

Name:
Dr. R. SHARAN



Designation:	Associate Professor			
Qualification:	M.Sc., Ph. D.			
Area of specialization:	Electrochemical Gas Sensor, Nanomaterials			
Experience:	Industrial Experience	Postdoctoral Experience	Teaching Experience	
	-	-	5 years 1 month	
Number of workshops / FDP attended:	Number of Workshops		Number of FDPs	
	3		23	
Publications:	Conference		Journal	
	National	International	National	International
	-	-	-	6
Books / Book Chapters	3			
Patents:	National		International	
	-		-	
Research Guidance	Completed		Ongoing	
	-		01	
Professional Body Membership	<ol style="list-style-type: none"> 1. IEEE 2. Society for Materials Chemistry (Life Member) 			

Research	Google Scholar ID: D4lbvjQAAAAJ Researcher ID: AAD-8400-2021 Orcid ID: 0000-0002-2458-1407 Scopus ID: 57191341516 Anna University Guideship: 4170119
Staff Achievements	1. BEST PAPER AWARD (1ST PRIZE) - 20th NCE 2018 2. BEST POSTER AWARD (1ST PRIZE) - 7th DAE-BRNS 2018 3. BEST POSTER AWARD (2ND PRIZE) - 6th DAE-BRNS 2016 4. NPTEL Enthusiast 2025 5. NPTEL Believer 2025 6. NPTEL Domain Scholar 2025 7. NPTEL Discipline Star 2025

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	Achariya Arts and Science College, Puducherry	Pondicherry University	72	First Class
PG	M.Sc.,	Physics	2014	St. Joseph's College, Tiruchirappalli	Barathidasan University	81	Distinction
	PGDCSA	Computer Application	2013	St. Joseph's College, Tiruchirappalli	Barathidasan University	72	First Class
Doctorate	Ph.D.	Physics / Materials Science	2020	Vellore Institute of Technology, VIT Chennai	Vellore Institute of Technology, VIT Chennai	Highly Commented	

Academic Experience:

Name of the College	Designation	Joining Date	Relieving Date	Experience		
				Years	Months	Days
Sri Sairam Engineering College, Chennai	Associate Professor	01/11/2024	Till date	01	03	27
Sri Sairam Engineering College, Chennai	Assistant Professor	27/09/2023	31/10/2024	01	01	05
Easwari Engineering College	Assistant Professor	25/01/2021	25/09/2023	02	08	01
Total				05	01	03

Workshops/Seminars attended:

1. Participated at the National Workshop on Theory and Practice of Powder X-Ray Diffraction Analysis (NWPXRD-2017) held at Pondicherry University, Puducherry on 23 & 24th December 2017 organized by Centre for Nanoscience and Technology (CNST) Pondicherry University.
2. Attended Professor Prashant V. Kamat's school on Applications of functional materials for electrochemical energy conversion organized by the India Section of the Electrochemical Society held at Amirta Vishwa Vidyapeetham University, Coimbatore during 26- 28 December 2017.
3. Participated at the "Interactive Workshop on Electrochemical Technologies : Emphasizing Batteries, Supercapacitors, and Fuel Cells." held at VIT – Vellore, on 05th and 06th December 2024 organized by Centre for Nanotechnology Research, Vellore Institute of Technology, Vellore in association with ECS IITM Student Chapter & AMETEK Princeton Applied Research, Solartron Analytical.

FDP/STTP Attended:

1. NPTEL – AICTE Faculty Development Program, Fundamentals of Electronic Materials and Devices, Jan – March 2025
2. NPTEL – AICTE Faculty Development Program, Materials Design for Electronic, Electromechanical and Optical Functions, July - Oct 2024
3. NPTEL – AICTE Faculty Development Program, Nature and Properties of Materials - An Introductory Course, July - Sep 2025
4. NPTEL – AICTE Faculty Development Program, Theory and Practice of Non Destructive Testing, January – March 2021.
5. AICTE 5 day Faculty Development Program, "Inculcating Universal Human Values in Technical Education" organized by All India Council for Technical Education (AICTE), 31st May – 4th June 2021.
6. AICTE Training And Learning (ATAL) Academy, Online Elementary FDP on "Novel Materials", Indian Institute of Technology Bhilai, 5th July – 9 th July 2021.
7. AICTE Training And Learning (ATAL) Academy, Online Elementary FDP on "Recent Trends in Green Technologies for sustainable Development", University College of Engineering & Technology, Bikaner, 13th September – 17th September 2021.
8. AICTE Training And Learning (ATAL) Academy, Online Elementary FDP on "AICTE Training and Learning Sponsored Virtual Faculty Development Program on Sensor Technology", K S R College of Engineering, 04th October – 10th October 2021.
9. Tamilnadu State Government sponsored Two Week Faculty Development Program on, "Exploring the Fabrication Techniques, Characterizations and Applications of Functional Materials", Faculty Development Training Centre, Department of Physics, Alagappa Chettiar Government College of

Engineering and Technology, Karaikudi, 13th June – 20th June 2022.

10. NPTEL – AICTE Faculty Development Program, Selection of Nanomaterials for Energy Harvesting and Storage Application (Elite + Silver), July – August 2022.
11. NPTEL – AICTE Faculty Development Program, Advanced Materials and Processing (Elite), August-October 2023.
12. NPTEL – AICTE Faculty Development Program, Fundamentals of Electronic Device Fabrication (Elite), July – August 2024.
13. NPTEL – AICTE Faculty Development Program, Physics of Materials (Elite + Silver), July – October 2024
14. NPTEL – AICTE Faculty Development Program, Nanomaterials and their Properties (Elite), July - Oct 2025
15. NPTEL – AICTE Faculty Development Program, Physics of Materials (Elite + Silver), July - Oct 2024
16. NPTEL – AICTE Faculty Development Program, Nanotechnology, Science and Applications (Elite + Silver), July - Sep 2025
17. NPTEL – AICTE Faculty Development Program, Physics of Nanomaterials (Elite + Gold – Topper 5%) , July - Oct 2025
18. NPTEL – AICTE Faculty Development Program, Solar Photovoltaics: Principles, Technologies & Materials (Elite + Silver), Jan - March 2025
19. NPTEL – AICTE Faculty Development Program, Structural Analysis of Nanomaterials (Elite), July - Aug 2025
20. NPTEL – AICTE Faculty Development Program, Thin Film Technology (Elite), July - Oct 2025
21. NPTEL – AICTE Faculty Development Program, United Nations Sustainable Development Goals (UN SDGs) (Elite + Silver), Jan - Apr 2025
22. Completed a Faculty Development Course on Quantum Technologies and Applications, Conducted by Electronics and ICT Academies, MNIT Jaipur during Feb 28 - Mar 22 2025.
23. Completed a Faculty Development Course on Foundations of Quantum Technologies Conducted by Electronics and ICT Academies, MNIT Jaipur during Apr 11 - May 3 2025.
24. Completed a Faculty Development Course on Basics of Quantum Programming, Conducted by Electronics and ICT Academies, MNIT Jaipur during May 16 - Jun 07 2025.
25. Completed a Faculty Development Course on Quantum Computation, Conducted by Electronics and ICT Academies, MNIT Jaipur during Jul 11 - Aug 02 2025.
26. Completed a Faculty Development Course on Quantum Communication, Conducted by Electronics and ICT Academies, MNIT Jaipur during Aug 18 - Sep 11 2025.

Papers presented in International / National Conferences:

1. Presented a paper (Oral) at Conference on Emerging Materials (CEMAT-2016), held at the Indian Institute of Science, Bangalore, during 18-19 July 2016.
2. Presented a paper (Oral) at the 20th National Convention of Electrochemists (NCE-20) conducted by the Society for Advancement of Electrochemical Science and Technology (SAEST), CECRI Karaikudi, during 07-08 June 2018. **Received Best paper award (1st Prize)**

Conference/ Symposium Attended:

1. Presented a paper (Poster) at the 6th DAE-BRNS Interdisciplinary Symposium on Materials Chemistry (ISMC-2016), held at Bhabha Atomic Research Centre (BARC), Mumbai, during 06-10 December 2016. Received Best poster award (2nd Prize)
2. Presented a paper (Poster) at the 7th DAE-BRNS Interdisciplinary Symposium on Materials Chemistry (ISMC-2018), held at Bhabha Atomic Research Centre (BARC), Mumbai, during 04-08 December 2018. Received Best poster award (1st Prize)
3. Presented a paper (Poster) at the 3rd DAE-BRNS Symposium on Current Trends in Analytical Chemistry (CTAC-2023), held at Bhabha Atomic Research Centre (BARC), Mumbai, during 06-09 March 2024. Received Best poster award (1st Prize)

Program Organized:

1. Organized Two-week online Faculty Development Program (FDP) on "Frontiers in Materials Research, Innovations, and Entrepreneurship" (FMRIE'24) hosted by the Department of Humanities and Sciences (Physics), Sri Sairam Engineering College from 25/07/2024 to 08/08/2024.

Journal Publications:

1. **Sharan, R.**, and Atanu Dutta. "Structural analysis of Zr⁴⁺ doped ceria, a possible material for ammonia detection in ppm level." Journal of alloys and compounds 693 (2017): 936-944.
2. **Sharan, R.**, Mainak Roy, A. K. Tyagi, and Atanu Dutta. "Lanthanum gallate based amperometric electrochemical sensor for detecting ammonia in ppm level: Optimization of electrode compositions." Sensors and Actuators B: Chemical 258 (2018): 454-460.
3. Nithya, S., **R. Sharan**, Mainak Roy, Hack Ho Kim, Tatsumi Ishihara, and Atanu Dutta. "Ni doping in CuO: a highly sensitive electrode for sensing ammonia in ppm level using lanthanum gallate based electrolyte." Materials Research Bulletin 118 (2019): 110478.
4. **Sharan, R.**, Mainak Roy, and Atanu Dutta. "Sensing behaviour investigation of amperometric electrochemical NH₃ sensor: optimization of lanthanum gallate based electrolyte composition." Journal of The Electrochemical Society 167, no. 11 (2020): 117508.

5. Mathan Kumar P, **Sharan R**, Rajagopal Peri, Mohana Selvi T, Mareeswaran V, Brindha S, Muthuraaman B, "Enhancing surface area, morphology, and electrocatalytic activity favouring triiodide reduction via surface sulfurization of metal oxide." *Electrochimica Acta* 475 (2024): 143616
6. C Selvakumar, V T Geetha, S Sathiyamoorthi and **R Sharan**, "Third order NLO study of Manganese doped Copper Sulfide Nanoparticles for Optical Evolution." *Journal of Nonlinear Optical Physics & Materials* (2024) doi: 10.1142/S0218863524500371.

Books / Book Chapters:

1. **R. Sharan** and C. Manjula, Chapter 34, "Nanomaterial," *Novel materials for Emerging Applications*, Shanlax Publication, ISBN 9789391373108
2. **R. Sharan** and K. Saravanan, Chapter 35, "Sensor materials for Environmental monitoring," *Novel materials for Emerging Applications*, Shanlax Publication, ISBN 9789391373108
3. **R. Sharan**, S. Prabhakaran, R. Mohan, Chapter 7 - "Screen Printed Electrodes for Detection of Neurotransmitters", *Future Approaches to Electrochemical Sensing of Neurotransmitters*, Royal Society of Chemistry (RSC).

Awards:

1. **BEST PAPER AWARD (1ST PRIZE)** - 20th National Convention of Electrochemists (NCE-20), Society for Advancement of Electrochemical Science and Technology (SAEST), CECRI Karaikudi.
2. **BEST POSTER AWARD (1ST PRIZE)** - 7th DAE-BRNS Interdisciplinary Symposium on Materials Chemistry (ISMC-2018), BARC, Mumbai
3. **BEST POSTER AWARD (2ND PRIZE)** - 6th DAE-BRNS Interdisciplinary Symposium on Materials Chemistry (ISMC-2016), BARC, Mumbai.
4. **NPTEL - Enthusiasts** - Recognized as NPTEL Enthusiasts for Jul-Dec 2025 for appearing in eight or more NPTEL exams across the last four semesters (Jan 2024, July 2024, Jan 2025, and July 2025) and have passed at least 75% of the total exams I have appeared for.
5. **NPTEL - Believer** - Recognized as NPTEL Believers for appearing in 4, 5, 6, or 7 NPTEL exams in the Jul-Dec 2025 semester and have obtained certification in at least four of the exams they appeared for during this period.
6. **NPTEL Domain Scholar** - Recognized as Domain Scholar in Electronic Materials by completing 3 Core and 2 Elective courses by July- December 2025.
7. **NPTEL Discipline Star** - Recognized as Discipline Star in Metallurgical and Materials Engineering by completing a total duration of 50 weeks or more, with all courses belonging to the same discipline . Additionally, the final score in each course certificate must be 55 or above to qualify.

Online Courses:

1. Completed the NPTEL–AICTE course on Selection of Nanomaterials for Energy Harvesting and Storage Application (Elite + Silver), July–August 2022.
2. Completed the NPTEL–AICTE course on Advanced Materials and Processing (Elite), August–October 2023.
3. Completed the NPTEL–AICTE course on Fundamentals of Electronic Device Fabrication (Elite), July–August 2024.
4. Completed the NPTEL–AICTE course on Physics of Materials (Elite + Silver), July–October 2024
5. Completed the NPTEL–AICTE course on Nanomaterials and their Properties (Elite), July - Oct 2025
6. Completed the NPTEL–AICTE course on Physics of Materials (Elite + Silver), July - Oct 2024
7. Completed the NPTEL–AICTE course on Nanotechnology, Science and Applications (Elite + Silver), July - Sep 2025
8. Completed the NPTEL–AICTE course on Physics of Nanomaterials (Elite + Gold – Topper 5%) , July - Oct 2025
9. Completed the NPTEL–AICTE course on Solar Photovoltaics: Principles, Technologies & Materials (Elite + Silver), Jan - March 2025
10. Completed the NPTEL–AICTE course on Structural Analysis of Nanomaterials (Elite), July - Aug 2025
11. Completed the NPTEL–AICTE course on Thin Film Technology (Elite), July - Oct 2025
12. Completed the NPTEL–AICTE course on United Nations Sustainable Development Goals (UN SDGs) (Elite + Silver), Jan - Apr 2025