# KETUL KUMAWAT

## CSIR SRF RESEARCH SCHOLAR

**Address** Jaipur, Rajasthan 303107
**Phone** (+91)8107988135
**E-mail** Ketulkumawat@gmail.com
https://www.linkedin.com/in/ketulkumawat-3b3591181

## Websites, Portfolios, Profiles

- https://www.linkedin.com/in/ketulkumawat-3b3591181

Dynamic Research Scientist with a PhD in Chemistry and strong expertise in organic synthesis, selective chromium(VI) oxidants, and advanced analytical techniques (FTIR, UV–Vis, HPLC, GC–MS, MS). Demonstrated excellence in method development, kinetic/mechanistic studies, and chemical characterization with solid knowledge of QA/QC and ISO/GLP standards. Published author of multiple research papers and co-inventor on an **Two Indian patent** (Application No. 202511052608 & 202511103951). Qualified **CSIR NET JRF, SRF, GATE, CGSET**, and awarded the **Young Scientist Award** by the Indian Chemical Society. Known for accuracy, innovation, and delivering high-quality scientific outcomes.

## SKILLS

- Expertise in synthesis, distillation, gravimetry and chromatography, Instruments handled
- UV-VISIBLE spectrophotometer, Digital skills
- RSCIT
- Skilled in FTIR, UV–Vis, HPLC, GC–MS, and basic wet chemistry.
- Experience in organic synthesis and reaction optimization.
- Knowledge of QA/QC, GLP–GMP, and ISO standards.
- Strong in method development, sample testing, and data analysis.
- Good documentation, teamwork, and problem-solving skills

## Work history

**2021-04 - Current**

### CSIR SRF Research Scholar

*JAI NARIAN VYAS UNIVERSITY JODHPUR, Jodhpur, India*

- Teaching workload: the norms of UGC.CSIR UGC

## Education

**2025-11**

### Ph.D.: CHEMICAL SCIENCE

*JAI NARIAN VYAS UNIVERSITY, JODHPUR, RAJASTHAN*

GPA: Pursuing

**2020-01**

### Bachelor of Education: Teaching and Child Development

*UNIVERSITY OF RAJASTHAN*

GPA: 80%

**2018-01**

### Master of Science: Chemistry

*UNIVERSITY OF KOTA*

GPA: 73.55%

**2016-01**

### Bsc.: CBZ

*UNIVERSITY OF RAJASTHAN*

GPA: 75%

## Personal Details

**Date of Birth:** 04/07/1997

## Additional Information

Qualified **CSIR NET JRF, SRF, GATE, CGSET** in Chemistry.
Awarded the **Young Scientist Award** by the Indian Chemical Society.
Co-Inventor of an**Two Indian Patent** (Application No. 202511052608 & 202511103951).
Published multiple **research papers** in reputable journals.
Authored the book **"International Molecular Insights."**
Presented research in several **national conferences and webinars**.

## References

- Pradeep, Sharma, Professor (Dr.), FRSC (London), drpkvs27@yahoo.com, 7597942714, Jai Narain Vyas University, Former HOD, Director (UGC-HRD) & Registrar, Jodhpur
- Om, Prakash, Assistant Professor, doctorop29@gmail.com, 9314010029, Jai Narain Vyas University, Research Supervisor, Jodhpur

## CONFERENCE

- Role of Chemical Sciences in Sustainable Development Organized by Department of Chemistry and IQAC of Indira Gandhi Kala Mahavidyalaya, Ralegaon in collaboration with Indira Mahavidyalaya.
- DEPLETING NATURAL RESOURCES, ENVIRONMENTAL CRISIS AND REMEDIES IN JAMBHANI PHILOSOPHY.

- Organised by Guru Jambheshwar Environment Conservation Research Chair, Jai Narain Vyas University, Jodhpur
- International E-Conference on Sustainable and Futuristic Materials (SFM-2023)
- Organized by International Research Center and Department of Chemistry, Kalasalingam Academy of Research and Education.
- New Trends in Chemical Research"(ICNTCR-2022) organized by Department of Chemistry, SUS Govt. College, Matak Majri, Karnal
- "NATIONAL SYMPOSIUM OF MENTAL HEALTH DEVELOPMENT: CHALLENGES AND SOLUTIONS" organized by JAI NARAIN VYAS UNIVERSITY, JODHPUR

## *WEBINAR*

- Empowering Diversiy in Science (GWB-2022) on 16th February 2022 organized by Department of Chemistry, Kamla Nehru Mahavidyalaya, Nagpur
- FUTURE OF WINTERS IN The CLIMATE CHANGE ERA
- Organised by DR. RAJESH ACHARYA Chief Scientific Advisor Nanoland
- Reviewing of Literature for Formulating a Research Problem
- DATA COLLECTION
- Organised by Devi Ahilya Arts and Commerce College (Jagdale College) Indore MP, Research Foundation of India & JHERF
- INTELLECTUAL PROPERTY RIGHTS AWARENESS PROGRAM
- In association with CGPDTM, Ministry of Commerce & Industry, Government of India
- Synthesis Characterizations and Properties of Nano particles
- Organised by PODDAR INTERNATIONAL COLLEGE, JAIPUR

## *Research Papers*

1.Jangir Rakesh, Kumawat Ketul, Bishnoi Pramila, and Prakash Om*
Chemical Kinetics Laboratories, Department of Chemistry, J.N.V. University Jodhpur - 342 005 (Rajasthan), INDIA Structure-reactivity relation in the oxidation of some aliphatic aldehydes by Tripropylammonium Chlorochromate Vol.27 (3) March (2023) Res. J..Chem. Environ.
2. Oxidation kinetics of some Aliphatic Primary Alcohols by Tripropylammonium Chlorochromate Pramila Bishnoi, Ketul Kumawat, Rakesh Jangir, Ambika Singadiya and Om Prakash* Res. J. Chem. 2023. Communicated for publication
3. Structure-reactivity relation in the oxidation of some aliphatic aldehyde by Tripropylammonium Chlorochromate. Rakesh Jangir, Ketul Kumawat, Pramila Bishnoi, Ambika Singadiya and Om Prakash* Res. J. Chem., 202327(3) Proofs, Received; 47-80.
4. Kinetic and mechanistic studies in the Oxidative regeneration of carbonyl compounds from oximes by diethylammonium chlorochromate Ketul Kumawat, D. Yajurvrdi, A. Choudhary and Om Prakash Res. J. Chem. Envior. 2024 Proofs Received 16.07.2024
5., Correlation Analysis of Structure & Reactivity in the Oxidation of Aromatic Aldehydes By 2- Picolinium Chlorochromate Ketul Kumawat, Anurag Choudhary and Om Prakash Turk. Comp. Theo. Chem., 2024 Revised on

18.06.2024; Accepted on 25.07.2024
6. Structure-Reactivity Correlation in the Oxidation of Aliphatic Primary Alcohols by Tripropylammonium chlorochromate. Journal of Applicable Chemistry 2025,14(2), p207-216. Pramila Bisnoi, Ambika Singadiya, Rakesh Jangir, Ketul Kumawat, and Om Prakash

7. Oxidation Kinetics of DL-Methionine, a Sulphur containing Amino acid by Tripropylammonium Chlorochromate. Journal of Chemical, Biological and Prakash Physical Sciences, 2025. Ketul Kumawat, and Om J. of Appl. Chem. 2025, 14(2), 207–216.

8. Rakesh Jangir, Ambika Singadiya, Pramila Bisnoi, Ketul Kumawat, and Om Prakash. Oxidation of some Lower Oxyacids of Phosphorus by Tripropylammonium Chlorochromate: J. Emer. Tech. Innov. Res., 2025, 12(2) 337 – 343.

9 . Correlation Analysis of Reactivity in the Oxidation of some Vicinal and Non-vicinal Diols by Picolinium Chlorochromate (PiCC) Sapna Rankawat, Divya

Chaudhary, Jyoti Bhati, Ketul Kumawat and Om Prakash* GPG – Res. J. Chem., 2025, 9(2) 01–13.

MS Accepted for Publication:
10. Kinetics and Mechanism of Oxidation of Some Thioacids by Tetramethylguadinium Chlorochromate (TMGCC) Jyoti Bhati, Sapna Rankawat, Divya Choudhary, Ketul Kumawat and Om Prakash *Int. J. Res. Anal. Rev., 2025, Communicated on 02.10.2025
11. Oxidation Kinetics and Mechanistic Studies of Organic Acids by Tripropylammonium chlorochromate Divya Chaudhary, Jyoti Bhati, Sapna Rankawat, Ketul Kumawat and Om Prakash* J. of Appl. Chem. 2025, Communicated on 02.10.2025

## *QUALIFIED EXAMS*

- CSIR- NET - SRF QUALIFIED 2023
- CSIR NET JRF 2021
- Rank - 103
- GATE-2020 QUALIFIED
- Rank - 792
- CG- SET QUALIFIED

## *ACHIEVEMENTS & AWARDS*

Qualified **CSIR NET JRF, SRF, GATE, CGSET** ,**DST** in Chemistry.
Awarded the **Young Scientist Award** by the Indian Chemical Society.
Co-Inventor of an **Two  Indian Patent** (Application No. 202511052608).
Published multiple **research papers** in reputable journals.
Authored the book **“International Molecular Insights.”**
**Awarded &** Presented research in several **national conferences and webinars**.