


<b>Name: Dr. R. SHARAN</b>	<b>Photo</b> 			
<b>Designation:</b>	<b>Assistant Professor</b>			
<b>Qualification:</b>	<b>Master of Science (M.Sc.), Doctor of Philosophy (Ph. D.)</b>			
<b>Area of specialization:</b>	<b>Electrochemical Gas Sensor, Nanomaterials</b>			
<b>Experience:</b>	<b>Industrial Experience</b>		<b>Teaching Experience</b>	
	<b>Nil</b>		<b>4 Years</b>	
<b>Number of workshops / FDP attended:</b>	<b>Number of Workshops</b>		<b>Number of FDPs</b>	
	<b>3</b>		<b>11</b>	
<b>Publications:</b>	<b>Conference</b>		<b>Journal</b>	
	<b>National</b>	<b>International</b>	<b>National</b>	<b>International</b>
	<b>-</b>	<b>-</b>	<b>-</b>	<b>6</b>
<b>Books / Book Chapters</b>	<b>4 Chapters</b>			
<b>Patents:</b>	<b>National</b>		<b>International</b>	
	<b>0</b>		<b>0</b>	
<b>Professional Body Membership</b>	<b>IEEE Society for Materials Chemistry (Life Member)</b>			
<b>Staff Achievements</b>	<i>BEST PAPER AWARD (1ST PRIZE) 20th National Convention of Electrochemists (NCE-20), Society for Advancement of Electrochemical Science and Technology (SAEST), CECRI Karaikudi.</i>			

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
Ph.D.	Ph.D.	Physics / Materials Science	2020	Vellore Institute of Technology, VIT Chennai	Vellore Institute of Technology, VIT Chennai	Highly recommended	

*BEST POSTER AWARD (1ST PRIZE)*  
7th DAE-BRNS Interdisciplinary Symposium on Materials Chemistry (ISMC-2018), BARC, Mumbai

*BEST POSTER AWARD (2ND PRIZE)*  
6th DAE-BRNS Interdisciplinary Symposium on Materials Chemistry (ISMC-2016), BARC, Mumbai

### Educational Qualifications:

Name of the College	Designation	Joining Date	Relieving Date	Experience		
				Years	Months	Days
Easwari Engineering College	Assistant Professor	25/01/2021	25/09/2023	02	08	01
Sri Sai Ram Engineering College	Assistant Professor	27/09/2023	Till date	01	02	14
<b>Total</b>				<b>3</b>	<b>10</b>	<b>15</b>

**Academic Experience:**

### **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 & 24<sup>th</sup> 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 05<sup>th</sup> and 06<sup>th</sup> 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, **Theory and Practice of Non Destructive Testing**, January – March 2021.
2. AICTE 5 day Faculty Development Program, **“Inculcating Universal Human Values in Technical Education”** organized by All India Council for Technical Education (AICTE), 31<sup>st</sup> May – 4<sup>th</sup> June 2021.
3. AICTE Training And Learning (ATAL) Academy, Online Elementary FDP on **"Novel Materials"**, Indian Institute of Technology Bhilai, 5<sup>th</sup> July – 9<sup>th</sup> July 2021.
4. AICTE Training And Learning (ATAL) Academy, Online Elementary FDP on **"Recent Trends in Green Technologies for sustainable Development"**, University College of Engineering & Technology, Bikaner, 13<sup>th</sup> September – 17<sup>th</sup> September 2021.
5. 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, 04<sup>th</sup> October – 10<sup>th</sup> October 2021.
6. 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, 13<sup>th</sup> June – 20<sup>th</sup> June 2022.
7. NPTEL – AICTE Faculty Development Program, **Selection of Nanomaterials for Energy Harvesting and Storage Application (Elite + Silver)**, July – August 2022.

8. NPTEL – AICTE Faculty Development Program, **Advanced Materials and Processing (Elite)**, August-October 2023
9. NPTEL – AICTE Faculty Development Program, **Fundamentals of Electronic Device Fabrication (Elite)**, July – August 2024
10. NPTEL – AICTE Faculty Development Program, **Physics of Materials (Elite + Silver)**, July – October 2024
11. NPTEL – AICTE Faculty Development Program, **Materials Design for Electronic, Electromechanical and Optical Functions**, July – October 2024

### **Symposium Attended:**

1. Presented a paper (Poster) at the 6<sup>th</sup> 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 (2<sup>nd</sup> Prize)**
2. Presented a paper (Poster) at the 7<sup>th</sup> 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 (1<sup>st</sup> Prize)**
3. Presented a paper (Poster) at the 3<sup>rd</sup> DAE-BRNS Symposium on Current Trends in Analytical Chemistry (CTAC-2023), held at Bhabha Atomic Research Centre (BARC), Mumbai, during 06-09 March 2024.

### **Conference Attended:**

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 20<sup>th</sup> 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 (1<sup>st</sup> Prize)**

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

### **Patent:**

## Journal Publications:

1. **Sharan, R.**, and Atanu Dutta. "Structural analysis of  $Zr^{4+}$  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  $NH_3$  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. Mohan , S. Prabhakaran, **R. Sharan**, Chapter 6 – "**Design and Development of Immunosensor for detection of Neurotransmitters**", Future Approaches to Electrochemical Sensing of Neurotransmitters, Royal Society of Chemistry (RSC)
4. **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:**

**BEST PAPER AWARD (1ST PRIZE)**

*20th National Convention of Electrochemists (NCE-20), Society for Advancement of Electrochemical Science and Technology (SAEST), CECRI Karaikudi.*

**BEST POSTER AWARD (1ST PRIZE)**

*7th DAE-BRNS Interdisciplinary Symposium on Materials Chemistry (ISMC-2018), BARC, Mumbai*

**BEST POSTER AWARD (2ND PRIZE)**

*6th DAE-BRNS Interdisciplinary Symposium on Materials Chemistry (ISMC-2016), BARC, Mumbai*

**Startup:**

**Webinar:**

**Resource Person:**

**Online Courses:**