India, during 18-19, October, 2010.
63. N. Sivakumar participated in “One day seminar on Essentials of Good Research – Trends and techniques” held at VIT University, Vellore, Tamil Nadu, India, during 30<sup>th</sup> October, 2010.
64. N. Sivakumar participated in “UGC sponsored workshop on Recent Trends in Crystal Growth” held at Anna University, Chennai, Tamil Nadu, India, during 30<sup>th</sup>, March, 2010.
65. N. Sivakumar participated and presented a research paper entitled, “ Evaluation of the Physico-chemical parameters on the pollutant Migration and their relation with ultrasonic wave velocity in the ground water of the polluted sites of Vellore district” in Eighteen National symposium on Ultrasonics, held at VIT University, Vellore, Tamil Nadu, India, during 21-23, December, 2009.
66. N. Sivakumar participated in “Pre-Symposium workshop on Biomedical Applications of Ultrasonics/Ultrasonics in Materials Research” held at VIT University, Vellore, Tamil Nadu, India, during 19-20, December, 2009.
67. N. Sivakumar participated in “The 6<sup>th</sup> National symposium and conference on solid state chemistry and allied areas” held at VIT University, Tamil Nadu, India, during 19-21, November, 2009.
68. N. Sivakumar participated in “The state level seminar on Recent Advancements in solar energy applications” Presidency College, Chennai, Tamil Nadu, India, during 21-22, April, 2009.

### **Completed / Ongoing Projects:**

1. Collaborative Research Project, University of Chile, Chile
2. Collaborative Research Project, Metropolia University, Chile
3. Collaborative research project, Northern forestry University, China

### **Program Organized:**

1. A. Sathiya Priya (Convenor), International Research Collaborators Academic Lecture, Sri Sai Ram Engineering College, 2<sup>nd</sup> – 8<sup>th</sup> April 2025.
2. A.Sathiya Priya (Convenor), SERB sponsored 2<sup>nd</sup> 2 days International Hybrid mode conference on challenges & New trends in Solar cell technology (ICSCT'24), Sri Sai Ram Engineering College, 21<sup>st</sup> & 22<sup>nd</sup> March 2024.
3. A.Sathiya Priya (Convenor), One day National level Internship Program to Explore New Research Insights, Sri Sai Ram Engineering College, 24<sup>th</sup> August 2023.
4. 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.

5. 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.
6. A.Sathiya Priya (Convenor), Invited talk by international research collaborators, Sri Sai Ram Engineering College, 26th September 2022.

### **Resource Person:**

1. A.Sathiya Priya, Empowering Indian Youth for Global Leadership in Science and Innovation for 'Viksit Bharat', Annai Violet arts & Science College, 28th Feb 2025.
2. A. Sathiya Priya, Chief Guest for the Kindergarten Convocation at Sri Sairam Vidhyalaya, Chennai, on January 30, 2025.
3. A.Sathiya Priya, research opportunities for blooming young minds, sathyabama institute of science and technology, Chennai, 5th jan 2024.
4. A.Sathiya Priya, Energy conservation, National energy conservation day by bureau of energy efficiency, Annai Violet arts & Science College, 20th Dec 2023.
5. 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.
6. A.Sathiya Priya, Perovskite solar cell, Research Internship Training Program (RITP), Sri Sai Ram Engineering College, 23rd December 2022.
7. 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.

### **Journal Publications:**

1. K. Yukesh Kumar, N. Sivakumar, G. M. Bhalerao, G. Anbalagan, Kentaro Tashiro, Ali Alsulmi, Enlightening the effect of strontium in the BiVO<sub>4</sub>-TiO<sub>2</sub> diphasic composites for dielectric devices, J Mater Sci: Mater Electron (2025) 36:1104, I.F. 2.8, doi.org/10.1007/s10854-025-15208-w
2. K. Sedumathavan, N. Sivakumar, S. Kalpana, K. Yukesh Kumar, Abdullah Al Souwaileh, S. Gnanam, J. Gajendiran, K. Settu, Unveiling the impact of aluminium (Al) on the pure LaFeO<sub>3</sub> nanoparticles for supercapacitor electrodes, J Mater Sci: Mater Electron (2025) 36:1117, I.F. 2.8, ISSN 1573-482X(Q2), doi.org/10.1007/s10854-025-15176-1
3. N. Sivakumar, Dinesh Kumar, Rajesh Maurya, Subhashis Saha, Trilok Singh and Jatindra Kumar Rath, “Effects of pure and metal chloride-treated SnO<sub>2</sub> electron transport layer on air ambient fabricated

- perovskite solar cells: electrical, optical, and photovoltaic properties” *J. Mater Sci: Mater Electron*, Volume 36, article number 973, (2025), I.F. 2.8, doi.org/10.1007/s10854-025-15035-z. (Q2).
4. Saha Subhashis, Narendra Bandaru, N. Sivakumar, Sourav Mukherjee, Somnath C.Roy, and Jatindra Kumar Rath. “Spectroscopic investigation of SnS quantum dots and the design of SnS QD-TiO<sub>2</sub> heterojunction” *Physica Scripta* 100, no. 6 (2025): 065979. I.F. 2.8, ISSN: 1402-4896, doi.org/10.1088/1402-4896/add8f2 (Q2).
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  6. N. Sivakumar, K. Sedumathavan, Ali Alsulmi, K. Yukesh Kumar, K. Settu “A comprehensive exploration of pure and Zn-doped LaFeO<sub>3</sub> nanoparticles synthesized by solid-state mechanism for charge storage devices” *J Mater Sci: Mater Electron*, Volume 35, article number 1791, (2024), 10.1007/s10854-024-13483-7, ISSN 1573-482X(Q2)
  7. V.Vijayalakshmi , N. Sivakumar , V.Alsulmi , S. Elangovan, N. Kanagathara, Jan Janczak, M.K. Marchewka, M. Rowinska, “Exploring structure, molecular interactions, optical and thermal properties of Bis(2-Aminopyrimidinium) selenate monohydrate: A combined experimental and theoretical study” *Optical Material* Vol 152, June 2024, 115539. I.F. 3.9, ISSN: 0957-4522 (Q1). doi.org/10.1016/j.optmat.2024.115539
  8. N. Sivakumar, Subhashis Saha, Narendra Bandaru, Jatindra Kumar Rath, Development of MAPbI<sub>3</sub>.H<sub>2</sub>O and MAPbI<sub>3</sub> perovskite solar cells using TiO<sub>2</sub> and P3HT as charge transport layers, *J Mater Sci: Mater Electron* 35 (2024)223, doi.org/10.1007/s10854-024-12010-y, I.F. 2.8, ISSN: 0957-4522 (Q2)
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