

Name : Dr. V. JEYAVANI

Staff ID : RCAS05700

Designation : Assistant Professor of Chemistry

Department : Physics

Experience : Fresher (5 months)

Qualification : M.Sc., PhD

Specialization : Inorganic Chemistry, Nanomaterials, Material Sciences, Catalysis, Energy and Environment

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ACADEMICS

Degree	Branch	Institution / University	Year of Completion
B.Sc.,	Chemistry	Manonmaniyam Sundharanar University, Tirunelveli	2015
M.Sc.,	Chemistry	Madurai Kamaraj University, Madurai	2017
PhD	Chemical Sciences	CSIR- National Chemical Laboratory, Pune	2024

Diploma / Certification	Specialization	Institution / University / Agency Name	Year of Completion
PGDIT	Instrumentation technique	Ayya Nadar Janaki Ammal College, Sivakasi	2017

RESEARCH AND PUBLICATIONS

Journal Publications

V. Jeyavani, Manoj Shanmugasundaram and Shatabdi Porel Mukherjee; Size-Controlled Metal Ferrites ($M^{2+}Fe_2O_4$) Nanocrystals for Oxygen Evolution Reaction: Effect of M^{2+} ($M^{2+} = Mn, Co, Ni, \text{ and } Zn$) on Electrocatalytic Properties, *ACS Applied Nano Materials* **2024**, 7, 17776–17785. **IF- 5.3**

V. Jeyavani, Deepali Kondhekar, Meema Bhati, Sahil Dev, Kavita Joshi, R. Nandini Devi and Shatabdi Porel Mukherjee; Remarkable SO_2 and H_2S Resistant Ability on CO Oxidation by Unique Pd/WO_3 3D Hollow Sphere Nanocatalyst: Correlating Structure-Activity Relationships on SO_2 Exposure, *ACS Appl. Energy Mater.* **2024**, 7, 4, 1476–1487. **IF- 6.959**

V. Jeyavani and Shatabdi Porel Mukherjee; Crystal Phase and Morphology-Controlled Synthesis of Tungsten Oxide Nanostructures for Remarkably Ultrafast Adsorption and Separation of Organic Dyes, *ACS Inorg. Chem.* **2022**, 61, 18119–18134. **IF-5.436**.

V. Jeyavani, Rajendra Kumar, Pattayil Alias Joy, and Shatabdi Porel Mukherjee; MgB₂/NaNO₂-PVA free-standing polymer composite film as a green firework: a step towards environmental sustainability, *Bull. Mater. Sci.* **2022**, 45, 175. **IF-1.983**.

V. Jeyavani, Sayali Pawar, Arun Dadwal, Pattayil Alias Joy, and Shatabdi Porel Mukherjee; Size-controlled Cobalt Ferrite Nanocrystals: Magnetically separable Reusable Nanocatalysts for Selective Oxidation of Styrene, *ChemistrySelect* **2019**, 4, 6524 – 6531. **IF-2.307**.

List of Patents

Polymeric Flammable Compositions, Patent office IN, Application number **201911029469**, Complete filling date 07-22-2020, Patent Granted number: **420323**, Granted date: 02-02-2023.

Nanostructure Material for Adsorption Of Organic Dyes and the Process for Preparation Thereof, Patent office IN, Application number **202311006894** dated 02-02-2023 (2023). Record no. 2022042729790.

Palladium Tungsten Oxide Nanocatalyst for CO Oxidation and Its Method of Preparation Thereof, Patent office IN, Patent number (Provisional application filed), Application number **202311017234** dated 14-03-2023.

Palladium Tungsten Oxide Nanocatalyst for CO Oxidation and Its Method of Preparation Thereof, Patent office WO, Patent number, Application number **PCT/IN2024/050247** dated 14-03-2023.

PRESENTATIONS

	State Level	National	International
Conference			2

PARTICIPATION

	State Level	National	International
Conference		3	3
FDP/PDP		4	

Events Organized (Seminar/Conference/Workshop):

National Conference on Advancing Renewable Energy and Smart Materials- 2025-2026, supported by ANRF under SERB Seminar/Symposia Scheme.

Six days faculty development program on Next-Generation Nanomaterials for a Sustainable, Self-Reliant India – 2025-2-26, funded by AICTE-ATAL academy.

Invited Speaker / Session Chair- Conference / Seminar / Workshop

Participated as invited speaker and Presented my work **Remarkable SO₂ and H₂S Resistant Ability on CO Oxidation by Unique Pd/WO₃ 3D Hollow Sphere Nanocatalyst: Correlating Structure-Activity Relationships on SO₂ Exposure** in **4th International Conference on Chemistry & Chemical Engineering (ICCCE-2025)**, United Research Forum, Paris, UK.

AWARDS, HONORS AND RECOGNITION

Awards / Honors /Recognition	Agency / Institution	Year of Award
Best Paper Oral	Sarah Tucker College, Tirunelveli, Tamil Nadu.	2024
Alumnae Endorsement Award	Sarah Tucker College, Tirunelveli, Tamil Nadu.	2015