Name: Himanshu Sharma

Address: Room No. 72, Microwave Synthetic Lab

Department of Chemistry, Mohanlal Sukhadia University (Raj) 313001

Email: himanshu@mlsu.ac.in

Phone No: +91 8078603595

Website: htttp://himanshusharma.info/



CURRICULUM VITAE

EDUCATIONAL PROFILE

Degree/Certificate Board/University, City

Ph. D. University of Rajasthan, Jaipur

M.Sc. chemistry (organic) M. G. S. University, Bikaner

B.Sc. (Chemistry, Biotech, Botany)

University of Rajasthan, Jaipur

Senior Secondary (XII)(PCB)

Rajasthan Board of Secondary

Education, Ajmer

Secondary School (X) Rajasthan Board of Secondary

Education, Ajmer

POSITIONS HELD AND PRESENT POSITIONS

- ➤ July 2012- Dec. 2013: worked as Assistant professor in Department of Chemistry at Maharshi Dayanand Girls (P.G.) College. Raisinghnagar Distt. Sriganganagar, Rajasthan, India.
- ➤ June 2018- Present: Assistant Professor, Department of Chemistry, Mohan Lal Sukhadia University Udaipur, Rajasthan, India.
- ➤ Aug 2018- Aug 2021: Assistant Warden, Gargi Girls Hostel, Mohan Lal Sukhadia University Udaipur, Rajasthan, India.

ACHEAVMENT AND AWARDS

- ➤ Secure 69th All India Rank in Junior Research Fellowship for doctoral research (UGC–JRF–NET) June-2010 in 2014.
- Qualified the all India Rank Graduate Aptitude Test in Engineering (GATE 2014).
- ➤ Qualified National Eligible Test for Lectureship (NET–LS) Dec-2013.
- Qualified M. Phil. / Ph. D. Admission Test (UniRaj-MPAT) Exam 2013.
- Certificate in French (Language) 2011.
- ➤ Oral presentation on the topic of Trans Effect in seminar in M.Sc. (2012)

RESEARCH INTEREST

Organic Synthetic Chemistry, Bio active Heterocyclic Chemistry, Polymer chemistry, Nano catalysis, Photo Chemistry.

RESEARCH EXPERIENCE

- ➤ Ph.D. for five years: Title: Synthesis and Spectral Studies of Nitrogen and Sulphur containingHeterocycles.
- > Senior Research Fellow for one and half years (Rajasthan University, Jaipur)
- ➤ Junior Research Fellow for 2 years (Rajasthan University, Jaipur)

RESEARCH SKILLS

- Research work experience of work on organic materials
- Analysis of spectroscopic data *viz.*, NMR, IR, UV, and mass spectra.
- Crystal mounting, data collection, reduction and indexing and solving crystal structures (Organic, inorganic, and organometallic molecules).
- ➤ Highly conversant the modern experimental and analytical techniques such as thin layer chromatography, column chromatography, flash chromatography and vacuum distillation.
- > Capable of carrying independent and collaborative research.
- Experience in the characterization of nanoparticles using SEM, SEM-EDX, HRTEM, Powder XRD.
- > Skilled in presentations, paper writing and project conception and project implementation.

> INSTRUMENT HANDLING SKILLS

- NMR Spectrometer (300 MHz, *Bruker*, 400 and 500 MHz *Varian*)
- ➤ Single Crystal Diffractometer (*Smart Apex CCD*)
- ➤ Powder X-Ray Diffractometer (Bruker AXS Smart—Apex CCD)
- ➤ High Pressure Liquid Chromatography (HPLC Shimadzu)
- ➤ FT-Infra Red Spectrometer (*Nicolet Protege 460*)

- ➤ TGA & DTA (Pyris Diamond TG/DTA, Perkin Elmer)
- ➤ UV-Vis Spectrophotometer (*Perkin Elmer and Shimadzu*)
- ➤ CHN Analyzer (*Perkin Elmer*)
- > Flash chromatography

SOFTWARE SKILLS

- ➤ Proficiency with basic computer knowledge: MS office, Windows, Google Docs, C Lang. & Internet, Adobe illustrator, Adobe Photoshop.
- ➤ Single Crystal X-ray Diffraction: SMART, SAINT, SHELXTL, WINGX.
- ➤ Graphics-Viewer: ORTEP, DIAMOND, MERCURY.
- ➤ Chemistry related and other software: CHEM DRAW 11, ACD/Chem Sketch, ISIS DRAW, ACD NMR, Origin, Irfan View, PCPDF WIN (For JCPDS) etc. Sigma plot, Nuts, Delta, Origin, Gaussian 03W, 3, Rasmol, WinGX, APEX2, Mnova.

PROFESSIONAL SKILLS

TECHNICAL & COMPUTER SKILLS

- ➤ Good handling practice of chemicals, being working Heterocyclic compounds with good instrumental handling.
- ➤ Understanding of science and innovative mind with deep interest in the synthesis.
- > Effective communicator, command over Hindi and English.

PUBLICATIONS

- ➤ Himanshu Sharma, Mohini Mourya, Lokesh K. Soni, Debanjan Guin, Yogesh C. Joshi, Mahaveer P. Dobhal, Ashok K. Basak; Iodine mediated synthesis of coumarins from chromenes; *Tetrahedron Letters*; *56* (2015), 7100–7104. (Elsevier Publications)
- Himanshu Sharma, Mohini Mourya, Debanjan Guin, Yogesh C. Joshi, Mahabeer P. Dobhal, Ashok K. Basak; Diisopropylazodicarboxylate mediated selective dehydrogenation of 2-amino-3-cyano 4H-chromenes; *Tetrahedron Letters*; 58 (2017), 1727–1732. (Elsevier Publications)
- Mohini Mourya, **Himanshu Sharma**, Debanjan Guin, Yogesh C. Joshi, Ashok K. Basak; [4+3]-Anulation of 2-iminochromenes with 1,2-diaminobenzene: An access to noval chromenobenzodazepines; *Synopen*; 2 (2018), 128–132. (**Thieme Publication**)
- ➤ ShailySharma^a†, Mahesh Meena^a†, **Himanshu Sharma***a, Dinesh Kumar Yadav*a, Atul Tiwari*b, Ved Prakash Verma^c Fe₃O₄-supported sulfonated graphene-oxide as a green and magnetically separable novel nano catalyst for green synthesis of 2-amino-3-cyano-4H-chromene derivatives and their *in-silico* and *in-vitro* antimicrobial activity studies; *Synthetic communication*; 52 (2022), 1926-1955. (**Taylor & Francis Publications**)
- Surbhi Dhadda, Shaily Sharma, Prakash Jakhar, Himanshu Sharma* Recent Trends in Synthetic Strategies Using Magnetic Nanostructures as Green Catalysts in Synthesis of Pyran Analogues; Applied Organometallic Chemistry, (2022), e6915. (Wiley-VCH Publications)
- ➤ Surbhi Dhadda^a, Prakash Giri Goswami^b, and **Himanshu Sharma**c* Green Synthesis of Chalcone Derivatives Using Chalcones as Precursor; *Green Chemistry New Perspectives*, 2022. (Intech Open Publications)
- ➤ Shaily Sharma^a, Prakash Jakhar^a, and **Himanshu Sharma**^{a*} CuFe₂O₄ nanomaterials: Current discoveries in synthesis, catalytic efficiency in coupling reactions and their environmental applications; *Journal of Chinese Chemical Society*; (2023). (Wiley-VCH Publications)
- Surbhi Dhadda^b, Shaily Sharma^a, Prakash jakhar^a, and **Himanshu Sharma**^{a*} A facile synthesis

and biological evaluation of spiro thiazolidine based derivatives; (2023). RSC advances (RSC Publications)

- ➤ Shaily Sharma^a, Prakash Jakhar^a, and **Himanshu Sharma**^{a*} Facile synthesis of magnetically separable copper ferrite infused sulfonated graphene oxide nanocomposite with antimicrobial evaluation and photocatalytic performance under visible light; *Journal of Applied Polymer Science*; (2023), e54038. (Wiley Publications)
- ➤ Prakash Jakhar^a, Shaily Sharma^a, and **Himanshu Sharma**^{a*} Ultrasonic radiation-induced synthesis, characterization, and biological activity of a new Fe₃O₄ supported-sulfonated graphene oxide/polyaniline nano-composite; *Polymers for Advanced Technologies*; (2023). (Wiley Publications)
- ➤ Prakash Jakhar^a, Shaily Sharma^a, and **Himanshu Sharma**^{a*} Recent Progress, Challenges, and Future Prospects in Solar H2 Evolution via Pure/Sea Water Splitting Using Nanocomposites as Photocatalysts under Solar Light; *ChemistrySelect*; (2023), 8(38), e202301484. (Wiley Publications)

BOOKS

- ➤ Energy, Ecology & Environment Protection, R Publications, 2023, ISBN No. 978-93-93356-40-6
- ➤ A Chemistry for Green & Sustainable Development, Vital Biotech Publication, 2023, ISBN No. 978-81-963382-1-3

ORGANISED CONFRENCES/ WEBINAR

Covid 19: Awareness and Recent Advances

CONFRENCES AND WORKSHOPS (Paper presented and attended)

- 1. National Conference in Environmental Toxicology and Biotechnological Approach to Conserve Environment, January 30-31, 2009, ICG, Jaipur.
- National Symposium on Green Economy & Harnessing Natural Products for sustainable Development, July12, 2014, University of Rajasthan, Jaipur.
- International Conference on Advanced Material Science and Engineering, October 13, 2014,
 Biyani Group of Colleges, Jaipur.
- International Conference of Emerging Trends in Physical Science & Technology, January 16-18, 2015, University of Rajasthan, St. Wilfred PG College and Parishkar College of Global Excellence, Jaipur.
- National Conference on Frontiers at The Chemistry-Allied Sciences Interface, March 13-14,
 2015, University of Rajasthan, Jaipur.
- International Conference on Current Challenges in Drug Discovery Research, November 23-25, 2015, MNIT, Jaipur.
- 7. International Conference on Frontiers at The Chemistry-Allied Sciences Interface, April 25-26, 2016, University of Rajasthan, Jaipur.
- 8. National Conference on Sustainable Chemical & Material Sciences, August 5-6, 2016, S.S. Jain Subodh P.G. (Autonomous) College, Jaipur.
- National workshop on Electrophoresis-Currents Trends & Future Prospects, January 28, 2017, Suresh Gyan Vihar University, Jaipur.
- National workshop on Intellectual Property Rights Awareness and Training Program,
 February 24, 2018, Jaipur.
- International Conference on Frontiers at the chemistry Allied Sciences Interface. 2018,
 Jaipur.
- 12. UGC-SAP sponsored workshop on "VERMICOMPOSTING BIOTECHNOLOGY: An

- Improvised Technique for Institutional Waste Management" December 21-22, 2018, Udaipur.
- National Conference on "Trends and Innovation in Chemistry" (NCTIC-2019) December 06-07, 2019, Kapasan
- 14. International Virtual Conference on Frontiers in Chemical Science (IVCFCS 2021) June 25, 2021
- 15. ONE DAY WORKSHOP on Intellectual Property Rights Patent, Design, Trademark, Copyright & Geographical Indication (IPR-2022) February 22, 2022
- 16. IP Awareness/Training program under National Intellectual Property awareness mission on January 28,2022
- 17. Oral presentation entitled "Recent Advancement in Synthetic Approaches via Magnetic Nanostructures as Green Catalysts in Synthesis of Pyran Moieties" in 1st International Conference on Recent Advances In Chemical Sciences 2023 (ICRACS 2023), Mohanlal Sukhadia University, Jan 16-18, 2023.

ORIENTATION/REFRESHER COURSES/FDP ATTENDED

- UGC-Sponsored 113th Orientation Programme, University of Rajasthan, 3 Feb, 2020 22 Feb, 2020.
- Two-Week Interdisciplinary Refresher Course/Faculty Development Programme for Advanced Research Methodology Tools and Techniques, Teaching Learning Centre, Ramanujan College, 30 Jan, 2021 – 14 Feb, 2021.
- One Week International Faculty Development Programme on Recent Advancements In Chemical Sciences And Environmental Engineering, S.S.Jain Subodh P.G. (Autonomous) College, Jaipur, 15 Feb, 2021 – 19 Feb, 2021.
- One Week Online National Development Program on Academic Report Writing and Research Methodology, Sri Guru Tegh Bhadur Khalsa College, University of Delhi, 4 Mar, 2021 - 10 Mar, 2021.

RESEARCH GUIDANCE: 04

Name of PhD Scholars

- 1. Prakash Jakhar
- 2. Shaily Sharma
- 3. Mamata
- 4. Yashpal Sen

RESEARCH PROJECT

S.No.	Title of Project	Amount	Funding agency	Status
1.	Novel natural products from	4.5 crore	RUSA-MHRD	Ongoing
	traditional medicinal plants of			
	South Rajasthan region:			
	Structural, synthetic and			
	biological studies (Co-PI)			