Dr. Rama Kanwar Khangarot

Department of Chemistry Mohanlal Sukhadia University Udaipur 313001, Rajasthan, India ramakanwar.mlsu@gmail.com



Academic Qualification

2005	M.Sc. (Organic Chemistry Specialization)- S. D. Govt. College, Beawar Maharshi Dayanand Saraswati University, Ajmer, Rajasthan
2012	Ph.D Indian Institute of Technology Bombay, Powai, Mumbai, India

Positions Held and Present Position

Dec 2012- Dec 2014	Post-doctoral Associate at City College of New York, CUNY, NY, USA
Feb 2015- June 2015	Research Associate at IISER Bhopal, Madhya Pradesh, India
July 2015- June 2018	Assistant Professor, Manipal University Jaipur, Rajasthan, India
June 2018-	Assistant Professor, Mohanlal Sukhadia University Udaipur, Rajasthan, India

Awards and Honours

- Senior Research Fellowship [CSIR] award in June 2009
- Junior Research Fellowship [CSIR] award in June 2007
- Graduate Aptitude Test in Engineering (GATE) qualified in 2007 (Percentile: 99.15; All India Rank: 40)
- Council of Scientific and Industrial Research Lectureship award (CSIR, New Delhi, India) qualified in Dec 2006
- State Level Eligibility Test for Lectureship, Rajasthan (SLET) [RPSC] 2005
- Stood 1st in the M.Sc. examination in the College in 2005
- Stood 1st in the B.Sc. examination in the College in 2003
- Won the Zahoor Mohammad Smriti Medal for securing highest marks in chemistry in B.Sc. examination 2003
- Gargi prize winner at state level in Secondary examination 1998

Publications

• "Efficient Antibacterial Activity in Copper Oxide Nanoparticles Biosynthesized via Jasminum sambac Flower Extract" Manisha Khandelwal, Ashok Kumawat, Kamakhya Prakash Misra, **Rama Kanwar Khangarot**, Particulate Science and Technology, 2022, 1-13.

• "Recent Trends in Photocatalytic Enantioselective Reactions" Manmohan Singh, Renu Verma, Palavi Jindal, Jagdish Prasad, S. L. Kothari, Narendra Pal Lamba, Anshu Dandia, **Rama Kanwar Khangarot**, Topics in Current Chemistry, 2022, 380:48, 1-30.

• "Recent Developments in Nucleophilic Fluorination with Potassium Fluoride (KF): A Review" Manisha Khandelwal, Gangotri Pemawat, **Rama Kanwar Khangarot**, Asian Journal of Organic Chemistry, 2022, 1-16.

• "Band Gap Reduction and Zn related defects enhancement in Zn(Al, Ce)O nanoparticles" Ankit Sharma, Ashok Kumawat, Saikat Chattopadhyay, **Rama Kanwar Khangarot**, Nilanjan Halder, R. D. K. Misra, Kamakhya Prakash Misra, Materialstoday: Proceedings, 2021, 1-5.

• "Low Temperature Induced Red-shift in Violet-Blue Emission from Zn(Al, Ag)O Nanoparticles" Ankit Sharma, Ashok Kumawat, Saikat Chattopadhyay, **Rama Kanwar Khangarot**, R. D. K. Misra and Kamakhya Prakash Misra, Materials Technology: Advanced Performance Materials, 2021, 1-10.

• "Band Gap Reduction and Quenching of p-d Exchange Interaction in Sol-Gel Derived Zn(Al,Cu)O Nanostructures" Ankit Sharma, **Rama Kanwar Khangarot**, Kamakhya Prakash Misra, Devesh Misra, Saikat Chattopadhyay, P Babu, Nilanjan Halder, Phys. Scr. 2021, 96, 075803.

• "Syntheses and Applications of Singh's Catalyst" Manisha Khandelwal, Sumit Kumar Ray, **Rama Kanwar Khangarot**, Synthesis, 2020, 52, 3577-3582.

• "Rise in UV and blue emission and reduction of surface roughness due to presence of Ag and Al in monocrystalline ZnO films grown by sol-gel spin coating" Ankit Sharma, **Rama Kanwar Khangarot**, Nishant Kumar, Saikat Chattopadhyay, Kamakhya Prakash Misra, Materials Technology: Advanced Performance Materials, 2020, 1-11.

• "Generating Stereodiversity: Diastereoselective Fluorination and Highly Diastereoselective Epimerization of α -Amino Acid Building Blocks" Wei Wei, **Rama Kanwar Khangarot**, Lothar Stahl, Cristina Veresmortean, Padmanava Pradhan, Lijia Yang, and Barbara Zajc, Org. lett. 2018, 20, 3574-3578.

• "Kinugasa Reaction: A Direct One Pot Route to Highly Functionalized β -Lactams" **Rama K. Khangarot** and Krishna P. Kaliappan, Eur. J. Org. Chem., 2013, 7664-7677.

• "A Stereoselective Synthesis of Trifluoromethyl-Analogues of Polyhydroxy Pyrrolidines"

Rama K. Khangarot and Krishna P. Kaliappan, Eur. J. Org. Chem., 2013, 2692-2698.

• "A Stereoselective Route to Aza C-Aryl Glycosides from Arynes and Chiral Nitrones" **Rama Kanwar Khangarot** and Krishna P. Kaliappan, Eur. J. Org. Chem., 2012, 5844-5854.

• "A Stereoselective Synthesis of Sugar Derived Chiral β -Lactams" **Rama Kanwar Khangarot** and Krishna P. Kaliappan, Eur. J. Org. Chem., 2011, 6117-6127.

Memberships of Societies

- Member: American Chemical Society India, 2016
- Life Member: Indian Society of Chemists and Biologists since 2017

Grants

- RUSA 2.0 MHRD sanctioned a research grant of Rs. 4.75 Crore (as Co-PI)- 2020
- **Start-up Grant** (Under the MHRD/UGC Empowered Committee's Basic Science Research (BSR) Programme)- 2019
- Seed Money Grant (Manipal University Jaipur, Jaipur (Raj.))-2016

Research Interest

- Nanochemistry
- Synthesis of Heterocycles
- Synthesis of biologically active molecules
- Fluorine Chemistry