

# Sandeep Chaudhary Ph.D, FICS, MRSC

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## Office Address:

Associate Professor, Department of Medicinal Chemistry  
Laboratory of Bioactive Heterocycles and Catalysis (BHC lab)  
**National Institute of Pharmaceutical Education and Research Raebareli (NIPER-R)**  
(An Institute of National Importance, Department of Pharmaceuticals, Ministry of Chemicals and Fertilizers, Government of India)  
Bijnor-Sisendi Road, Near CRPF Base Camp, Sarojini Nagar, Lucknow, Uttar Pradesh-226002, INDIA



## Additional Positions:

Honorary Professor, Perm State University, Russia (2023- Present)  
Member, Royal Society of Chemistry (2025-Present)  
Member, Indian JSPS Alumni Association (2012- Present)  
F.I.C.S, Fellow of Indian Chemical Society (2014-Present)

## Editorial Board Memberships:

*Scientific Reports* (2025-Present)  
*Arkivoc* (2012- Present)  
*Current Organocatalysis* (2020- Present)  
*Current Indian Science* (2021- Present)  
*Current Drug Discovery Technologies* (2024-Present)

## Previous Assignments:

*Former Dean* (2022-2025)  
*Former HoD* (2021-2025)

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**Google Scholar ID:** [AJsN-F4DK5L8ca](#)

**Vidwan-ID:** 254718

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## Work Experience

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| 27 Sep, 2023 – Present       | <i>Honorary Professor</i> , Perm State University, Russia.                                                                                                                                                   |
| 04 Jun, 2021 – Present       | <i>Associate Professor</i> , Department of Medicinal Chemistry, NIPER-Raebareli, Lucknow, Uttar Pradesh, India.                                                                                              |
| 22 Feb, 2022 – 01 May, 2025  | <i>Dean</i> , NIPER-Raebareli, Lucknow, Uttar Pradesh, India.                                                                                                                                                |
| 04 Aug, 2021 – 14 Sep, 2025  | <i>Head of the Department (HoD)</i> , Department of Medicinal Chemistry, NIPER-Raebareli, Lucknow, Uttar Pradesh, India.                                                                                     |
| 11 Feb, 2019 – 03 June, 2021 | <i>Assistant Professor Grade I</i> , Department of Chemistry, MNIT Jaipur, India.                                                                                                                            |
| 03 Oct, 2012 – 10 Feb, 2019  | <i>Assistant Professor Grade II</i> , Department of Chemistry, MNIT Jaipur, India.                                                                                                                           |
| Aug, 2013 – Aug, 2015        | <i>Adjunct Faculty</i> , Materials Research Centre, MNIT Jaipur, Rajasthan, India.                                                                                                                           |
| Nov, 2010 – Sep, 2012        | <i>JSPS Postdoctoral Fellow</i> , MCRF-Institute of Microbial Chemistry, Tokyo, JAPAN.<br>(Advisor: <b>Prof. Dr. Masakatsu Shibasaki</b> , Emeritus Professor, University of Tokyo & University of Hokkaido) |
| Aug, 2009 – Oct, 2010        | <i>Postdoctoral Fellow (NIH)</i> , The City University of New York at Hunter College, New York, USA. (Advisor: <b>Prof. Wayne W. Harding</b> )                                                               |
| Jan, 2008 – July, 2009       | <i>Postdoctoral Fellow (NCRR-NIH)</i> , The City University of New York at Hunter College, New York, USA. (Advisor: <b>Prof. Wayne W. Harding</b> )                                                          |

## Education

**Feb, 2002- Aug, 2007** **Ph.D** from Division of Medicinal & Process Chemistry, CSIR-CDRI Lucknow [Affiliated to Jawaharlal Nehru University (JNU), New Delhi]; India. (Advisor: **Prof. Dr. Chandan Singh**)

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| <b>2002-2003</b> | <b>Pre-PhD</b> Course work (2 Semester) on Organic & Medicinal Chemistry, conducted jointly by JNU, New Delhi & CDRI, Lucknow. |
| <b>1997-1999</b> | <b>M.Sc</b> Chemistry (Specialization in Organic Chemistry), <i>DDU Gorakhpur University</i> , India.                          |
| <b>1994-1997</b> | <b>B.Sc</b> (Chemistry, Botany & Zoology), St. Andrew's College ( <i>DDU Gorakhpur University</i> ), India.                    |

#### **Academic and Professional Awards**

| <b>Award</b>                                                                                    | <b>University/Research Organization /Funding Sponsor</b>                                                                                                                                     | <b>Year</b>                                              |
|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| JSPS Bridge Fellowship                                                                          | Indian JSPS Alumni Association (IJAA) and Japan Society for the Promotion of Science (JSPS) Japan.                                                                                           | <b>2026</b>                                              |
| Gyanoday Puraskar                                                                               | NIPER-Raebareli                                                                                                                                                                              | <b>2026</b>                                              |
| Member of The Royal Society of Chemistry (MRSC)                                                 | Royal Society of Chemistry (2025)                                                                                                                                                            | <b>2025</b>                                              |
| Honorary Professor                                                                              | Perm State University, Russia                                                                                                                                                                | <b>2023</b>                                              |
| Letter of Appreciation                                                                          | Japan Information Centre, Embassy of Japan, MEXT Research Fellowships, New Delhi                                                                                                             | <b>2020-2024</b>                                         |
| AD Scientific Index Ranking                                                                     | World Scientist and University Ranking                                                                                                                                                       | <b>2021-2024</b>                                         |
| “Certificate of Reviewing” by Journals-Bioorganic Chemistry, Journal of Molecular Structure     | Elsevier, Amsterdam, The Netherlands                                                                                                                                                         | <b>2019</b>                                              |
| VIFA 2016 Outstanding Faculty Award                                                             | Venus International Foundation, Chennai                                                                                                                                                      | <b>2016</b>                                              |
| <i>BMCL Certificate of Outstanding Contribution in Reviewing</i>                                | Elsevier, Amsterdam, The Netherlands                                                                                                                                                         | <b>2015, 2017</b>                                        |
| BMCL Certificate of Reviewing                                                                   | Elsevier, Amsterdam, The Netherlands                                                                                                                                                         | <b>2015, 2017</b>                                        |
| Fellow of Indian Chemical Society                                                               | Indian Chemical Society, Kolkata                                                                                                                                                             | <b>2014-Present</b>                                      |
| <i>DST-SERB Young Scientist Award</i>                                                           | Department of Science and Technology, Ministry of HRDG, New Delhi                                                                                                                            | <b>2014</b>                                              |
| Certificate of Appreciation                                                                     | <i>American Chemical Society, U.S.A</i>                                                                                                                                                      | <b>2013</b>                                              |
| <i>2012 Top 10 Best Reviewer award for “Bioorganic and Medicinal Chemistry Letters” Journal</i> | Elsevier B.V. Registered Office, Amsterdam, The Netherlands & BMCL Regional Journal Office, Tokyo, Japan                                                                                     | <b>2012</b>                                              |
| JSPS Postdoctoral Fellowship                                                                    | <i>Japan Society for the Promotion of Science, Japan</i><br>Host Institute: <i>Institute of Microbial Chemistry, Microbial Chemistry Research Foundation (IMC-MCRF), Tokyo, Japan</i>        | <b>2010 – 2012</b>                                       |
| Postdoctoral Fellowship (NIH)                                                                   | <i>The City University of New York at Hunter College, New York, U.S.A</i><br>Funding agency: <i>National Institute of Drug Abuse (NIDA), National Institute of Health (NIH), U.S.A</i>       | <b>2009-2010</b>                                         |
| Postdoctoral Fellowship (NCRR-NIH)                                                              | <i>The City University of New York at Hunter College, New York, U.S.A</i><br>Funding agency: <i>National Centre for Research Resources (NCRR), National Institute of Health (NIH), U.S.A</i> | <b>2008-2009</b>                                         |
| CSIR S.R.F                                                                                      | Council of Scientific & Industrial Research, New Delhi, India                                                                                                                                | Jul, <b>2005</b>                                         |
| CSIR J.R.F                                                                                      | Council of Scientific & Industrial Research, New Delhi, India                                                                                                                                | Jul, <b>2003</b>                                         |
| CSIR-NET (Lectureship)<br>(3 times Qualified)                                                   | CSIR-UGC, New Delhi, India                                                                                                                                                                   | Jun, <b>2002</b><br>Dec, <b>2001</b><br>Jun, <b>2001</b> |
| GATE                                                                                            | Six old IIT's & IISc, Bangalore, India                                                                                                                                                       | Apr, <b>2002</b>                                         |
| CDRI PGRT                                                                                       | Ministry of Health (MOH), New Delhi, India                                                                                                                                                   | Feb, <b>2002</b>                                         |
| ASRB NET Certificate                                                                            | Agricultural Scientist Recruitment Board, New Delhi, India                                                                                                                                   | Oct, <b>2001</b>                                         |
| Research Entrance Test                                                                          | DDU Gorakhpur University, India                                                                                                                                                              | Mar, <b>2001</b>                                         |

#### **PROFESSIONAL INTERNATIONAL / NATIONAL MEMBERSHIP:**

- **Selection Committee Member** (Life Science-Biomedical Sciences) DST INSPIRE FACULTY FELLOWS under INSPIRE Faculty Fellowship component of Inspire Scheme, DST, GOI **2024-2026**
- **Selection Committee Member** (Chemical Sciences) DST INSPIRE FACULTY FELLOWS under INSPIRE Faculty Fellowship component of Inspire Scheme, DST, GOI **2024-2026**
- **Selection Committee Member (Chemistry)**, MEXT Research Fellowship **2020, 2021, 2022, 2023, 2024, and 2025** Embassy of Japan, Government of Japan.
- PhD examiner for various national and international universities.
- Special invitees as Resource person in various DST, SERB, UGC sponsored conferences, workshops and symposiums.
- Member (**2023-Present**) Board of Studies, Madan Mohan Malviya University of Technology, Gorakhpur.
- Subject Expert in the Inspection team for Pharmacy Course (B.Pharm, M.Pharm, Pharm. D, Pharm. D (PB) of Devbhoomi Institute of Education Science and Technology, Dehradun for Session 2023-24 affiliated with Veer Madho Singh Bhandari Uttarakhand Technical University, Dehradun.
- **French Grant Reviewer Committee Member**, French National Research Agency (ANR), **2021** Generic Call for Proposal (AAPG2021), France.
- **SERB Grant Reviewer**, SERB, **2023, 2024, 2025**
- **DBT Grant Reviewer**, DBT, **2024-25, 2025-26**
- **UPCST Grant Reviewer** **2025-26, 2026-27**

#### Achievements in Nutshell

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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Sponsored Projects Ongoing = 01;<br/>Applied = 04</b>                                                                                                                                       | <b>Sponsored Projects Completed = 16</b>                                                                                                                        | <b>Projects as Host Researcher = 04</b>                                                                                                                                       |
| <b>Total List of Publications in SCI journals = ~110 [h-index: 27, i10-index: 60, Citation: 2085]</b>                                                                                          | <b>Invited Talks / Plenary lecture/<br/>Chaired Session = 80</b>                                                                                                | <b>Conferences / Workshops /<br/>Invited lectures organized/<br/>Attended = 06</b>                                                                                            |
| <b>Patents = 06 [02 patents in process]<br/>Book Chapter = 12</b>                                                                                                                              | <b>International Conferences = 21<br/>National / International<br/>Collaborations: 22</b>                                                                       | <b>International/ National<br/>Conferences with proceedings =<br/>72</b>                                                                                                      |
| <b>Teaching Experience: ~14 years<br/>Research Experience:<br/>14 years as Asst. / Asso. Prof.<br/>4 years 9 months as Postdoc<br/>Total Post-Ph.D Working Experience =<br/>&gt;18.5 years</b> | MOU Signed between MNIT Jaipur and PGNIU, Perm, Russia<br>Foreign Expert in International Project funded by the Ministry of Education and Science, Perm, Russia | <b>Postdoc Supervision: 04<br/>Ph.D Supervision: 14<br/>(09 completed &amp; 06 ongoing)<br/>PG Project Supervision:<br/>Completed (54 Students)<br/>Ongoing (11 Students)</b> |

#### Research Areas

- **Organo-catalyzed C-H bond activation / Transition metal-catalyzed C—C & C—N bond formation:** Exploration with special emphasis by the use of cheaper transition metals; design and development of new metal-ligand catalyst systems and their investigations in direct C-H bond activation reactions; Investigation of cross Dehydrogenative coupling, hydroarylations, Cyclization/Annulation and addition reactions via development of novel metal-ligand catalytic systems.
- **Medicinal Chemistry, Drug Discovery & Process Development:** Mechanism/target/structure-based Drug Design & Drug Discovery, Scaffold Hopping, lead generation and lead optimization; Drug Design and Structure-Activity Relationship (SAR) study of new bioactive molecules/NCE's [Antimalarials, Antitubercular, Anti-infective, Anticancer]; Mechanism/target/structure-based drug design for neurodegenerative disorders.
- **Green chemistry:** Application of green organic synthetic transformations following 10 principals of Green Chemistry.
- **Development of New Synthetic Methodologies & its application in the Total synthesis of biologically active Natural Products/Drugs/Therapeutics.**
- **Asymmetric catalysis / Synthesis:** Development of catalytic asymmetric reactions, Design and development of new metallo-catalyst and organo-catalysts, development of direct catalytic asymmetric C-C bond-forming transformations.

#### Teaching Experience (~ > 14 years)

##### At NIPER-Raebareli

- **M.Pharm level:** MC 620 Logics in Organic Synthesis-II; MC 511 Spectral Analysis; MC 520 Logic in Organic Synthesis-I; MC 650 Stereochemistry and Drug Action; GE 511 and GE 611: Seminar; LG 510 and LG 610: Laboratory experience; PA 510 Topics in Pharmaceutical Analysis; PA 610 Pharmacopoeial Methods of Analysis; TH 598 Synopsis; TH 599 Presentation; TH 698 Thesis; TH 699 Defense of Thesis.
- **Ph.D level:** MC 810 Principle of Peptide Chemistry; MC 710 Stereoselective and Stereospecific synthesis; MC 730 - Organometallic and Sustainable Chemistry in the Synthesis of Pharmaceuticals.

#### At MNIT Jaipur

- **At UG level:** CYT 101 Engineering Chemistry (Theory, Tutorial & Practical's)
- **At PG (M.Sc 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> Semester) Level:**
  - CYT 513 Organic Chemistry                      CYT 632 Organic Synthesis                      CYT 635 Bioorganic Synthesis
  - CYT 601 Bio-inorganic Chemistry                      CYT 611 Stereochemistry, structure & reaction mechanism of Organic compounds
  - CYT 514 Analytical Chemistry                      CYT 638 Heterocyclic Chemistry                      CYT 643 Pharmaceutical Chemistry
  - CYP604 Chemistry Practicals                      CYP614 Organic Chemistry Practicals                      CYT 603 Analytical Chemistry

#### Sponsored Projects Ongoing

1. **UPCST Grant (2025-2028).**  
**Funding Agency:** UPCST (2025-2028); Total Sanctioned Amount: Rs. 14,86,000/-  
**Project Title:** Exploration of multi-targeted Novel Aza-/Thia-heterocycles as selective Acetylcholinesterase (AChE) and  $\beta$ -Secretase (BACE1) Inhibitors: A systematic Investigation towards the development of Anti-Alzheimer's agents.

#### Projects Completed as PI

2. **ICMR Grant (Adhoc) in collaboration with AIIMS New Delhi (2022-2025).**  
**Funding Agency:** ICMR (2022-2025); Total Sanctioned Amount: Rs. 88,98,000/- **NIPER-R Share:** ~12.50 lakhs  
**Project Title:** Discovering the anti-inflammatory effects of novel Toll-like receptor signaling inhibitors on rheumatoid arthritis mononuclear cells and synovial fibroblasts: An in vitro study to identify TLR signaling inhibition as future potential strategy to control inflammation in rheumatoid arthritis.
3. **Core Research Grant (CRG) in collaboration with AIIMS New Delhi (2020-2024).**  
**Funding Agency:** SERB (2020-2024); Total Sanctioned Amount: Rs. 67,81,480/- **NIPER-R Share:** 5.225 lakhs  
**Project Title:** Exploring the immunomodulatory activities of novel Toll-like receptor-signaling inhibitors in peripheral blood mononuclear cells from lupus patients: A study to identify TLRs as drug targets for lupus.
4. **Indo-Russian International Project**  
**Funding Agency:** Department of Science and Education, Perm, Russia Federation (2019-2022); Sanctioned Amount: 45 lakhs  
**Project Title:** Nitrogen- and Oxygen- containing heterocycles in the synthesis of drugs - from research to practice.
5. **FDCT Indo-Macao International Project (in collaboration with Macao University of Science and Technology (MUST), Macao, China)**  
**Funding Agency:** FDCT (2020-2021); Total Sanctioned Amount: 4,95,000 MOP (~ Rs. 45,82,764/-)  
**Project Title:** Investigation of Ozonide analogs for overcoming drug resistance in cancer and study of their mechanism of action.
6. **DST-NRF Indo-South Africa Joint Research Project**  
**Funding Agency:** DST (2016-2019); Sanctioned Amount: 33.36 lakhs  
**Project Title:** Development of innovative Indigenous Knowledge System (IKS)-based new cosmetic raw material: Isolation, extraction and chemical profiling of melanin biosynthesis pathways-based natural compounds from Indian and South-African medicinal plants.
7. **DST-ARRS Indo-Slovenian Joint Research Project**  
**Funding Agency:** DST (2015-2018); Sanctioned Amount: 14.5 lakhs  
**Project Title:** Exploring Antimalarial Peroxides from Bench-side to Bedside: Synthesis, Chemistry, Antimalarial Assessment and SAR studies of Novel functionalized 1, 2, 4-Trioxanes and 1, 2, 4, 5-Tetraoxanes against Multi-drug-Resistant Malaria.
8. **DST-RFBR Indo-Russian Joint Research Project**  
**Funding Agency:** DST (2014-2016); Sanctioned Amount: 26.236 lakhs

**Project Title:** Exploring nitrogen-based heterocycles from bench-side to bedside: Synthesis, chemistry, stereochemical assignment, structure-activity relationship studies and biological evaluation.

9. **CSIR Research Grant**

**Funding Agency:** CSIR (2014-2017); Sanctioned Amount: 24.75 lakhs

**Project Title:** Strategic investigation of organo-catalyzed direct arylation of arenes and hetero-arenes *via* sp<sup>2</sup> C-H bond activation: Application to an efficient synthesis of bioactive heterocycles.

10. **DST-SERB Start-up Research Grant (Young Scientist)**

**Funding Agency:** SERB-DST (2014-2017); Sanctioned Amount: 25 lakhs

**Project Title:** Exploring non-opioid analgesics from bench-side to bedside: An efficient, cost-effective, asymmetric synthesis and SAR study of new non-opioid anti-pain lead compound, Conolidine.

11. **Organizing International Conference - “Current Challenges in Drug Discovery Research (CCDDR 2015)”**

**Funding Agency:** SERB (23<sup>rd</sup> Nov- 25<sup>th</sup> Nov, 2015); Sanctioned Amount: 0.75 lakh

12. **Seed Grant (2013-2016)**

**Funding Agency:** MNIT Jaipur; Sanctioned Amount: 16 lakhs

**Project Title:** Chemo- and regio-selective transition metal-catalyzed asymmetric hydroarylation of methylenecyclobutanes and methylenecyclopentanes.

**Projects Completed as Co-PI**

13. **TEQIP III “Collaborative Research Scheme (CRS)” Scheme Project with GEC, Jhalawar, Rajasthan**

**Funding Agency:** NPIU, TEQIP III, New Delhi under MHRD; Sanctioned Amount: 23.80 lakhs

**Project Title:** Strategic Investigation of Organocatalyzed Direct sp<sup>2</sup> C-H Arylation methodology on Antimalarial lead Cassiarin F Alkaloids: A Potential Chemotherapeutic approach towards Antimalarial Drug Development.

14. **TEQIP III “Collaborative Research Scheme (CRS)” Scheme Project with GWEC, Ajmer, Rajasthan**

**Funding Agency:** NPIU, TEQIP III, New Delhi under MHRD; Sanctioned Amount: 18.30 lakhs

**Project Title:** Small Molecule Fluorescent Probes for amyloid- $\beta$  for the detection of Alzheimer's disease.

**Sponsored Projects completed as Host Researcher**

15. **SERB-DST Young Scientist Scheme; Sanctioned Amount: 33.17 lakhs**

**Funding Agency:** SERB-DST (2016-2017)

**Project Title:** Synthesis of hetero-substituted amino acids *via* C (sp<sup>3</sup>)-H functionalization and its applications.

16. **SERB National Postdoctoral Fellowship; Sanctioned Amount: 19.20 lakhs**

**Funding Agency:** SERB-DST (2016-2018)

**Project Title:** Strategic Investigation of Novel Pincer-Based metal-catalyzed sp<sup>2</sup> and sp<sup>3</sup> C-H bond activation reactions: Application towards the synthesis of Novel Bioheterocycles.

17. **CSIR-RA (Direct)**

**Funding Agency:** CSIR (2017-2020)

**Project Title:** Design and synthesis of responsive cholesteryl-lipoic acid conjugates for drug transport to resistant cancer cell lines.

**List of Publications in Peer-reviewed Journals (H index =27, i10 index 60, Total citations = 2072)**

1. Chaudhary, S.\*; Yadav, D. K.; Chaturvedi, V.\* “Identification of Novel 1,2,4-Trioxolanes (Ozonides) Derived from Artemisinin as a New Class of Antitubercular Agents: Synthesis, in vitro/in vivo screening, cytotoxicity, structure-activity relationship and molecular docking studies”, *Eur. J. Med. Chem.*, **2026**, (Under review) (I.F = 7.3)
2. Mahajan, A.T.; Sahu, N. K.; Chaudhary, S.\* “Free-Radical Scavenging Bioactive Heterocycles: Deciphering Antioxidant Potential for Better Health” *Current Pharmaceutical Design*, **2026** (Under Review).
3. Sarkar, E.;<sup>‡</sup> Tantra, T.;<sup>‡</sup> Misra, A.; Mohan, V.; Tripathi, P.; Chaudhary, S.\* “Diabetes Redefined: Exploring Hidden Variants and Therapeutic Innovations” *ChemBioChem*, **2026**, (Under review). [DOI: ] (I.F. = 4.7)
4. Nandini, Rathod. A. K.; Chaudhary, S.\* (2025) “Earth-Abundant Metals in C–H Bond Activation: Sustainable Approaches and Mechanistic Insights with Iron, Cobalt, and Nickel Catalysis” *Top. Curr. Chem.*, **2026** (Under review).
5. Sen, J.; Shivani; Chaudhary, S.\* “Pd-catalyzed, K<sub>2</sub>S<sub>2</sub>O<sub>8</sub>-promoted, Chelation-assisted, Regioselective Direct ortho-Nitration of 1-Aryl-1H-Indazoles via C–H Bond Activation: Access to Indazole-based Anticancer Agents” *J. Org. Chem.* **2026**, (Under review). [DOI: .....] (I.F. = 3.6)
6. Shivani; Sen, J.; Chaudhary, S.\* “Pd-catalyzed, Oxidant-promoted, Regioselective C(sp<sup>2</sup>)-H/C(sp<sup>2</sup>)-H Cross-Dehydrogenative Coupling for Direct ortho-alkoxylation of 1-Aryl-1H-indazoles via C-H Bond Activation” *Org. Biomol. Chem.* **2026**, ..... [DOI: .....] (I.F. = 2.8)

7. Yadav, R. K.; Sen, J.; **Chaudhary, S.** \* “*N*-Heterocyclic Carbene Catalyzed Deoxygenative  $\alpha$ -Benzylation of Ketones via  $C(sp^3)$ -H Bond Activation” *Current Organocatalysis*, **2026**. (Under review) (I.F = 1.0)
8. Rahaman, A. T A.;<sup>†</sup> Tantra, T.;<sup>†</sup> Singh, P.;<sup>†</sup> Nandini.; Singh, Y.; Sen, J.; Datusalia, A. K.;\* **Chaudhary, S.** \* “*Novel Substituted O-Benzylated mono-/tris-arylated Pyrazoles as Selective Monoamine Oxidase-B Inhibitors: Synthesis, Bioevaluation, SAR and In Silico Studies*” *J. Mol. Struct.*, **2026** (Under review)
9. Jaiswal, S.K.; Yadav, R.K.; Dang, Q. L.; Mishra, D. K.; Sharma, K.; Shahin. R.; Mishra, S.; Singh, C.; **Chaudhary, S.**; Baeg, J. O.\* “*Designing porphyrin-based covalent triazine framework polymer composites with Cp\*Rh catalytic sites for solar-driven CO<sub>2</sub> conversion and oxidation reactions*” *Reactive and Functional Polymers*, **2026**, 227, 106849. [DOI: <https://doi.org/10.1016/j.reactfunctpolym.2026.106849>] (I.F = 5.4)
10. Sharma, R.; Mahajan A. T.; Shrivastava, V.; Idrisi, F.B.Z.H.; **Chaudhary, S.** \* “*Fused 1H-/2H-Indazoles as Bioactive Privileged Scaffolds: Synthetic Strategies and Pharmaceutical Applications*” *Curr. Drug. Discovery Technologies.*, **2026**, [DOI: [10.2174/0115701638437454260321220944](https://doi.org/10.2174/0115701638437454260321220944)] (I.F = 2.4)
11. Yadav, R. K.; Atpadkar, P. P.;<sup>#</sup> Tantra, T.;<sup>#</sup> Sharma, R.; Singh, Y.; Kaundal, R. K.; **Chaudhary, S.** \* “*Discovery of 2-Substituted-5H-imidazo[2,1-b][1,3]thiazin-5-ones as Cytotoxic Synthons: Green Synthesis, Photophysical Characterization, Bioevaluation, in Silico and DFT Studies*” *J. Mol. Struct.*, **2026**, 1372, 146654. [DOI: [10.1016/j.molstruc.2026.146654](https://doi.org/10.1016/j.molstruc.2026.146654)] (I.F = 4.9)
12. Shivani; Sharma, K.; **Chaudhary, S.** \* “*Green and Sustainable Approaches towards Synthesis of Anticancer Bioheterocycles via Microwave Irradiations*” *Bioorg. Chem.* **2026**, 176, 109879. [DOI: <https://doi.org/10.1016/j.bioorg.2026.109879>] (I.F. = 5.1)
13. Mishra, S.; Yadav, R.K.; Singh, C.; Shahin, R.; Sharma, K.; Mishra, V.K.; Jaiswal, S.K.; **Chaudhary, S.**; Tantra, T.; Baeg, J.-O. "Micellar-Colloidal Iron Oxyhydroxide-Integrated Hybrid-Composites Photocatalysts for Orthogonal Rhodium/Cobalt-Mediated NAD<sup>+</sup>/NADH Cycling and Mediator-Free Boronic Acid Hydroxylation" *New. J. Chem.*, **2026**, (Accepted). [DOI: <https://doi.org/10.1039/D5NJ04983K>] (I.F. = 2.6)
14. Yadav, A.; Yadav, R. K.; Yadav, A.; Sharma, K.; Shahin, R.; Mishra, S.; **Chaudhary, S.**; Baeg, J. -O. “*Solar-Driven Artificial Photosynthesis: Solar-Active D- $\pi$ -A COFs Photocatalyst Using Cobalt Complex for CO<sub>2</sub> Fixation and Difluoroalkylation via HAT Pathways*” *Chemistry - A European Journal*, **2026**, 32(25), e71014. [DOI: <https://doi.org/10.1002/chem.71014>] (I.F. = 3.6)
15. Sen, J.; Sharma, R.; Mahajan, A. T.; Rahaman, A. T A.; Sahu, S. T.; Novikov, A. S. **Chaudhary, S.** \* “*Regioselective direct synthesis of mono- and bis-substituted benzimidazoles via base-switchable aerobic N-heterocyclic carbene organocatalysis*” *Catal. Sci. Technol.*, **2026**, 16, 3366-3377. [DOI: <https://doi.org/10.1039/D6CY00036C>] (I.F. = 4.0)
16. Nandini and **Chaudhary, S.** \* “*Earth-Abundant Transition Metals Catalyzed Alkylation, Alkenylation, and Alkynylation of Arenes via Cross Dehydrogenative Coupling: Synthetic Strategies and Mechanistic Pathways*” *Top. Curr. Chem.*, **2026**, 384(8), ... [DOI: <https://doi.org/10.1007/s41061-026-00540-4>] (I.F = 10.9)
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#### **List of Publications (Ready for Communication)**

108. Yajnashri, M.;<sup>†</sup> Sumanth, G.;<sup>†</sup> Atpadkar, P. P.;<sup>†</sup> **Chaudhary, S.\*** “Recent Developments and Practical Applications of Biosurfactant as Stabilization Agents” *J. Indian Chem. Soc.*, **2025**
109. **Chaudhary, S.\*** “Analysis of diastereomeric ( $\alpha/\beta$ ) ratio in artemisinin analogues: 3D conformational effects of sterically hindered and bulky substituent’s” *J. Chem. Sci.*
110. **Chaudhary, S.\*** “Insights on synthetic strategies and structure-activity relationship studies of Linezolid and its derivatives”, *Current Pharmaceutical Design*, **2025**, in progress.
111. **Chaudhary, Sandeep\*** “Microwave–assisted direct arylations: Recent developments in transition-metal catalysed C-C bond formations” *Mini Rev. Org. Chem.* **2025**, in progress.

#### **Patents**

1. **Chaudhary, S.**; Kaundal, R.K.; Tantra, T. Chauhan, C.; Rahaman, A.T.A.; Sen, J.; Shrivastava, V.; “Novel Substituted Urea Derivatives as NOD-like receptor protein-3 (NLRP-3)Inhibitors” Indian patent, **2026**, Patent No. .... [Filing date: .....]
2. Tripathi, P.; Shukla, R.; **Chaudhary, S.**; Harsh, Handa, M. “A Novel Formulation of Artemisinin for management of Inflammation and thereof” Indian patent, **2023**, Patent No. 202311049238. [Filing date: 21 July, 2023]

3. Tripathi, P.; Priyanka; and **Chaudhary, S.** “A Method of preparing Beta Glucan Nanoparticles and nanoformulations thereof” Indian patent, **2023**, Patent No. 202311044926. [Filing date: **21 July, 2023**]
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## Book Chapters

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2. Shivani; Khan, T.; Chaudhary, S.\* (**2026**) “Bioactive Natural Product-Driven Anticancer Chemotherapy: Chronological Advancements and Future Perspectives of Evodiamine Analogues” In: Prof. Atta-ur-Rahman, Editors, (19<sup>th</sup> Ed.) “*Studies in Natural Products Chemistry (SNPC)*” (Bioactive Natural Products), Vol 89, Elsevier Science Publishers, Netherlands. DOI: <https://doi.org/10.1016/B978-0-443-49144-3.00003-4>; Book ISBN: 978-0-443-49144-3; ISSN: 1572-5995
3. Sharma, V.;<sup>†</sup> Mahajan, A. T.;<sup>†</sup> Khatik, G. L.;\* **Chaudhary, S.\*** (**2025**) “Natural-Product-Inspired Bioactive Alkaloids via C–C/C–N Coupling Reactions – Synthetic Developments, Current Challenges and Future Opportunities” In: Prof. Atta-ur-Rahman, Editors, (18<sup>th</sup> Ed.) “*Studies in Natural Products Chemistry (SNPC)*” (Bioactive Natural Products), Elsevier Science Publishers, Netherlands. DOI: [10.1016/B978-0-443-23754-6.00003-3](https://doi.org/10.1016/B978-0-443-23754-6.00003-3); Book ISBN: 9780443237546.
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*Sustainable Developments*” In: Ravi Kant and K.L. Ameta, Editors, (1<sup>st</sup> Ed.) “*Nanocatalysis: Synthesis of Bioactive heterocycles*”, CRC Press, Taylor and Francis group, USA. DOI: [10.1201/9781003141488-5](https://doi.org/10.1201/9781003141488-5); ISBN: 9780367693541.

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12. Yadav, R.K.; **Chaudhary, S.\*** (2021) “*Microwave-Assisted Synthesis of Imidazo[1,2-a]pyridine Class of Bio-heterocycles: Green Avenues and Sustainable Developments.*” In: Inamuddin, Rajender Boddula, Mohd. Imran Ahamed and Anish Khan, Editors, (1<sup>st</sup> Ed.) “**Advances in Green Synthesis: Avenues and Sustainability**”, Springer Nature, UK. DOI: [https://doi.org/10.1007/978-3-030-67884-5\\_12](https://doi.org/10.1007/978-3-030-67884-5_12); Book ISBN: 978-3-030-67883-8; Book ID: 492753\_1\_En

### **International/ National Conferences/ Symposium with proceedings (Abstract published) (Total = 69)**

1. Rahaman, A. T. A.; Sharma, R.; Sen, J.; **Chaudhary, S.\*** “*Ultrasonic-Assisted 1, 3-Dipolar Cycloaddition Reaction for the Synthesis of Novel Spirooxindole Derivatives as Anti-cancer Agent*”, **8-10 Jan, 2024** (P-2) 28<sup>th</sup> ISCB international conference (ISCBC 2024)- Recent Advances in Biological, Chemical, Biotechnological, and Pharmaceutical Sciences for Innovation in Healthcare, Faculty of Science and Faculty of Pharmacy, Marwadi University, Rajkot, Gujarat, India.
2. Shivani.; Boralkar, T. M.; Tantra, T.; **Chaudhary, S.\*** “*Ultrasonic-Assisted 1, 3-Dipolar Cycloaddition Reaction for the Synthesis of Novel Spirooxindole Derivatives as Anti-cancer Agent*”, **8-10 Jan, 2024** (P-54) 28<sup>th</sup> ISCB international conference (ISCBC 2024)- Recent Advances in Biological, Chemical, Biotechnological, and Pharmaceutical Sciences for Innovation in Healthcare, Faculty of Science and Faculty of Pharmacy, Marwadi University, Rajkot, Gujarat, India.
3. Tantra, T.; Boralkar, T. M.; Shivani.; **Chaudhary, S.\*** “*2-Phenylbenzo[d]imidazo[2,1-b] thiazoles as Potential Anticancer Agents: Design, Synthesis, Bioevaluation and in-silico studies*”, **8-10 Jan, 2024** (P-58) 28<sup>th</sup> ISCB international conference (ISCBC 2024)- Recent Advances in Biological, Chemical, Biotechnological, and Pharmaceutical Sciences for Innovation in Healthcare, Faculty of Science and Faculty of Pharmacy, Marwadi University, Rajkot, Gujarat, India.
4. Mahajan, A. T.; Shyamlal, B.R. K.; Kumar, V.; Gupta, A.; Sen, J.; Ronin, R. R.; Mathur, M.; **Chaudhary, S.\*** “*Natural-Product-Inspired Synthesis of C-Homoaporphine Alkaloids as a New Class of Antiplatelet and Antimicrobial Agents*” **18-19 Dec, 2023** International Symposium on 4th Flow Chemistry and Natural Product Synthesis, organized by NIPER-Kolkata, W.B.
5. Sen, J.; Yadav, L.; Rahaman, A. T. A.; **Chaudhary, S.\*** “*Synthesis of Indolo[2,1-a]isoquinoline and Dibenzopyrrocoline Alkaloids via TMEDA-Catalyzed Regioselective Decarboalkoxy C-N Bond Formation*” **18-19 Dec, 2023** International Symposium on 4th Flow Chemistry and Natural Product Synthesis, organized by NIPER-Kolkata, W.B.
6. Mahajan, A. T.; Shyamlal, B.R. K.; Kumar, V.; Gupta, A.; Sen, J.; Ronin, R. R.; Mathur, M.; **Chaudhary, S.\*** “*Novel C-Homoaporphine Analogues as a New Class of Antiplatelet and Antimicrobial Agents*” **10-12 Aug, 2023** NIPER Student Research Symposium, NSRS-2023, at NIPER, S.A.S. Nagar, Punjab, India.
7. Sen, J.; Sharma, R.; Rahaman, A. T. A.; **Chaudhary, S.\*** “*Organocatalyzed Hydrogen Borrowing Reaction: NHC-Catalysed Direct N-Alkylation of Amines with Benzyl Alcohols*” **14-16 Sep, 2023** “International Conference on **New Horizons in Drugs, Devices & Diagnostics** (NIPER PHARMACON-2023)”, organized by NIPER-Hyderabad at Kanha Shanti Vanam, Hyderabad, India.
8. Sen, J.; Yadav, L.; Rahaman, A. T. A.; **Chaudhary, S.\*** “*Design, Synthesis and In silico Studies of Substituted Dibenzopyrrocolines Alkaloids: A Promising Scaffold as Anti-Alzheimer’s Agents*” **16-19 Nov, 2022** “27<sup>th</sup> ISCBC-2022 International Conference on Research and Innovation in Chemical, Pharmaceutical and Biological Sciences”, organized at Department of Chemistry, Birla Institute of Technology, Mesra, Ranchi (JH).
9. Rahaman, A. T. A.; Yadav, L.; Sen, J.; **Chaudhary, S.\*** “*Organocatalyzed, Regioselective Synthesis of Indolo[2,1-a]isoquinoline via Decarboalkoxy C-N Bond Formation: A Potential Scaffold as Anti-Alzheimer’s Agents*” **10-12 Nov, 2022** “International Conference on **Recent Trends and Future Opportunities in Pharmaceuticals** (NIPER PHARMACON-2022)”, organized at NIPER-SAS Nagar, Punjab.
10. Sharma, R.; **Chaudhary, S.** “*Oxidant-Switched Palladium-Catalyzed Regioselective Mono- versus Bis-ortho-Aroylation of 1-Aryl-1H-indazoles with Aldehydes via C-H Bond Activation*” **6-8 Dec, 2021** Abstracts of papers ISBN 978-5-7944-3752-2 (Page-4) All-Russian Scientific Conference with International Participation on “Resource-saving and environmentally friendly processes in chemistry and chemical technology”, Faculty of Chemistry, Department of Organic Chemistry, Perm State National Research University, Perm, Russia Federation.

11. Sahu, N. K.; Jain, M.; **Chaudhary, S.** "Polymeric Acid-catalyzed Modified Guareschi Thorpe Type Regioselective Modular Synthesis: Access to Novel Bioactive Indole-tethered Alicyclic[b]fused Pyridines" **6<sup>th</sup>-8<sup>th</sup> Dec, 2021** Abstracts of papers ISBN 978-5-7944-3752-2 (Page-5) All-Russian Scientific Conference with International Participation on "Resource-saving and environmentally friendly processes in chemistry and chemical technology", Faculty of Chemistry, Department of Organic Chemistry, Perm State National Research University, Perm, Russia Federation.
12. Sharma, R.; **Chaudhary, S.** "Transition-Metal Free  $C(sp^2)$ - $C(sp^2)$  Cross Dehydrogenative Coupling: TBPB-promoted, Regioselective, Direct C-3 Benzoylation/Acylation of 2H-Indazoles with Aldehydes/Benzyl Alcohols/Styrenes" at Virtual International Conference on 'Emerging Trends in Medicinal Chemistry-2021' (ETMC-2021) organized by the Department of Chemistry, S. V. National Institute of Technology (SVNIT), Surat during **18 - 19 March, 2021**.
13. Gautam, D.; **Chaudhary, S.** "First Row Transition metal-based Symmetrical NCN Pincer Complexes via  $C_{(sp^2)}$ -H Bond Functionalization: Synthesis and its Practical Applications" **20<sup>th</sup>-22<sup>th</sup> Oct, 2020** Abstracts of papers ISBN 978-5-7944-3566-5 (Page-18-19) All-Russian Scientific Conference with International Participation on "**Organic Chemistry for Agriculture and Medicine 2020**", Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia Federation.
14. Sahu, N. K.; **Chaudhary, S.** "Ultrasound-irradiated, one-pot, efficient synthesis of functionalized novel analogues natural product Cephalandole A: A new class of antimalarial as well as antileishmanial agents" **20<sup>th</sup>-22<sup>th</sup> Oct, 2020** Abstracts of papers ISBN 978-5-7944-3566-5 (Page-16-17) All-Russian Scientific Conference with International Participation on "**Organic Chemistry for Agriculture and Medicine 2020**", Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia Federation.
15. Sharma, R.; **Chaudhary, S.** "Oxidant-promoted  $C(sp^2)$  - $C(sp^2)$  Cross-Dehydrogenative Coupling for the Direct C-3 Benzoylation of 2H-Indazoles" **20<sup>th</sup>-22<sup>th</sup> Oct, 2020** Abstracts of papers ISBN 978-5-7944-3566-5 (Page-15-16) All-Russian Scientific Conference with International Participation on "**Organic Chemistry for Agriculture and Medicine 2020**", Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia Federation.
16. Yadav, R. K.; **Chaudhary, S.** "Oxidant-Promoted, Rapid, Regioselective Direct C-3 Halogenation of Imidazo[1,2-a]pyridines and their congeners via  $C_{(sp^2)}$ -H Functionalizations" **20<sup>th</sup>-22<sup>th</sup> Oct, 2020** Abstracts of papers ISBN 978-5-7944-3566-5 (Page-14-15) All-Russian Scientific Conference with International Participation on "**Organic Chemistry for Agriculture and Medicine 2020**", Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia Federation.
17. **Chaudhary, S.** "Artemisinin, a Nobel Medicine: A Flourishing Drug in Antimalarial Chemotherapy" **28<sup>th</sup>-29<sup>th</sup> Feb, 2020** International Conference on "Frontier Areas of Chemistry (ICFAC) 2020", Department of Chemistry, School of Physical Sciences, Mahatma Gandhi Central University, Motihari, Bihar-845401, India. (*Oral presentation*)
18. Yadav, L.; Shyamlal, B. R. K.; Tiwari, M. K.; **Chaudhary, S.** "A Decarboxylative Transition-Metal-free Facile Synthesis of Indolo[2,1-a]isoquinolines and Dibenzopyrrocoline Alkaloids" **28<sup>th</sup>-29<sup>th</sup> Feb, 2020** International Conference on "Frontier Areas of Chemistry (ICFAC) 2020", Department of Chemistry, School of Physical Sciences, Mahatma Gandhi Central University, Motihari, Bihar-845401, India.
19. Tiwari, M. K.; Shyamlal, B. R. K.; Yadav, L.; **Chaudhary, S.** "Novel functionalized 1,2,4-trioxanes as potent antimalarial and anticancer agents" **28<sup>th</sup>-29<sup>th</sup> Feb, 2020** International Conference on "Frontier Areas of Chemistry (ICFAC) 2020", Department of Chemistry, School of Physical Sciences, Mahatma Gandhi Central University, Motihari, Bihar-845401, India.
20. Shyamlal, B. R. K.; Yadav, L.; Tiwari, M. K.; **Chaudhary, S.** "(Z)-3-benzylideneisobenzofuran-1(3H)-ones as Highly Potent antioxidants and Antiplatelet agents: Synthesis, Bioevaluation, SAR and Docking Studies" **28<sup>th</sup>-29<sup>th</sup> Feb, 2020** International Conference on "Frontier Areas of Chemistry (ICFAC) 2020", Department of Chemistry, School of Physical Sciences, Mahatma Gandhi Central University, Motihari, Bihar-845401, India.
21. Sharma, R.; Tiwari, M.K.; **Chaudhary, S.** "Weak Bases-Mediated Metal Free  $A^3$  Coupling Reaction for the Synthesis of Propargylamines" **26<sup>th</sup>-29<sup>th</sup> Feb, 2020** (Poster No. 70) International Conference on "Recent Trends in Catalysis", Department of Chemistry, NIT Calicut, Kerala, India.
22. Yadav, R. K.; **Chaudhary, S.** "Oxidant-Promoted Selective C-3 Hydroxylation of Imidazole-based heterocycles via  $C_{(sp^2)}$ -H bond Activation" **26<sup>th</sup>-29<sup>th</sup> Feb, 2020** (Poster No. 71) International Conference on "Recent Trends in Catalysis", Department of Chemistry, NIT Calicut, Kerala, India.
23. Sahu, N.K.; **Chaudhary, S.** "Organocatalytic, Regioselective, Modified Guareschi-Thorpe Synthesis of Indole-based alicyclic [b]-fused pyridines" **26<sup>th</sup>-29<sup>th</sup> Feb, 2020** (Poster No. 72) International Conference on "Recent Trends in Catalysis", Department of Chemistry, NIT Calicut, Kerala, India.

24. Yadav, L.; Kumar, K.; Shyamlal, B. R. K.; **Chaudhary, S.** "Efficient antibacterial and low cytotoxic potential of Silver nanoparticles produced instantaneously using dimeric gallate" **15<sup>th</sup>-18<sup>th</sup> May, 2019** Abstracts of papers ISBN 978-5-7944-3288-6 (Page-10) International Conference on "Polycarbonyl compounds 2019 dedicated to the 85th anniversary of Yu. S. Andrejchikov", Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia Federation.
25. Tiwari, M. K.; Yadav, L.; Shyamlal, B. R. K.; **Chaudhary, S.** "Transition Metal-Free Terminal Alkyne Activation: A Rapid Access to Pharmaceutically Privileged Scaffolds" **15<sup>th</sup>-18<sup>th</sup> May, 2019** Abstracts of papers ISBN 978-5-7944-3288-6 (Page-11) International Conference on "Polycarbonyl compounds 2019 dedicated to the 85th anniversary of Yu. S. Andrejchikov", Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia Federation.
26. Sahu, N. K.; Jaiswal, P. K.; Sharma, V.; Mathur, M.; and **Chaudhary, S.** "Novel 2-(3-indolo)-pyridine fused heterocycles as a new class of antifungal agents: Design, synthesis, structure-activity relationship and in silico molecular docking studies" **15<sup>th</sup>-18<sup>th</sup> May, 2019** Abstracts of papers ISBN 978-5-7944-3288-6 (Page-12) International Conference on "Polycarbonyl compounds 2019 dedicated to the 85th anniversary of Yu. S. Andrejchikov", Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia Federation.
27. Shyamlal, B. R. K.; Kumar, K.; Gupta, A.; Mathur, M.; Swami, A. K.; **Chaudhary, S.** "Efficacious fungicidal potential of composite derived from nano-aggregates of Cu-Diclofenac complexes and ZnO nanoparticles" **15<sup>th</sup>-18<sup>th</sup> May, 2019** Abstracts of papers ISBN 978-5-7944-3288-6 (Page-13) International Conference on "Polycarbonyl compounds 2019 dedicated to the 85th anniversary of Yu. S. Andrejchikov", Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia Federation.
28. Sharma, R.; Yadav, L.; **Chaudhary, S.** "One-pot Chemo/Regio-Selective Synthesis of a Library of Functionalized Spirooxindole from Nitrostyrene as starting materials: An attempt towards potential anticancer agents" **15<sup>th</sup>-18<sup>th</sup> May, 2019** Abstracts of papers ISBN 978-5-7944-3288-6 (Page-15) International Conference on "Polycarbonyl compounds 2019 dedicated to the 85th anniversary of Yu. S. Andrejchikov", Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia Federation.
29. Sharma, R.; Yadav, L.; Lal, J.; Mathur, M.; Swami, A. K.; **Chaudhary, S.** "Synthesis of a new series of 5'-(indoline-2-ylmethyl)-3'-(4-methylbenzoyl)-4'-(p tolyl)spiro[indoline-3,2'-pyrrolidin]-2-ones via 1,3-dipolar cycloaddition: x-ray crystal structure, SAR and biological evaluation" **16<sup>th</sup>-18<sup>th</sup> May, 2018** Abstracts of papers ISBN 978-5-7944-3095-0 (Page-55) International Conference on "100 Years of Development of Chemistry: From Synthesis of Polyethylene to Stereodivergence", Department of Organic Chemistry, Perm State University, Perm, Russia Federation.
30. Shyamlal, B. R. K.; Yadav, L.; Tiwari, M. K.; Kumar, K.; **Chaudhary S.** "Microwave-assisted synthesis of c-homoaporphines as potent anticancer and antimalarial agents" **16<sup>th</sup>-18<sup>th</sup> May, 2018** Abstracts of papers ISBN 978-5-7944-3095-0 (Page-58) International Conference on "100 Years of Development of Chemistry: From Synthesis of Polyethylene to Stereodivergence", Department of Organic Chemistry, Perm State University, Perm, Russia Federation.
31. Tiwari, M. K.; Yadav, L.; Shyamlal, B. R. K.; **Chaudhary, S.** "Transition metal-free direct coupling of aldehydes with terminal alkynes: A fast, convenient process for the synthesis of propargylic alcohols" **16<sup>th</sup>-18<sup>th</sup> May, 2018** Abstracts of papers ISBN 978-5-7944-3095-0 (Page-59) International Conference on "100 Years of Development of Chemistry: From Synthesis of Polyethylene to Stereodivergence", Department of Organic Chemistry, Perm State University, Perm, Russia Federation.
32. Yadav, L.; Tiwari, M. K.; Shyamlal, B. R. K.; Rawat, N.; **Chaudhary, S.** "One-pot chemo/regio-selective generation of library of functionalized spirooxindoles/pyrrolidines from naturally occurring chalcones as potential anti-tyrosinase agents" **16<sup>th</sup>-18<sup>th</sup> May, 2018** Abstracts of papers ISBN 978-5-7944-3095-0 (Page-60) International Conference on "100 Years of Development of Chemistry: From Synthesis of Polyethylene to Stereodivergence", Department of Organic Chemistry, Perm State University, Perm, Russia Federation.
33. Yadav, R. K.; **Chaudhary S.** "Metal-free, solvent free direct hydroxylation of imidazo [1, 2-a] pyridines via C (sp<sup>2</sup>)-H activation: Synthesis, chemistry and its applications" **16<sup>th</sup>-18<sup>th</sup> May, 2018** Abstracts of papers ISBN 978-5-7944-3095-0 (Page-61) International Conference on "100 Years of Development of Chemistry: From Synthesis of Polyethylene to Stereodivergence", Department of Organic Chemistry, Perm State University, Perm, Russia Federation.
34. Jaiswal, P. K.; Sharma, V.; Prikhodko, J. I.; Mashevskaya, I. V.; **Chaudhary, S.** "On water" ultrasound-assisted one pot efficient synthesis of functionalized 2-oxo-benzo [1, 4] oxazines: First application to the synthesis of anticancer indole alkaloid, Cephalandole A" **15<sup>th</sup>-20<sup>th</sup> July, 2017** Abstracts of papers ISBN No. 978-5-7944-2925-1 (PP-01)

International Conference on “*The study of the biological activities heterocycles with the purpose of creating innovative medicines*”, Department of Organic Chemistry, Perm State University, Perm, Russia Federation.

35. Sharma, V.; Jaiswal, P. K.; Saran, M.; Prikhodko, J. I.; Mathur, M.; Swami, A. K.; Mashevskaya, I. V.; **Chaudhary, S.** *An Efficient MW-Assisted, Green Synthesis of Functionalized 2-oxo-3,4-dihydro-2H-benzo[1,4]oxazines and 2-oxo-3,4-dihydroquinoxalines as Potential Antioxidant Agents*” 15<sup>th</sup>-20<sup>th</sup> July, **2017** Abstracts of papers ISBN No. 978-5-7944-2925-1 (PP-04) International Conference on “*The study of the biological activities heterocycles with the purpose of creating innovative medicines*”, Department of Organic Chemistry, Perm State University, Perm, Russia Federation.
36. Prikhodko, J. I.; Maslivets, A. N.; Mashevskaya, I. V.; **Chaudhary, S.**; Mathur, M. and Swami, A. K. “*Antifungal and Antibacterial activity of products of reaction between hetareno[E]pyrrole-2,3-diones with 2-aminothiophenols*” International Conference on “*Current Trends in Chemical Sciences*” held at Department of Organic Chemistry, Perm State University, Perm, Russia on **19<sup>th</sup> – 21<sup>st</sup> Oct, 2016**.
37. Prikhodko, J. I.; Pchelintseva, D. V.; Maslivets, A. N.; Mashevskaya, I. V.; **Chaudhary, S.**; Mathur, M. and Swami, A. K. “*Substituted Methanobenzo[5.6][1,4]Diazepin[1,7-A]Quinoxalin-1,4,8-Triones, displaying antibacterial activity*” International Conference on “*Current Trends in Chemical Sciences*” held at Department of Organic Chemistry, Perm State University, Perm, Russia on **19<sup>th</sup> – 21<sup>st</sup> Oct, 2016**.
38. Lal, J.; **Chaudhary, S.** “*Synthesis of Symmetrical NCN Pincer Complexes of First Row Transition Metals: An Attempt towards C-H ( $Sp^2$ ) Bond Functionalization*” National Conference on “Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges” (**OCS-D-2016**) **30-31 Aug, 2016** Abstract of papers at Department of Chemistry, Birla Institute of Science and Technology (BITS) Pilani, Pilani, India.
39. Sharma, R.; Lal, J.; **Chaudhary, S.** “*Microwave-assisted synthesis and antimicrobial activity of novel 2-oxo-benzo-[1, 4]-oxazine analogues*” National Conference on “Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges” (**OCS-D-2016**) **30-31 Aug, 2016** Abstract of papers at Department of Chemistry, Birla Institute of Science and Technology (BITS) Pilani, Pilani, India.
40. Yadav, L.; Tiwari, M. K.; Bharti Shyamlal, R. K. and **Chaudhary, S.** (Nov, **2015**), “*New Piperazine-based Organocatalysis for Intramolecular Direct Arylation Reactions*” 23<sup>rd</sup>-25<sup>th</sup> Nov, 2015 Abstracts of papers ISBN No. 978-93-84869-93-9 (PP-100) International Conference on “*Current Challenges in Drug Discovery Research CCDDR-2015*”, MNIT Jaipur-302017, Rajasthan, India.
41. Yadav, L.; Tiwari, M. K.; Bharti Shyamlal, R. K.; Mathur, M.; Swami, A. K.; Naikade, N. K. and **Chaudhary, S.** (Nov, **2015**), “*Novel 1, 2-dioxa-4-aza-indenones and 1, 2-dioxa-4-aza-fluorenones: Synthesis and their in vitro Antimalarial Activity*” 23<sup>rd</sup>-25<sup>th</sup> Nov, 2015 Abstracts of papers ISBN No. 978-93-84869-93-9 (PP-101) International Conference on “*Current Challenges in Drug Discovery Research CCDDR-2015*”, MNIT Jaipur-302017, Rajasthan, India.
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45. Jaiswal, P. K. and **Chaudhary, S.** (Nov, **2015**), “*Organocatalytic, Natural Product Inspired C-C bond forming domino approaches: Application towards the synthesis of bioactive heterocycles*” 23<sup>rd</sup>-25<sup>th</sup> Nov, 2015 Abstracts of papers ISBN No. 978-93-84869-93-9 (SIL-48) International Conference on “*Current Challenges in Drug Discovery Research CCDDR-2015*”, MNIT Jaipur-302017, Rajasthan, India.
46. Jaiswal, P. K.; Sharma, V. and **Chaudhary, S.** (Nov, **2015**), “*Development of highly efficient one pot green synthetic protocol for the construction of benzo [1, 4] oxazin-2-one incorporated novel Antiplatelet agents*” 23<sup>rd</sup>-25<sup>th</sup> Nov, 2015

Abstracts of papers ISBN No. 978-93-84869-93-9 (PP-128) International Conference on “*Current Challenges in Drug Discovery Research CCDDR-2015*”, MNIT Jaipur-302017, Rajasthan, India.

47. Jaiswal, P. K.; Sharma, V.; Gaikwad, A. N.; Sinha, S. K.; Puri, S. K.; Sharon, A.; Maulik, P. R.; Chaturvedi, V. and **Chaudhary, S.** (Nov, 2015), “*An expedient Synthesis of Stable Tricyclic Antitubercular Ozonides Derived from Artemisinin*” 23<sup>rd</sup>-25<sup>th</sup> Nov, 2015 Abstracts of papers ISBN No. 978-93-84869-93-9 (PP-129) International Conference on “*Current Challenges in Drug Discovery Research CCDDR-2015*”, MNIT Jaipur-302017, Rajasthan, India.
48. Bharti Shyamlal, R. K.; Yadav, L.; Tiwari, M. K. and **Chaudhary, S.** (Nov, 2015), “*Silver-Catalysed Highly Regio-selective modified Castro-Stephens Reaction: Application to the Synthesis of Substituted-Isocoumarins*” 23<sup>rd</sup>-25<sup>th</sup> Nov, 2015 Abstracts of papers ISBN No. 978-93-84869-93-9 (PP-80) International Conference on “*Current Challenges in Drug Discovery Research CCDDR-2015*”, MNIT Jaipur-302017, Rajasthan, India.
49. Bharti Shyamlal, R. K.; Yadav, L.; Tiwari, M. K.; Mathur, M.; Swami, A. K.; and **Chaudhary, S.** (Nov, 2015), “*Synthesis of Novel Dimeric Aporphines and their Acetylcholinesterase Inhibitory Activity*” 23<sup>rd</sup>-25<sup>th</sup> Nov, 2015 Abstracts of papers ISBN No. 978-93-84869-93-9 (PP-81) International Conference on “*Current Challenges in Drug Discovery Research CCDDR-2015*”, MNIT Jaipur-302017, Rajasthan, India.
50. Sharma, R.; Jaiswal, P. K. and **Chaudhary, S.** (Nov, 2015), “*A metal free domino approach towards the microwave assisted direct synthesis of novel 2-oxo-benzo-(1, 4)-oxazine analogues as potential antimicrobial agents*” 23<sup>rd</sup>-25<sup>th</sup> Nov, 2015 Abstracts of papers ISBN No. 978-93-84869-93-9 (PP-151) International Conference on “*Current Challenges in Drug Discovery Research CCDDR-2015*”, MNIT Jaipur-302017, Rajasthan, India.
51. Sharma, R.; Jaiswal, P. K. and **Chaudhary, S.** (Nov, 2015), “*A new insight towards the development of green synthetic protocol for Chalcone derived pharmaceutically demanding N-heterocycles and their biological activity evaluation*” 23<sup>rd</sup>-25<sup>th</sup> Nov, 2015 Abstracts of papers ISBN No. 978-93-84869-93-9 (PP-152) International Conference on “*Current Challenges in Drug Discovery Research CCDDR-2015*”, MNIT Jaipur-302017, Rajasthan, India.
52. Sharma, V.; Jaiswal, P. K. and **Chaudhary, S.** (Nov, 2015), “*Studies towards Benzo (1, 4) oxazine-2-one based novel antifungal agents: Design, Synthesis and their in vitro antifungal activities*” 23<sup>rd</sup>-25<sup>th</sup> Nov, 2015 Abstracts of papers ISBN No. 978-93-84869-93-9 (PP-181) International Conference on “*Current Challenges in Drug Discovery Research CCDDR-2015*”, MNIT Jaipur-302017, Rajasthan, India.
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54. Poster presentation, Sharma, V.; Jaiswal, P. K.; Prikhodko, J. I.; Mathur, M.; Swami, A. K.; Mashevskaya, I. V.; and **Chaudhary, S.** (PP-235) “*Microwave-assisted synthesis of five-membered 2,3-dioxo-heterocycles and their anti-fungal, anti-bacterial and anti-oxidant activity evaluation*”, National conference on “*Frontiers at the Chemistry-Allied Interface*” (FCASI-2015), 13<sup>th</sup>-14<sup>th</sup> March, 2015, Centre of Advanced Study, Department of Chemistry, University of Rajasthan, Jaipur-302017, India.
55. Poster presentation, Jaiswal, P. k.; **Chaudhary, S.**; and Samanta, S. (PP-234) “*A novel C-C bond forming domino approach for the direct synthesis of highly substituted tetrahydrocarbazoles and carbazoles under organocatalytic environment*”, National conference on “*Frontiers at the Chemistry-Allied Sciences Interface*” (FCASI-2015), 13<sup>th</sup>-14<sup>th</sup> March, 2015, Centre of Advanced Study, Department of Chemistry, University of Rajasthan, Jaipur-302017, India.
56. **Chaudhary, S.** (27 Feb, 2015) “*An enantioselective synthesis of an anti-hypercholesterolemic drug atorvastatin calcium (Lipitor) via direct catalytic asymmetric aldol reaction of thioamides*”, 21<sup>st</sup> ISCB international conference (ISCBC 2015)-Current trends in drug discovery and developments, CSIR-Central Drug Research Institute, Lucknow, India.
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58. Poster presentation, **Chaudhary, S.**; Naikade, N. K. & Singh, C. (26 Sep, 2014) “*<sup>1</sup>O<sub>2</sub>-Mediated Photo-oxygenation Ene Reaction on Artemisinin-Linked Allyl Alcohols: An Efficient methodology to Generate Antimalarial Artemisinin-1,2,4-Trioxane hybrid*”, 3<sup>rd</sup> international conference on Advanced oxidation Process (AOP 2014), East end Hotel, Munnar, Organized by Mahatma Gandhi University, Kottayam, Kerala, India

59. *Poster presentation*, **Chaudhary, S.**; Puri, S. K. & Singh, C. (Mar, **2014**) “*Novel seco-artemisinin analogues: Design, synthesis and in vivo antimalarial assessment in search for putative antimalarial structural motif via pruning of artemisinin framework*”, 20<sup>th</sup> ISCBC international conference on Chemistry and Medicinal Plants in Translational Medicine for Healthcare (**ISCBC 2014**), Dept. of Chemistry, University of Delhi, India.
60. **Chaudhary, S.** and Harding, W. W. (December, **2012**), “*Microwave-Assisted Direct Arylation for the Synthesis of Novel Aporphines as 5-HT<sub>2A</sub> and  $\alpha_{1A}$  Receptor Antagonist*” Abstracts of papers “Chemistry for a Sustainable future” International workshop on Green Chemistry, Jaipur, Rajasthan, India.
61. *Poster presentation*, **Chaudhary, S.** “*Frontiers of medicinal science*” 8<sup>th</sup> AFMC International medicinal chemistry symposium (AIMECS), **Nov-Dec, 2011**, Tokyo, JAPAN.
62. *Poster presentation*, **Chaudhary, S.** “*Chembiomolecular Science: at the frontier of Chemistry and Biology*”, The Uehara memorial foundation international symposium, (June, **2011**), Tokyo, JAPAN.
63. **Chaudhary, S.** and Harding, W. W. (August **2010**), “*Synthesis of homoaporphines via microwave-assisted direct arylation*”, Abstracts of papers in Sci Finder and *Poster presentation*, 240<sup>th</sup> ACS national meetings & expositions, Boston, MA, U.S.A.
64. Pecic, S.; **Chaudhary, S.**; Navarro, H. A.; and Harding, W. W. (March, **2010**), “*Nantenine analogs as 5-HT<sub>2A</sub> receptor antagonists: Synthesis, biological evaluations and receptor docking studies*”, Abstracts of papers in Sci Finder and *Poster presentation*, 239<sup>th</sup> ACS national meetings & expositions, San Francisco, California, U.S.A.
65. **Chaudhary, S.** and Harding, W. W. (August, **2009**), “*Application of microwave-assisted direct biaryl coupling reaction for the synthesis of aporphine alkaloids*” Abstracts of papers in SciFinder and *Poster presentation*, 238<sup>th</sup> ACS national meetings & expositions, Washington D C, U.S.A.
66. Pecic, S.; **Chaudhary, S.**; Legendre, O.; and Harding, W. W. (August, **2008**), “*Development of 5HT<sub>2A</sub> antagonists based on the aporphine alkaloid nantenine*” Abstracts of papers in Sci Finder & *Poster presentation*, 236<sup>th</sup> ACS national meetings & expositions, Philadelphia, Pennsylvania, U.S.A.
67. *Poster presentation*, **Chaudhary, S.**; Gaikwad, A. N.; Sinha, S.; Chaturvedi, V. Manju, Y. K. and Singh, C. (Feb, **2007**) “*Artemisinin derived stable ozonides: Synthesis and antitubercular activities*”, 3<sup>rd</sup> international symposium on current trends in drug discovery research (**CTDDR-2007**), CSIR-Central Drug Research Institute, Lucknow, India.
68. *Poster presentation*, **Chaudhary, S.**; Puri, S. K. and Singh, C. (Jan, **2006**) “*Novel orally active C-10a ester analogues of dihydroartemisinin as antimalarials*”, *Joint international conference on building bridges, forging bonds for 21<sup>st</sup> century organic chemistry and chemical biology (ACS CSIR OCCB-2006)*, CSIR-National Chemical Laboratory, Pune India.
69. *Poster presentation*, **Chaudhary, S.**; Puri, S. K. & Singh, C. (Feb, **2004**) “*Orally active artemisinin derivatives*”, 2<sup>nd</sup> international symposium on current trends in drug discovery research (**CTDDR-2004**), CSIR-Central Drug Research Institute, Lucknow, India.

#### **Presentations/ Participation in International/National Meetings/ Workshops/ Sponsored Programs**

1. Served as “**Guest of Honour**” on 10 April, 2026 in “Annual Award function” of the Chemical Society, Department of Chemistry, St. Andrew’s College, Gorakhpur.
2. Attended National Seminar on “*Novel Paradigms in Controlled Drug Delivery to Strengthen Innovation and Translation in Pharmaceutical Formulations*” Organized by NIPER-Raebareli in Collaboration with “*Controlled Release Society-Indian Chapter (CRSIC)*”, Hotel Hilton Garden Inn, Gomti Nagar, Lucknow on **Dec 22, 2023**.
3. Attended International Webinar (Online mode) on ‘Post-COVID Challenges and opportunities for the chemist’, jointly organized by Indian Science Congress Association (Delhi Chapter) and Department of Chemistry, University of Delhi on **Dec 28, 2021**.
4. Attended International Virtual Workshop ‘Bioelectronic Medicine’, jointly organized by IIT (BHU) Varanasi and IISc Bangalore and co-hosted by the Henry Royce Institute, The University of Manchester, UK on **Dec 16, 2021**.
5. Attended RSC-IISER Desktop Seminar with OBC, organized by RSC publishing Webinars, Royal Society of Chemistry, UK on **Nov 25, 2021**.
6. Attended RSC-IISER Desktop Seminar with ChemComm, organized by RSC publishing Webinars, Royal Society of Chemistry, UK on **Aug 06, 2021**.
7. Attended 1<sup>st</sup> Virtual International Symposium on C-H Bond activation, **2021**, organized by Georg-August-Universität Göttingen, Germany from **27-30 July, 2021**.
8. Certified and Attended E-seminar on “Research and Ethics” on **8<sup>th</sup> July, 2020** Organized by Department of Applied Science, SAGE Institute of Research and Technology, SAGE University, Indore (M.P).

9. Participated in International e-Symposium on “Diversification of Indian Agricultures: Ancient to Modern” Organized by School of Agriculture, Suresh Gyan Vihar University, Jaipur from **17-18 June, 2020**.
10. Attended 3 days Online National Workshop in Structural Bioinformatics in “*In Silico Techniques in Drug Designing*”, **2020**, Jointly organized by Bioinformatics Centre (SubDIC), Department of Biotechnology, Barkatullah University, Bhopal & Corporate Institute of Pharmacy, Bhopal from **27-29 May, 2020**.
11. Attended/Participated in “*Workshop on the Application of Direct Analysis in Real Time Mass Spectroscopy (DART-MS) Techniques*, **24-25 Sep, 2013**, CSIR-CDRI, Lucknow.
12. Attended/Participated in “*Brainstorming Conference/Workshop on Science, Technology and Innovation Policy (STI Policy, DST), 2013*” organized by MNIT Jaipur (**30<sup>th</sup> April, 2013**), India.
13. National Workshop attended on “*Modern Sophisticated Instruments*”, Indian Institute of Technology, Indore (Feb, **2013**), India.
14. “21st Symposium on optically active compounds” Institute of microbial chemistry, Microbial chemistry research foundation, **Nov, 2011**, Tokyo, JAPAN.
15. Workshop attended on “*Responsible conduct of research*”, (May, **2010**), the City University of New York, New York, U.S.A.
16. “*Sponsored Program & Funding: CUNY postdoctoral development program*”, (April, **2010**), The City University of New York, U.S.A.
17. “*Autism: Integrating genes, brain and behavior*” 23<sup>rd</sup> annual international symposium, (Jan, **2010**), Center for study of gene structure & function, The City University of New York, New York, U.S.A.
18. Workshop attended on “*Responsible conduct of research*”, (Oct, **2009**), The City University of New York, New York, U.S.A.
19. “*Autism: Integrating genes, brain and behavior*” 22<sup>nd</sup> Annual International Symposium, (Jan, **2009**), Center for study of gene structure & function, the city university of New York, New York, U.S.A.
20. Workshop attended on “*CUNY Postdoc development programme*”, (Oct, **2008**), The City University of New York, New York, U.S.A.

**Conferences/ Workshops/ Symposia /Short Term Training Programme/ Short Term Course/ Community Development Programme (CDP) / Faculty Development Programme (FDP)/ Invited lectures Organized**

1. Programme on “*Leadership Development Programme for Scientists (DST Sponsored)*” organized by Administrative Staff College of India (ASCI), Bella Vista, Hyderabad from 14-18 Oct, 2024.
2. **International Symposium** on “*Toxicology and Applied Pharmacology*” at NIPER-Raebareli on 29-30 Sep, 2022. (as Patron)
3. **SERB-DST Sponsored International Conference** on “*Current Challenges in Drug Discovery Research*” **CCDDR 2015** at Department of Chemistry, MNIT Jaipur on 23-25 Nov, 2015. (as Convener & Organizing Secretary, CCDDR 2015)
4. “*AIDS Awareness Programme*” as part of Community Development Programme organized at Department of Chemistry, MNIT Jaipur on 1<sup>st</sup> Dec, **2014**. (as Programme Coordinator)
5. “*CANCER Awareness Programme*” as part of Community Development Programme organized at Department of Chemistry, MNIT Jaipur on 19<sup>th</sup> Nov, **2014**. (as Programme Coordinator)
6. Served as **Programme coordinator** for organizing several “*Invited Lecture*” by eminent expert in the Department of Chemistry, MNIT Jaipur from **2013-2015**.

**Invited Talks/ Plenary lecture/ Chaired Session**

1. **Invited Lecture** on “*Natural-Product-Inspired AI/ML-Assisted Drug Discovery with Special Emphasis on Virtual Screening: Challenges and Opportunities*” **11 June, 2026 National Faculty Development Programme (Online)**, organized by College of Pharmacy, Integral University, Lucknow-226026, India.
2. **Invited Lecture** on “*From Curiosity to Contribution: Fueling Research Excellence and Motivation to Next Generation towards Chemical Science*” **13 April, 2026** organized by the Department of Chemistry, Deen Dayal Upadhyay Gorakhpur University, Gorakhpur-273009, U.P, India.
3. **DISTINGUISHED LECTURE** on “*Reengineering 1,2,4-Trioxane Pharmacophore Toward Next-Generation Anticancer Therapeutics: From Rational Design and Synthesis to Bioevaluation and Computational Exploration*” **26-28 Mar, 2026** International Conference on “*Biotech Innovations 2026: From Discovery to Translation*”, organized by Suresh Gyan Vihar University- Biotechnology Business Incubator and School of Applied Sciences, SGVU, Jaipur, India.

4. **Invited Lecture** on “*N-Heterocyclic Carbene Organocatalysis in C–H Activation: Sustainable Strategies for C–C/C–N Bond Construction in Bioactive Aza-Heterocycles*” **6-7 Mar, 2026** International Conference on Chemical Synthesis and Advanced Materials (ICCSAM 2026), organized by the Department of Chemistry, SVNIT Surat-395007, Gujarat, India.
5. **Invited Lecture** on “*Harnessing Nature’s Blueprint for the Development of Next-Generation Anticancer Congeners*” **30-31 Jan, 2026** International Conference - Comprehensive Approaches to Cancer: Prevention, Diagnosis and Holistic Management-2026 (IC-CPDHM-2026), organized by the Department of Pharmacy, Suresh Gyan Vihar University, Jaipur, India.
6. **Invited Lecture** on “*Natural Product-Driven Discovery of Intrinsically Fluorescent Imidazo[2,1-b][1,3]thiazin-5-one as Cytotoxic Synthone*” **16 Jan, 2026** One-Day Hands-on Training on Fluorescence Spectrophotometer conducted under Scientific Social Responsibility (SSR) activity of ANRF, at the Department of Medicinal Chemistry, NIPER-Raebareli, Lucknow, India.
7. **KEYNOTE LECTURE** on “*Exploration of Natural-Product-Inspired Bioactive Alkaloids and Terpenes: Synthetic Strategies and Practical Applications*” **3-4 Sep, 2025** International Symposium on "Integrated Computational and Experimental Methods for Innovation in Chemistry and Interdisciplinary Sciences (ICEMI-CHEMIS 2025),” organized by School of Sciences, P. P. Savani University, Surat, Gujarat, India.
8. **Invited Lecture** on “*Artemisinin, A Sesquiterpene Peroxide-based Antimalarial Drug: A Nobel Medicine for Malaria*” **24-25 Feb, 2025** National Conference on “Recent Breakthrough in Pharmaceutical Sciences- From bench Innovations to laboratory applications and beyond” February 24-25, 2025 Organized by the Department of Pharmacy, Amity University, Lucknow (U.P).
9. **Invited Lecture** on “*Role of Pharmaceutical Chemistry in Drug Discovery: Current Scenario, Scope and Future Opportunities*” **20 Feb, 2025** Guest Lecture organized by Department of Pharmacy, Amity University, Lucknow, U.P.
10. **Invited Lecture** on “*Artificial Intelligence and Machine Learning-Assisted Drug Discovery in AYUSH/Traditional Medicine with Special Emphasis on Virtual Screening: Challenges and Opportunities*” **12 Feb, 2025** International Conference on “Innovation in Unani Medicine for integrative Health Solution: A Way forward”, organized by CCRUM, Ministry of Ayush, GOI at Vigyan Bhawan, New Delhi.
11. **CHAIRE SESSION** Technical Session II: 13:45 – 16:15 on **16 Dec, 2024** in National Seminar on “*Harnessing Artificial Intelligence and Machine learning for Ayush: Prospectus and Challenges*”, organized by Central Research Institute of Unani Medicine (CRIUM), Lucknow in collaboration with CCRUM, Ministry of Ayush, GOI.
12. **Invited Lecture** on “*Artificial Intelligence and Machine Learning-Assisted Drug Discovery in Unani Medicine with special emphasis on Virtual Screening: Challenges and Opportunities*” **16 Dec, 2024** National Seminar on “*Harnessing Artificial Intelligence and Machine learning for Ayush: Prospectus and Challenges*”, organized by Central Research Institute of Unani Medicine (CRIUM), Lucknow in collaboration with CCRUM, Ministry of Ayush, GOI.
13. **KEYNOTE LECTURE** delivered in National Conference entitled “*Drug Discovery in Pharmaceutical Sciences and its Future Prospectives*” on title “*Artemisinin, A Sesquiterpene Peroxide-based Antimalarial Drug: A Major Breakthrough in the Chemotherapy of Malaria*” Organized by Siddhartha Institute of Pharmacy, Dehradun on **9 May, 2024** in collaboration with APTI, Uttarakhand and Uttarakhand Technical University, Dehradun, India.
14. **KEYNOTE LECTURE** on “*Exploration of Artemisinin Analogues as Potent Antimalarials: A Journey towards Drug discovery and development*” **26-27 Apr, 2024** International Conference on “Recent Advances in Biotechnology & Biomedical Sciences” (BIOTECH NEXUS 2024), organized by Suresh Gyan Vihar University- Biotechnology Business Incubator and School of Applied Sciences, SGVU, Jaipur, India.
15. **CHAIRE SESSION** “*Oral Presentation Session-VIP*” on **26-27 Apr, 2024** at International Conference on “Recent Advances in Biotechnology & Biomedical Sciences” (BIOTECH NEXUS 2024), organized by Suresh Gyan Vihar University- Biotechnology Business Incubator and School of Applied Sciences, SGVU, Jaipur, India.
16. **Invited Lecture** on “*Exploration of Natural-Product-Inspired Bioactive Alkaloids and Terpenes: Synthetic Strategies and Practical Applications*” **20-21 Mar, 2024** National Conference on Recent Trends in Chemical Sciences Research and Future prospects (NCRTCSRFP 2024), organized by Department of Chemistry, St. Andrew’s College, Gorakhpur-273008, U.P., India.
17. **CHAIRE SESSION** at “*Oral Session-I: 3:00 PM – 6:30 PM Best Oral Presentation Award Competition*” **16-18 Feb, 2024** International Conference on Traditional Medicine & Phytopharmaceuticals, and the 11th International Congress of the Society for Ethnopharmacology (ICTMP-SFEC 2024), organized by Natural Product and Medicinal Chemistry Division, CSIR-IIIM, Jammu-180001, J.K., India.
18. **Invited Lecture** on “*Exploration of Natural-Product-Inspired Bioactive Alkaloids/Terpenes: Synthetic Strategies and Applications*” **16-18 Feb, 2024** International Conference on Traditional Medicine & Phytopharmaceuticals, and the

- 11th International Congress of the Society for Ethnopharmacology (ICTMP-SFEC 2024), organized by Natural Product and Medicinal Chemistry Division, CSIR-IIIM, Jammu-180001, J.K., India.
19. **Chairperson** in National Seminar on “*Novel Paradigms in Controlled Drug Delivery to Strengthen Innovation and Translation in Pharmaceutical Formulations*” organized by NIPER-Raebareli in collaboration with Controlled Release Society-Indian Chapter(CRSIC) on **22 Dec, 2023**.
  20. **CHAired SESSION** at “*Sessions II- Natural Product Synthesis 18 Dec, 2023*” “**18-19 Dec, 2023 International Symposium on 4th Flow Chemistry and Natural Product Synthesis**, organized by Department of Medicinal Chemistry, NIPER-Kolkata, W.B.
  21. **Invited Lecture** on “*Artemisinin, A Sesquiterpene Peroxide-based Antimalarial Drug: A Nobel Medicine for Malaria*” **18-19 Dec, 2023 International Symposium on 4th Flow Chemistry and Natural Product Synthesis**, organized by Department of Medicinal Chemistry, NIPER-Kolkata, W.B.
  22. **KEYNOTE SPEAKER** (Guest of Honour at Valedictory Ceremony) on “*An Overview of Drug Discovery: Journey from bench-side to Bed-side*” at Valedictory ceremony of International Conference cum Workshop on “*Alternatives to animal experiments: Exploring imminent possibilities in preclinical drug discovery using computational tools*” [AAE-2023] at Amity Institute of Pharmacy, Amity University, Lucknow campus (UP)” held on **3 Nov, 2023**.
  23. **CHAired SESSION** at “*Parallel Sessions IX-C 18 Nov, 2022*” 16-19 Nov, 2022 “**27<sup>th</sup> ISCBC-2022 International Conference on Research and Innovation in Chemical, Pharmaceutical and Biological Sciences**”, organized at Department of Chemistry, Birla Institute of Technology, Mesra, Ranchi (JH).
  24. **Invited Lecture** on “*Oxidant-Promoted, Palladium-catalyzed, Regioselective Synthesis of Bioactive Heterocycles via C–H Bond Activation: Chemistry on 1-Aryl-1H-indazoles and 2-Aryl-2H-indazoles*” 16-19 Nov, **2022** “**27<sup>th</sup> ISCBC-2022 International Conference on Research and Innovation in Chemical, Pharmaceutical and Biological Sciences**”, organized at Department of Chemistry, Birla Institute of Technology, Mesra, Ranchi (JH).
  25. **CHAired SESSION** at “*T-5 Development of key intermediates and APIs*” 11 Nov, **2022** “**International Conference on Recent Trends and Future Opportunities in Pharmaceuticals (NIPER PHARMACon-2022)**”, organized at NIPER-SAS Nagar, Punjab.
  26. **Oral Presentation** on “*Synthetic Halogenated Arylvinyl-1,2,4 Trioxanes as Potential Anticancer Agents: Synthesis, Bioevaluation, SAR and In-silico Studies*” **10-12 Nov, 2022** “**International Conference on Recent Trends and Future Opportunities in Pharmaceuticals (NIPER PHARMACon-2022)**”, organized at NIPER-SAS Nagar, Punjab.
  27. **ONLINE Invited Lecture** on “*An Enantioselective Synthesis of an Anti-hypercholesterolemic drug Atorvastatin Calcium (Lipitor)*” in NIPER Research Symposium, organized by NIPER-Kolkata, India on **15<sup>th</sup> Feb, 2022**.
  28. **ONLINE Invited Lecture** on “*Practical Approaches in C-H Bond Activation: Theory and Practical Applications*” at **ALL RUSSIAN SCIENTIFIC AND PRACTICAL CONFERENCE WITH INTERNATIONAL PARTICIPATION** on “**RESOURCE-SAVING AND ENVIRONMENTALLY FRIENDLY PROCESSES IN CHEMISTRY AND CHEMICAL TECHNOLOGY**” held on **8 Dec, 2021** at the Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia on **6<sup>th</sup> – 8<sup>th</sup> Dec, 2021**.
  29. **ONLINE Plenary Lecture** on “*Oxidative Cross-Dehydrogenative Coupling (CDC) via C<sub>(sp<sup>2</sup>)</sub>–H bond Functionalization: tert-Butyl Peroxybenzoate-promoted Regioselective Direct C-3 Acylation/ Benzoylation of 2H-Indazoles with Aldehydes/Benzyl Alcohols /Styrenes*” at **ALL RUSSIAN SCIENTIFIC AND PRACTICAL CONFERENCE WITH INTERNATIONAL PARTICIPATION** on “**RESOURCE-SAVING AND ENVIRONMENTALLY FRIENDLY PROCESSES IN CHEMISTRY AND CHEMICAL TECHNOLOGY**” held on **8 Dec, 2021** at the Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia on **6<sup>th</sup> – 8<sup>th</sup> Dec, 2021**.
  30. **ONLINE Plenary Lecture** on “*Oxidant-Promoted C-H Bond Activation Reactions: Chemistry and Practical Approaches Towards Natural-Product-Inspired Bio-Heterocycles*” at **ALL RUSSIAN SCIENTIFIC AND PRACTICAL CONFERENCE WITH INTERNATIONAL PARTICIPATION** on “**RESOURCE-SAVING AND ENVIRONMENTALLY FRIENDLY PROCESSES IN CHEMISTRY AND CHEMICAL TECHNOLOGY**” held on **7 Dec, 2021** at the Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia on **6<sup>th</sup> – 8<sup>th</sup> Dec, 2021**.
  31. **ONLINE Plenary Lecture** on “*Organocatalyzed C-H Bond Activation Reactions: Environmentally Benign Strategies towards the Synthesis of Bioactive Heterocycles*” at **ALL RUSSIAN SCIENTIFIC AND PRACTICAL CONFERENCE WITH INTERNATIONAL PARTICIPATION** on “**RESOURCE-SAVING AND ENVIRONMENTALLY FRIENDLY PROCESSES IN CHEMISTRY AND CHEMICAL TECHNOLOGY**” held on **6 Dec, 2021** at the Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia on **6<sup>th</sup> – 8<sup>th</sup> Dec, 2021**.
  32. **ONLINE Invited Lecture** on “*Microwave-Assisted, Regio-/Stereo-selective Synthesis of Novel Functionalized Spiro[pyrrolidine-2',3'-oxindoles]: Design, X-Ray Crystal Studies, Anticancer Activities and SAR Studies*” in “**Perm**

- Scientific Forum: Science and Global Challenges of the XXI century**” at the Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia on **19<sup>th</sup> Nov, 2021**.
33. **ONLINE Invited Lecture** on “*Novel functionalized para-(Aryloxy)-Arylvinyl-1,2,4 Trioxanes as Anti-cancer Agents: Synthesis, Bioevaluation and SAR Studies*” in “**Perm Scientific Forum: Science and Global Challenges of the XXI century**” at the Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia on **19<sup>th</sup> Nov, 2021**.
  34. **ONLINE Invited Lecture** on “*Ultrasound-Assisted Synthesis of Novel Spirooxindole Derivatives via One-Pot Three-Component 1,3-Dipolar Cycloaddition Reactions: Synthesis, Stereochemical Assignment, Antimicrobial and Antitubercular Activities, SAR and in silico Studies*” in “**Perm Scientific Forum: Science and Global Challenges of the XXI century**” at the Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia on **18<sup>th</sup> Nov, 2021**.
  35. **ONLINE Invited Lecture** on “*Oxidative Cross-Dehydrogenative Coupling (CDC) via  $C_{(sp^2)}$ -H bond Functionalization: tert-Butyl Peroxybenzoate (TBPB)-promoted Regioselective Direct C-3 Acylation/Benzoylation of 2H-Indazoles with Aldehydes/Benzyl Alcohols/Styrenes*” in “**Perm Scientific Forum: Science and Global Challenges of the XXI century**” at the Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia on **18<sup>th</sup> Nov, 2021**.
  36. **ONLINE Invited Lecture** on “*Pd-Catalyzed Oxidant Switched Regioselective Mono- and Bis-ortho-Aroylation of 1-Aryl-1H-Indazole with Aldehydes via  $C_{(sp^2)}$ -H Bond Activation*” in “**Perm Scientific Forum: Science and Global Challenges of the XXI century**” at the Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia on **17<sup>th</sup> Nov, 2021**.
  37. **ONLINE Invited Lecture** on “*N-Heterocyclic Carbene-Catalyzed Deoxygenative  $\alpha$ -Benzylation of Ketones via  $C_{(sp^3)}$ -H bond activation: Synthesis, Chemistry, and Practical Applications*” in “**Perm Scientific Forum: Science and Global Challenges of the XXI century**” at the Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia on **17<sup>th</sup> Nov, 2021**.
  38. **ONLINE Invited Lecture** on “*Cu-Catalyzed C-N Bond formation via  $C_{(sp^2)}$ -H bond functionalization: Application to the synthesis of Novel 2-Phenyl-5H-imidazo[2,1-b][1,3]thiazin-5-ones - Sulphonamide Hybrids*” in “**Perm Scientific Forum: Science and Global Challenges of the XXI century**” at the Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia on **16<sup>th</sup> Nov, 2021**.
  39. **ONLINE Invited Lecture** on “*Microwave-Assisted Synthesis of 2-Phenyl-5H-imidazo[2,1-b][1,3]thiazin-5-ones: Design, Synthesis, Chemistry and Photophysical and Cytotoxicity Activity*” in “**Perm Scientific Forum: Science and Global Challenges of the XXI century**” at the Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia on **16<sup>th</sup> Nov, 2021**.
  40. **ONLINE Invited Lecture** on “*Lewis Acid/Oxidant as Rapid Regioselective Halogenating Reagent System for Direct Halogenation of Fused Bi-/Tri-cyclic Hetero-aromatic Congeners via  $C_{(sp^2)}$ -H bond Functionalization*” in “**Perm Scientific Forum: Science and Global Challenges of the XXI century**” at the Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia on **15<sup>th</sup> Nov, 2021**.
  41. **ONLINE Invited Lecture** on “*Metal-Free,  $H_2O_2$ -Mediated, Regioselective Direct C-3 Hydroxylation of Imidazo[1,2-a]pyridines via  $C_{(sp^2)}$ -H Bond Functionalization*” in “**Perm Scientific Forum: Science and Global Challenges of the XXI century**” at the Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia on **15<sup>th</sup> Nov, 2021**.
  42. **ONLINE CHAIRED SESSION** at Virtual International Conference on ‘**Emerging Trends in Medicinal Chemistry–2021**’ (**ETMC-2021**) organized by the Department of Chemistry, S. V. National Institute of Technology (SV NIT), Surat on **18<sup>th</sup> - 19<sup>th</sup> March, 2021**.
  43. **ONLINE Invited Lecture** on “*Transition-Metal-Free/Oxidant-Promoted  $C_{(sp^2)}$ -H Bond Activation/ Functionalization Reactions: Chemistry and Practical Approaches towards Bioactive Heterocycles*” at Virtual International Conference on ‘**Emerging Trends in Medicinal Chemistry–2021**’ (**ETMC-2021**) organized by the Department of Chemistry, S. V. National Institute of Technology (SV NIT), Surat during **18<sup>th</sup> - 19<sup>th</sup> March, 2021**.
  44. **ONLINE Invited Lecture** on “*Learning and Teaching Online in Indian Education System During Covid-19 Pandemic: An Overview*” at V Prikamsky congress of Chemistry Teachers “*Continuous chemical education- trends and directions of developments*” held on **5<sup>th</sup> Nov, 2020** at the Faculty of Chemistry, Perm State University, Perm, Russia on **5<sup>th</sup> Nov, 2020**.
  45. **ONLINE Invited Lecture** on “*Transition Metal-Free Direct Coupling of Aldehydes with Terminal Alkynes: An Efficient Process for the Synthesis of Pharmaceutically Privileged  $\alpha$ ,  $\beta$ -Unsaturated Ketones (Chalcones) and Propargylic Alcohols*” at the Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia on **30<sup>th</sup> Oct, 2020**.

46. **ONLINE Invited Lecture** on “2,3-Bis-(2-pyridyl)Pyrazine as an Efficient Organocatalyst for the Direct  $C_{(sp^2)}$ -H Arylation of Unactivated Arenes/Heteroarenes” at the Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia on **30<sup>th</sup> Oct, 2020**.
47. **ONLINE Invited Lecture** on “Novel Functionalized 1,2,4-Trioxanes as Antimalarial and Anticancer agents: Synthesis, Chemistry, Bioevaluation, SAR and in silico studies” at the Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia on **29<sup>th</sup> Oct, 2020**.
48. **ONLINE Invited Lecture** on “Microwave-Assisted Synthesis of  $C_8$ -Substituted Methylxanthines via Cross-Dehydrogenative Coupling (CDC) Strategy: Synthesis, Chemistry, Bioevaluation and their Practical Applications” at the Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia on **29<sup>th</sup> Oct, 2020**.
49. **ONLINE Invited Lecture** on “Novel C-Homoaporphine Analogues: Synthesis, Chemistry, Bioevaluation and their Structure-Activity Relationship studies” at the Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia on **26<sup>th</sup> Oct, 2020**.
50. **ONLINE Invited Lecture** on “C-3 Tethered isobenzofuran-1(3H)-ones and ortho-Substituted-1H-isochromen-1-ones as Potent Antioxidant and Antiplatelet Agents: Design, Synthesis, Biological Evaluation, SAR and in silico Studies” at the Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia on **26<sup>th</sup> Oct, 2020**.
51. **ONLINE Invited Lecture** on “Organocatalyzed Decarboethoxy C-N Bond Formation: Application to the Synthesis of Indolo[2,1-a]isoquinoline and Dibenzopyrrocolone Alkaloids” at All-Russian Scientific Conference with International Participation on “**Organic Chemistry for Agriculture and Medicine**” held on **22 Oct, 2020 [5:00 PM-5:30 PM]** at the Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia on **20<sup>th</sup> – 22<sup>nd</sup> Oct, 2020**.
52. **ONLINE Invited Lecture** on “Metal-Free, Oxidant-Promoted,  $Csp^2$ - $Csp^3$  Cross-Dehydrogenative Coupling: Chemistry and its Practical Application” at All-Russian Scientific Conference with International Participation on “**Organic Chemistry for Agriculture and Medicine**” held on **22 Oct, 2020 [4:30 PM-5:00 PM]** at the Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia on **20<sup>th</sup> – 22<sup>nd</sup> Oct, 2020**.
53. **ONLINE Plenary Lecture** on “Organocatalysis in  $C_{(sp^2)}$ -H Bond Activation Reactions: Chemistry and Applications to the Synthesis of Bioactive Heterocycles” at All-Russian Scientific Conference with International Participation on “**Organic Chemistry for Agriculture and Medicine**” held on **21 Oct, 2020** at the Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia on **20<sup>th</sup> – 22<sup>nd</sup> Oct, 2020**.
54. “Metal-Free C-H Bond Activation Reactions: Approach to Access Bioactive Heterocycles via Modifying Guareschi-Thorpe & Favorskii Reactions” at **28<sup>th</sup>-29<sup>th</sup> Feb, 2019** International Conference on “**Frontier Areas of Chemistry (ICFAC) 2020**”, Department of Chemistry, School of Physical Sciences, Mahatma Gandhi Central University, Motihari, Bihar-845401, India.
55. **Plenary Lecture** on “Artemisinin, a Nobel Medicine: A Booming Drug in Antimalarial Chemotherapy” at **4<sup>th</sup> International Conference on Pharmacy and Pharmaceutical Sciences 2019** with the Theme: “**Innovative Approaches, analysis and Developments in Pharmacy and Pharmaceutical Science**” (4<sup>th</sup> ICPPS, 2019) on **14 Dec, 2019** at Bangkok, Thailand from **December 13<sup>th</sup> - 14<sup>th</sup>, 2019**.
56. “Exploration of natural product inspired bioactive heterocycles from bench-side to bed-side: A journey towards drug discovery and development.” on **17 May, 2019** at the Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia on **15<sup>th</sup> – 18<sup>st</sup> May, 2019**.
57. “Development of Organocatalyzed  $sp^2$  C-H bond activation reactions: Synthesis, Chemistry, Scope and its practical applications” on **17 May, 2019** at the Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia on **15<sup>th</sup> – 18<sup>st</sup> May, 2019**.
58. “ $Ag_2O$  nanoparticle-catalyzed substrate-controlled regioselectivities: Direct access to bioactive 3-ylidenephthalides and isocoumarins” on **16 May, 2019** at the Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia on **15<sup>th</sup> – 18<sup>st</sup> May, 2019**.
59. **Invited Lecture** on “Indian education system: An overview” at IV Prikamsky congress of Chemistry Teachers “Continuous chemical education- trends and directions of developments” held on **17 May, 2019** at the Faculty of Chemistry, Perm State University, Perm, Russia on **15<sup>th</sup> – 18<sup>st</sup> May, 2019**.
60. **Plenary Lecture** on “Carbonyl compounds as universal synthetic precursors for the direct access to natural product inspired bioactive pyridine-based heterocycles” at International Conference on “**Polycarbonyl compounds 2019 dedicated to the 85th anniversary of Yu. S. Andrejchikov**” held on **15 May, 2019** at the Faculty of Chemistry, Department of Organic Chemistry, Perm State University, Perm, Russia on **15<sup>th</sup> – 18<sup>st</sup> May, 2019**.
61. “Role of Chemistry in Drug Discovery: Current Scenario, Scope and Future Opportunities” at the Faculty of Basic and Applied Science, Vivekananda Global University, Jaipur on **31 January, 2019**.

62. "Recent Development in Interdisciplinary Research in Chemical Sciences at Laboratory of Organic and Medicinal Chemistry, MNIT Jaipur" at National Workshop on "MIND-MELD - How Interdisciplinary are you" held at Manipal University, Jaipur on **29 July, 2017**.
63. "Transition metal-catalyzed/Organo-Catalyzed C-H Bond Activation/Functionalization: Scope and Applications" at Faculty of Chemistry and Chemical Technology, University of Ljubljana, Ljubljana, Slovenia. on **27<sup>th</sup> Dec, 2016**.
64. **Plenary Lecture** on "Artemisinin Derived Stable Ozonides: Synthesis, Chemistry, X-ray studies, in vitro and in vivo Antitubercular activities, SAR and molecular docking studies" at International Conference on "Current Trends in Chemical Sciences" held at Department of Organic Chemistry, Perm State University, Perm, Russia on **19<sup>th</sup> – 21<sup>st</sup> Oct, 2016**.
65. "Recent developments in the Chemistry and biology of Antimalarial drug Artemisinin" at National Conference (OCS-2016) on "Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges" held at Department of Chemistry, Birla Institute of Science and Technology (BITS) Pilani, Pilani, India on **29<sup>th</sup>-30<sup>th</sup> August, 2016**.
66. "Carbon-Carbon Bond Forming Reactions: Classical vs Modern" at Department of Chemistry, Goa University, Goa, India on **22nd March, 2016**.
67. "Recent Advances in Antimalarial Peroxide-based Natural Product, Artemisinin: A Nobel Medicine for Malaria" at Department of Chemistry, Birla Institute of Science and Technology (BITS) Pilani-Goa Campus, Goa, India on **21st March, 2016**.
68. "Recent Advances in Antimalarial Peroxide-based Chemotherapy for Malaria: Artemisinin, A Nobel Medicine" at One Day Symposium (ETACS-2016) on "Emerging Trends in Applied Chemical Sciences (ETACS-2016)" held at Department of Chemistry, School of Chemical Sciences and Pharmacy, Central University of Rajasthan, Bandarsindri, Kishangarh, Ajmer, India on **18th March, 2016**.
69. "Artemisinin, an Nobel Medicine: Still Only Drug of Choice for the Treatment of Malaria" at Department of Chemistry, Mohanlal Sukhadia University, Udaipur, India on **23th February, 2016**.
70. "Wittig Reaction in Organic Synthesis" at Department of Chemistry, Alankar P.G. Girls College (Affiliated to University of Rajasthan), Jaipur, India on **12th February, 2016**.
71. "Discovery of Artemisinin as Nobel medicine: A Gift from Traditional Chinese herb Artemisia Annua" at Department of Chemistry, Sardar Vallabhbhai National Institute of Technology, Surat, India on **9th February, 2016**.
72. "Perspective and Challenges in Antimalarial Chemotherapy: Design and Synthesis of Novel Artemisinin Analogues as Antimalarials" at 22nd ISCB International Conference (ISCBC-2016) on "Recent Trends in Affordable and sustainable Drug Discovery and Developments" held at Uka Tarsadia University, Bardoli, Surat, India on **6th February, 2016**.
73. "Stable Bio-active Novel Peroxides: Synthesis, Chemistry and their Biological Evaluation" at Department of Chemistry, University of Ljubljana, Ljubljana, Slovenia on **10<sup>th</sup> September, 2015**.
74. "Systematic Investigation of Bio-active Ozonides and Aza-Peroxides: Synthesis, Chemistry and their Biological Evaluation" at Department of Physical and Organic Chemistry, Jožef Stefan Institute, Ljubljana, Slovenia on **8<sup>th</sup> September, 2015**.
75. "Synthesis of Aza-heterocyclic compounds via transition metal-catalyzed direct arylation strategy" at Department of Organic Chemistry, Faculty of Chemistry, Perm State University, Perm, Russia on **25<sup>rd</sup> March, 2015**.
76. "Synthesis, Chemistry and Bioevaluation of Antimalarial Peroxide Drug Artemisinin" at Department of Organic Chemistry, Faculty of Chemistry, Perm State University, Perm, Russia on **23<sup>rd</sup> March, 2015**.
77. "An enantioselective synthesis of an anti-hypercholesterolemic drug atorvastatin calcium (Lipitor) via direct catalytic asymmetric aldol reaction of thioamides" in 21<sup>st</sup> ISCB International Conference on Current Trends in Drug Discovery and Developments (ISCBC-2015), Jointly organized by ISCB, India and CSIR-CDRI, Lucknow, India on 25<sup>th</sup>-28<sup>th</sup> Feb, 2015. (**oral presentation**)
78. "Artemisinin analogues: Synthesis, Chemistry and antimalarial assessment" UGC-Sponsored National Conference on Current Trends in Chemical Sciences (NCCTCS 2014), 15<sup>th</sup>-16<sup>th</sup> Oct, 2014, Department of Chemistry, St. Andrew's College, Gorakhpur, India.
79. "Transition metal-catalyzed C-C bond formation via C-H bond activation: Versatility and practicality in natural product synthesis" Chemical Society (30<sup>th</sup> Oct, 2013), Department of Chemistry, St. Andrew's College, Gorakhpur, India.
80. "Direct catalytic asymmetric aldol reaction of thioamides-An efficient route to atorvastatin calcium (Lipitor)" Intra-Institute Conference (24 Feb, 2012), Microbial Chemistry Research Foundation, Tokyo, Japan

#### [Current National /International Collaborations \(2026-2028\)](#)

1. **Prof. Irina V. Mashevskaya**, Department of Organic Chemistry, Faculty of Chemistry, Perm State University, Perm, Russia Federation.
2. **Prof. Jernej Iskra**, Department of Chemistry and Biochemistry, University of Ljubljana, Slovenia.
3. **Dr. Paolo Coghi**, Macau Institute for Applied Research in Medicine and Health, State Key Laboratory of Quality Research in Chinese Medicine, Macau University of Science and Technology, Taipa, Macau, China.
4. **Prof. Sirish K. Ippagunta**, Department of Biotechnology, AIIMS, New Delhi.
5. **Dr. Ashok K. Datusalia**, Department of Pharmacology and Toxicology, NIPER-Raebareli.
6. **Dr. Ravinder K. Kaundal**, Department of Pharmacology and Toxicology, NIPER-Raebareli.
7. **Dr. Girijesh K. Patel**, Department of Biotechnology, MNNIT Allahabad.
8. **Prof. Nikolai Petrovsky**, Professor of Immunology and Infectious Disease, The Australian Respiratory and Sleep Medicine Institute, and Professor and Research Director, Vaxine Pty Ltd, Adelaide, Australia

#### National/International Collaborations (2013-2025)

9. **Prof. Na'il Saleh**, Department of Chemistry, College of Science, United Arab Emirates (UAE) University, Al Ain, United Arab Emirates.
10. **Prof. Carmine Coluccini**, Institute of New Drug Development, China Medical University, Taiwan.
11. **Prof. Dr. Vincent Wong**, Macau Institute for Applied Research in Medicine and Health, State Key Laboratory of Quality Research in Chinese Medicine, Macau University of Science and Technology, Taipa, Macau, China.
12. **Dr. Dharmendra Kumar Yadav**, College of Pharmacy, Gachon University of Medicine and Science, Yeonsu-gu, Incheon City, 21924, Korea
13. **Prof. Andrey N. Maslivets**, Department of Organic Chemistry, Faculty of Chemistry, Perm State University, Perm, Russia Federation.
14. **Prof. Mohamed El-Shazly**, Department of Pharmaceutical Biology, Faculty of Pharmacy and Biotechnology, The German University in Cairo, Cairo, Egypt.
15. **Dr. Vinita Chaturvedi**, CSIR-CDRI, Lucknow.
16. **Prof. Jernej Iskra**, Laboratory of Organic & Bioorganic Chemistry, Department of Physical and Organic Chemistry (K-3), "Jozef Stefan" Institute, Jamova 39, 1000 Ljubljana, Slovenia. (*DST-ARRS Indo-Slovenia Project*)
17. **Prof. Stojan Stavber**, Laboratory of Organic & Bioorganic Chemistry, Department of Physical and Organic Chemistry (K-3), "Jozef Stefan" Institute, Jamova 39, 1000 Ljubljana, Slovenia. (*DST-ARRS Indo-Slovenia Project*)
18. **Prof. Kristof Kranjc**, Department of Chemistry and Biochemistry, University of Ljubljana, Slovenia.
19. **Prof. Franc Perdih**, Department of Chemistry and Biochemistry, University of Ljubljana, Slovenia.
20. Department of Advance Molecular Microbiology, **M/s Seminal Applied Sciences Pvt. Ltd, Jaipur.**
21. **Dr. Roman V. Shchepin**, Department of Radiology & Radiological Sciences, Vanderbilt University, Institute of Imaging Science, Vanderbilt University Medical Center, Nashville, Tennessee, USA.
22. **Prof. Nadezhda Shchepina**, Head of the Laboratory of Radiochemistry, Natural Sciences Institute of Perm State University, 4, Genkel St., Perm-614990, Russia.
23. **Prof. Nonhlanhla P. Khumalo**, Hair and Skin Research lab, Head of Dermatology, Groote Schuur Hospital & the University of Cape Town, Capetown, South Africa.
24. **Dr. Ahmed Mohammed**, Department of Chemistry, Faculty of the Natural Sciences, University of the Western Cape, Cape Town, South Africa.
25. **Prof. (Dr.) S. L. Kothari**, FBS, FISPM, FNAAS, FNASc Dy. Vice Chancellor, Director, Amity Institute of Biotechnology, Amity University Rajasthan, Jaipur. [Former Dean (Science) and Director, Centre for Convergent Technology, University of Rajasthan, Jaipur]
26. **Prof. Lester M. Davids**, Redox laboratory, Department of Human Biology, Health Sciences faculty, University of Cape Town Medical School, Cape Town, South Africa. (*DST-NRF Indo-South Africa Project*)
27. **Prof. Paturu Kondaiah**, Department of Molecular Reproduction, Development and Genetics, Indian Institute of Science, Bangalore-560012, India.
28. **Dr. Rajbala Verma**, Department of Zoology, University of Rajasthan, Jaipur-302004, India. (Biological Investigation = Antitubercular, Antimicrobials, Antioxidants, Antiplatelets etc.)
29. **Dr. Dinkar Sahal**, International Centre for Genetic Engineering and Biotechnology. Aruna Asaf Ali Marg, New Delhi, New Delhi. (*Antimalarial Drug Development Programme*)
30. **Dr. Ramendra Pratap**, Department of Chemistry, University of Delhi.

#### International Visits

1. Visited **Murdoch University, Perth campus, AUSTRALIA** from 22-28 Nov, 2025 for teaching and research collaboration in association with iSTEP, an associated partner of Murdoch University.

2. Visited **Bangkok, THAILAND** to deliver **Plenary lecture in International Conference** on Pharmacy and Pharmaceutical Sciences 2019 with the Theme: “*Innovative Approaches, analysis and Developments in Pharmacy and Pharmaceutical Science*” (4<sup>th</sup> ICPPS, 2019) from 13<sup>th</sup> -14<sup>th</sup> Dec 2019.
3. Visited Perm State University, Department of Organic Chemistry, **Perm, Russian Federation** under Indo-Russian International Project (under the agreement C-25/174.5 from 31-01-2019; work contract No. 1-01-10, MOU between MNIT Jaipur and PGNIU, Perm, Russian Federation) from 14<sup>th</sup> -19<sup>th</sup> May, 2019.
4. Visited Laboratory of Organic and Bioorganic Chemistry, Department of Physical and Organic Chemistry (K-3), “**Jozef Stefan**” **Institute, Ljubljana, SLOVENIA** under the DST-ARRS Indo-Slovenian joint research project. (DST/INT/Slovenia/P-14/2014) from 23<sup>rd</sup> Dec, 2016 to 02<sup>nd</sup> Jan, 2017.
5. Visited Perm State University, Department of Organic Chemistry, **Perm, Russian Federation** under DST-RFBR Indo-Russian Joint Research Project (DST/INT/RFBR/P-169) from 10<sup>th</sup> -22<sup>nd</sup> Oct, 2016.
6. Visited Laboratory of Organic and Bioorganic Chemistry, Department of Physical and Organic Chemistry (K-3), “**Jozef Stefan**” **Institute, Ljubljana, SLOVENIA** under the DST-ARRS Indo-Slovenian joint research project. (DST/INT/Slovenia/P-14/2014) from 5<sup>th</sup> -14<sup>th</sup> Sep, 2015.
7. Visited Perm State University, Department of Organic Chemistry, **Perm, Russian Federation** under DST-RFBR Indo-Russian Joint Research Project (DST/INT/RFBR/P-169) from 18<sup>th</sup> -31<sup>st</sup> Mar, 2015.

#### Facilities Established at NIPER Raebareli:

**In Department of Medicinal Chemistry:** Established “*Laboratory of Bioactive Heterocycles and Catalysis (BHC lab)*” having all basic chemistry-based facilities.

#### Facilities Established at MNIT Jaipur:

**Committee Member at Institute Level:** ECS 400 MHz Jeol NMR, Gevo G-2 QTOF LCMS & HRMS (ESI), FT-IR, UV-Vis fluorescence, N<sub>2</sub> gas plant, Powder X-RD, Tunnel Electron Microscope (TEM), Scanning electron microscope (SEM), MW-reactor and many other small instruments TGA, DSC, Fume Hood.

**In Department of Chemistry:** Established “*Laboratory of Organic and Medicinal Chemistry (OMC lab)*” having all basic chemistry-based facilities.

#### Postdoc Supervision (01)

ANRF-NPDF Applied = 02

#### Ph.D Supervision [14 Students: 08 Awarded and 06 Ongoing]

| S. No. | Name of Ph.D student                                               | Title of Thesis                                                                                                                                                                                  | Status                                                             |
|--------|--------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| 1.     | <b>Dr. Vashundhra Sharma</b><br>(Jan, 2013- Dec, 2017)             | <i>Synthetic Studies towards Coupling Reactions: Chemistry and Biology of Bio-Active Alkaloids</i>                                                                                               | Thesis submitted on 05-12-2017 & Ph.D awarded on 22-12-2018 (2018) |
| 2.     | <b>Dr. Ritu Sharma</b><br>(Jan, 2014-Feb, 2019)                    | <i>Synthesis, Chemistry and Bio-evaluation of some Biologically active Heterocycles</i>                                                                                                          | Thesis submitted on 21-02-2019 & Ph.D awarded on 03-12-2019 (2019) |
| 3.     | <b>Dr. Mohit K. Tiwari</b><br>(July, 2014- Dec, 2019)              | <i>Synthetic Studies on Pharmaceutically Privileged Bioactive Heterocycles: Synthesis, Chemistry &amp; Biological Evaluation</i>                                                                 | Thesis submitted on 31-12-2019 & Ph.D awarded on 07-07-2020 (2020) |
| 4.     | <b>Dr. Bharti Rajesh Kumar Shyamlal</b><br>(July, 2014-July, 2020) | <i>Studies towards Natural Product-Inspired Bioactive Heterocycles: Synthesis, Chemistry and their Medicinal Applications</i>                                                                    | Thesis submitted on 27-07-2020 & Ph.D awarded on 10-02-2021 (2021) |
| 5.     | <b>Dr. Lalit Yadav</b><br>(Jan, 2015- July, 2020)                  | <i>Synthetic Studies Towards Organocatalyzed C<sub>(sp)<sup>2</sup></sub>-H Bond Activation Reactions: Development of New Strategies for the Synthesis of Bioactive Heterocycles</i>             | Thesis submitted on 26-08-2020 & Ph.D awarded on 11-02-2021 (2021) |
| 6.     | <b>Dr. Ravi Kant Yadav</b><br>(July, 2016-Sep, 2021)               | <i>Studies on Bioactive Heterocycles via C<sub>(sp)<sup>2</sup></sub>-H and C<sub>(sp)<sup>3</sup></sub>-H Bond Functionalization Reactions: Synthesis, Chemistry and Practical Applications</i> | Thesis submitted on 08-09-2021 & Ph.D awarded on 26-03-2022 (2022) |
| 7.     | <b>Dr. Richa Sharma</b><br>(Aug, 2019 – July, 2023)                | <i>Chemistry on Natural Product Inspired Fused Bio-heterocycles: Synthesis, Functionalizations and its Applications</i>                                                                          | Thesis submitted on 03-07-2023 & Ph.D awarded on 12-01-2024 (2024) |

|     |                                                                                           |                                                                                                                                                                                                     |                                                                    |
|-----|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| 8.  | <b>Dr. Nawal Kishore Sahu</b><br>(TEQIP Part-Time Scholar)<br>(Aug, 2018 –June, 2024)     | <i>Indole-Based Novel Bioactive Alkaloids: Synthesis, Chemistry and Biological Assessment</i><br><b>Current Position:</b> Asst. Professor, Govt. Engg. College (Affiliated to RTU, Kota), Bharatpur | Thesis submitted on 20-03-2024 & Ph.D awarded on 24-06-2024 (2024) |
| 9.  | <b>Abdul Rahaman T A</b><br>(823/PhD-MC/21)<br>(Sep, 2021-June, 2026)                     | <i>Aza-/Oxa-Based Heterocycles as Selective MAO-B and NLRP3 Inhibitors: Synthesis, Chemistry and Biological Evaluation</i>                                                                          | Thesis submitted on 30-06-2026 & Ph.D awarded on ..... (2026)      |
| 10. | <b>Janmejaya Sen</b><br>(825/PhD-MC/21)                                                   | <i>Chemistry on Bioactive Aza-Heterocycles: Synthesis, Methodology Development, and Their Practical Applications</i>                                                                                | Ongoing (Sep, 2021-Present)                                        |
| 11. | <b>Amol Tarachand Mahajan</b><br>(953/Ph.D.-MC/22)                                        | <i>Studies on Development of Fused Bio-Heterocycles as Anticancer Agents: Synthesis, Chemistry, and Medicinal Applications”</i>                                                                     | Ongoing (23 Aug, 2022-Present)                                     |
| 12. | <b>Shivani</b><br>(956/PhD-MC/22)                                                         | <i>Bioactive Heterocycles as Anticancer Agents: Synthesis, Chemistry and Biological Assessment</i>                                                                                                  | Ongoing (22 Aug, 2022-Present)                                     |
| 13. | <b>Tanmoy Tantra</b><br>(957/PhD-MC/22)                                                   | <i>Studies on the Development of Fused Aza-Heterocycles as NLRP3 Inhibitors: Synthesis, Chemistry, and Medicinal Applications</i>                                                                   | Ongoing (22 Aug, 2022- Present)                                    |
| 14. | <b>Nandini</b><br>(1120/PhD-MC/23)                                                        | <i>Synthetic Studies on Pharmaceutically Important Bioactive Alkaloids: Synthesis, Chemistry and Bioevaluation and in silico studies</i>                                                            | Ongoing (Sep, 2023-Present)                                        |
| 15. | <b>Pushpendra Kumar</b><br>(UPCST project Staff, Registered at Amity University, Gurgaon) | <i>Biological Evaluation of Pharmaceutically Privileged Aza-/Thia-Heterocycles</i>                                                                                                                  | Ongoing (Jan, 2026-Present)                                        |

## ALUMNI

### Postdoc Supervised (04)

**1<sup>st</sup> Mar, 2016- 28<sup>th</sup> Feb, 2018:** Dr. Jaggi Lal, Ph.D (Jiwaji University, Gwalior) **SERB N PDF**

**1<sup>st</sup> Apr, 2016 – 21<sup>st</sup> Aug, 2017:** Dr. Yogesh Kumar, Ph.D (University of Delhi), **DST-SERB Young Scientist Scheme**

**1<sup>st</sup> Oct, 2014 – 30<sup>th</sup> Sep, 2017:** Dr. Pradeep k. Jaiswal, Ph.D (CSIR-CDRI, Lucknow), **CSIR Project**

**1<sup>st</sup> May, 2017- 30<sup>th</sup> Apr, 2020:** Dr. Krishan Kumar, Ph.D (IISc Bangalore), **CSIR-RA**

### M.Pharm (Med Chem)/ M.S. Pharm [Pharmaceutical Analysis] Supervision [Completed 28; Ongoing 6]

| S. No. | Name of M.S. Pharm Student(s)                 | Title of Dissertation / M.S. Thesis                                                              | Year of Completion             |
|--------|-----------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------|
| 1.     | Pandey Muskan Sachivkumar<br>(03/MS-MC/25)    | <i>Yet to decide</i>                                                                             | <b>2025-2027<br/>(ongoing)</b> |
| 2.     | Saurabh<br>(06/MS-MC/25)                      | <i>Yet to decide</i>                                                                             |                                |
| 3.     | Sourabh Yadav<br>(09/MS-MC/25)                | <i>Yet to decide</i>                                                                             |                                |
| 4.     | Devesh K. Singh<br>(60/MS-PA/25)              | <i>Yet to decide</i>                                                                             |                                |
| 5.     | K. Gurucharan<br>(61/MS-PA/25)                | <i>Yet to decide</i>                                                                             |                                |
| 6.     | Mude Naveen Kumar Naik<br>(123/MS-MC/25)      | <i>Yet to decide</i>                                                                             |                                |
| 7.     | Idrisi Fatima Bano Zakir Husain (07/MS-MC/24) | <i>Synthesis and Characterization of Impurities in Active Pharmaceutical Ingredients</i>         | <b>2026</b>                    |
| 8.     | Khushi Sharma (08/MS-MC/24)                   | <i>Synthetic Approaches and Analytical Characterization of Impurities in New Drug Substances</i> |                                |
| 9.     | Kriti (09/MS-MC/24)                           | <i>Process-Related Impurities in Active Pharmaceutical</i>                                       |                                |

|     |                                                                                              |                                                                                                                                                                                                |             |
|-----|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
|     |                                                                                              | <i>Ingredients (APIs): Synthesis, Chemistry and their Characterization</i>                                                                                                                     |             |
| 10. | Divya (62/MS-PA/24)                                                                          | <i>Development of an Analytical Method for the Determination of Impurities present in Raw material used for the Synthesis of Dipeptidyl Peptidase-4 (DPP-4) Inhibitor Drug Substance</i>       |             |
| 11. | Himanshu Dagar (109/MS-PA/24)                                                                | <i>Establishment of the Degradation Profile of Drug-A used in the Treatment of Neuropsychiatric Disorders Using Various Analytical Techniques</i>                                              |             |
| 12. | Krishna Kumar (1000/MS-MC/23)                                                                | <i>Design, Synthesis and In silico Studies of Novel Indazolo-Thiazole Hybrids as FGFR4 Inhibitors</i>                                                                                          | <b>2025</b> |
| 13. | Nirwan Sweety Anil (1003/MS-MC/23)                                                           | <i>Novel Conjugated Thiazolidine-2,4-dione-Ferulic Acid Congeners as NLRP3 Inhibitors: Design, Synthesis and In silico Studies</i>                                                             |             |
| 14. | Rathod Abhijit Kundalik (1006/MS-MC/23)                                                      | <i>Design, Synthesis and In silico Studies of Novel Quinazoline Analogues as TLR4 Inhibitors towards the Development of anti-Alzheimer's Agents</i>                                            |             |
| 15. | Toufeek Khan (1015/MS-MC/23)                                                                 | <i>Novel 1-phenyl-2-((3-(pyrazolo[1,5-a]pyrimidin-7-yl)phenyl)amino)ethan-1-one Derivatives as Epidermal Growth Factor Receptor (EGFR) Inhibitors: Design, Synthesis and In Silico Studies</i> |             |
| 16. | Vivek Kumar Gupta (1017/MS-MC/23)                                                            | <i>Design, Synthesis and In silico Studies of Novel Chromene-Triazole Hybrids as Anticancer agents</i>                                                                                         |             |
| 17. | Deeksha Upadhyay (in association with NFSU Gandhinagar)                                      | <i>Synthesis, Characterization and In Silico studies of 1-Phenyl-1H-Indazole Derivatives as Anticancer Agents</i>                                                                              |             |
| 18. | Anand K. Dubey (845/MS-MC/22)                                                                | <i>Novel Heteroaryl/Alicyclic-Pyridine Hybrid Analogues as EGFR Inhibitors: Design, Synthesis and In silico Studies</i>                                                                        | <b>2024</b> |
| 19. | Arun C (847/MS-MC/22)                                                                        | <i>Design, Synthesis and In silico Studies of Novel Bioactive Aza-Heterocycles as FGFR4 Inhibitors</i>                                                                                         |             |
| 20. | Gaurav Kesharwani (850/MS-MC/22)                                                             | <i>Design, Synthesis, and In-silico studies of Novel Quinazoline Analogues as SIRT1 Activator Towards the Development of anti-Parkinson's agents</i>                                           |             |
| 21. | Jalasutram Pavani Durga Chaturvedi (854/MS-MC/22)                                            | <i>Design, Synthesis and In silico Studies of Novel Isoxazole Derivatives as TLR antagonists Towards the Development of Anti-Alzheimer's Agents</i>                                            |             |
| 22. | Tushar Panwar (867/MS-MC/22)                                                                 | <i>Design, Synthesis, and In Silico Studies of Novel Imidazo[1,2-a]pyridine Derivatives as SIRT 1 Activators Towards the Development of Anti-Alzheimer's Agents</i>                            |             |
| 23. | Vidit Shrivastava (868/MS-MC/22)                                                             | <i>Design, Synthesis and In-silico studies of Novel Sulphonylurea derivatives as NLRP3 Inflammasome Inhibitors for the Management of Alzheimer's disease</i>                                   |             |
| 24. | SweetY Yadav (in association with Pt. Deen Dayal Upadhyay Govt. Girls P.G. College, Lucknow) | <i>Synthesis, purification and characterization of spirooxindoles derivatives as Anticancer agents</i>                                                                                         |             |
| 25. | Samir Tikaram Sahu (753/MS-MC/21)                                                            | <i>Pyrazoles-Based Bioactive Aza-heterocycles as Potential Acetylcholinesterase Inhibitors: Design, Synthesis and In silico Studies</i>                                                        | <b>2023</b> |
| 26. | Kshirsagar Prasad Suhas (746/MS-MC/21)                                                       | <i>Novel 3-(Pyridin-2-yl)-1H-Indoles and its Congeners as Anti-Cholinesterase Agents / NMDA Antagonists: Design, Synthesis and In silico Studies</i>                                           |             |
| 27. | Thakar Neha Rajendra (760/MS-MC/21)                                                          | <i>Design, Synthesis and In Silico Studies of Novel 2-Phenylbenzo[d]imidazo[2,1-b]thiazoles and Alicyclic[b]-fused pyridines as Anti-Alzheimer Agents</i>                                      |             |
| 28. | Saswat Gaurab Dash                                                                           | <i>Design, Synthesis and In Silico Studies of Functionalized</i>                                                                                                                               |             |

|     |                                       |                                                                                                                                                                           |             |
|-----|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
|     | (754/MS-MC/21)                        | <i>Alicyclic[b]-fused Pyridines as anti-Alzheimer's Agents</i>                                                                                                            |             |
| 29. | Prem S (751/MS-MC/21)                 | <i>Design, synthesis and in silico studies of benzyloxy substituted triaryl pyrazole derivatives as anti-Alzheimer agents</i>                                             |             |
| 30. | Vijeta Choudhary (NIT Warangal)       | <i>Chalcones as potential acetylcholinesterase inhibitors: Design, synthesis and molecular docking studies</i>                                                            |             |
| 31. | Pooja Prakash Atpadkar (666/MS-MC/20) | <i>Design, synthesis and molecular docking studies of 2-Phenyl-5H-imidazo[2,1-b][1,3]thiazin-5-ones derivatives as anti-Alzheimer agents</i>                              |             |
| 32. | Tushar M. Boralkar (673/MS-MC/20)     | <i>Ultrasonic-Assisted One-pot Multi-component Reaction via 1,3-Dipolar Cycloaddition Reaction: Synthesis of Novel Spirooxindole Derivatives as Anti-Alzheimer Agents</i> | <b>2022</b> |
| 33. | Vedant V. Deshmukh (674/MS-MC/20)     | <i>Microwave-Assisted Synthesis of Novel Spirooxindole Derivatives as Anti-Alzheimer Agents</i>                                                                           |             |
| 34. | Yajnashri M (675/MS-MC/20)            | <i>Substituted Triaryl Pyrazoles as Anti-Alzheimer Agents: Design, Synthesis and Molecular Docking Studies</i>                                                            |             |

#### **M.Sc Project Supervision [Completed (26)]**

| S. No. | Name of M.Sc Student          | Title of M.Sc Dissertation / Thesis                                                                                                                                                | Year of Completion |
|--------|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| 1.     | Mukul Yadav (2019PCY5608)     | <i>Synthetic Studies Towards Novel 5H-imidazo[2,1-b][1,3]thiazin-5-one and its sulphonamides</i>                                                                                   | <b>2021</b>        |
| 2.     | Vishal Yadav (2019PCY5628)    | <i>Synthetic Studies Towards phenylimidazo[1,2-a]pyridine and Novel 4H-1,3-Oxazin-2-amine and 5H-Imidazo[2,1-b][1,3]oxazine Class of Heterocycles</i>                              |                    |
| 3.     | Govind (2018PCY5402)          | <i>Microwave-Assisted Synthesis of Imidazo[1,2-a]pyridine Class of Heterocycles</i>                                                                                                | <b>2020</b>        |
| 4.     | Vikas Kumar (2018PCY5314)     | <i>An efficient synthesis of substituted 1-phenethyl-1,2,3,4-terahydroisoquinolines: A precursor for the synthesis of bioactive C-homoaporphines</i>                               |                    |
| 5.     | Dinesh Yadav (2017PCY5358)    | <i>Synthetic Studies Towards Novel 5H-imidazo[2,1-b][1,3]thiazin-5-one and Isochromeno[4,3-c]chromen-11(6H)-one Class of Heterocycles</i>                                          | <b>2019</b>        |
| 6.     | Shaifali Mittal (2017PCY5353) | <i>Synthesis and Characterization of 2H-Indazole based bioactive heterocycles</i>                                                                                                  |                    |
| 7.     | Satyam Doley (2017PCY5311)    | <i>Synthetic studies towards novel 4H-1,3-oxazin-2-amine and 5H-imidazo[2,1-b][1,3]oxazine class of heterocycles</i>                                                               |                    |
| 8.     | Poonam Meena (2016PCY5377)    | <i>An efficient synthesis of various 2'-bromoacetophenones and 2-aminothiazines: A starting precursor for the synthesis of various substituted imidazo[2,1-b]azines</i>            | <b>2018</b>        |
| 9.     | Neelam Rawat (2016PCY5141)    | <i>Synthesis, Characterization of Curcumin Analogues Bearing Pyrazole/ Pyrimidine Ring Targeting Anti-tyrosinase activity.</i>                                                     |                    |
| 10.    | Vishal (2015PCY 5454)         | <i>Synthetic studies towards antimalarial peroxides: synthesis of various starting materials for the synthesis of antimalarial bicyclic azaperoxides</i>                           | <b>2017</b>        |
| 11.    | Ruchi Aggarwal (2015PCY5433)  | <i>Synthesis of N-substituted indoles: An important precursor for the synthesis of Indole-based natural products</i>                                                               |                    |
| 12.    | Aarohi Gupta (2015PCY5388)    | <i>An efficient synthesis of substituted amides via reaction of various phenethylamines with bromoacids: a starting precursor for the synthesis of bio-active C-Homoaporphines</i> |                    |

|     |                                  |                                                                                                                                                        |             |
|-----|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 13. | Renu (2014PCY5302)               | <i>Synthesis, characterization and analytical studies of reaction intermediates- Application towards synthesis of antimicrobial benzo[1,4]oxazines</i> | <b>2016</b> |
| 14. | Sapna Yadav (2014PCY5281)        | <i>Synthesis, Characterization and Analytical Study of Reaction Intermediates- Application towards synthesis of antioxidant Benzo[1,4]oxazines</i>     |             |
| 15. | Bhawna Lekhwani (2013PCY7022)    | <i>Synthesis and Characterization Of O-Amino Thiophenol</i>                                                                                            | <b>2015</b> |
| 16. | Mahadeva Singh Jat (2013PCY7038) | <i>Synthesis and Characterization of benzothiazoles</i>                                                                                                |             |
| 17. | Pushpa Chaudhary (2013PCY7068)   | <i>Synthesis and Characterization of Antimalarial Quinoline derivatives</i>                                                                            |             |
| 18. | Kamna Sharma (2013PCY7048)       | <i>Synthesis and Characterization of benzodiazepines</i>                                                                                               |             |
| 19. | Gurmeet Singh (2013PCY7013)      | <i>Synthesis of Versatile intermediate “2H-Pyran-2-ones” for organic transformations</i>                                                               |             |
| 20. | Monika Choudhary (2012PCY7051)   | <i>Synthetic Utilities of Ketene Dithioacetal</i>                                                                                                      | <b>2014</b> |
| 21. | Deep Shikha Vyas (2012PCY7039)   | <i>Synthesis and Study of Oral rehydration salt</i>                                                                                                    |             |
| 22. | Hansa Arya (2012PCY7010)         | <i>A Simple and Efficient Synthesis of Highly Functionalized 2H-Pyran-2-Ones = Versatile Intermediate for Diverse Transformations</i>                  |             |
| 23. | Rajnikant Mahawar (2011PCY5062)  | <i>Study of Cement Chemistry and its Manufacturing</i>                                                                                                 | <b>2013</b> |
| 24. | Neelam (2011PCY5056)             | <i>Pharmaceutical Drug Metronidazole</i>                                                                                                               |             |
| 25. | Sharda Saini (2011PCY5075)       | <i>Surface Active Agents</i>                                                                                                                           |             |
| 26. | Manisha Bhagat (2011PCY5072)     | <i>Aqueous Film Forming Foam</i>                                                                                                                       |             |

### Visiting Researcher

**2014-2015:** Dr. Rajpratap B. Kshatriya, Ph.D (University of Pune); Postdoc (South Africa), RA (ICT, Mumbai), Present Affiliation: Assistant Professor, Uka Tarsadia University, Surat, Gujarat.

### Research Intern/Visiting Students from other institutions (12 Students)

**June, 2026–July, 2026:** Yogita Singh, MMMUT, Gorakhpur.

**Dec, 2025–Feb, 2026:** Parshavi Verma, Delhi Technical University, Delhi

**June, 2025:** Umme Kulsum, Singh, MMMUT, Gorakhpur.

**June–July, 2024:** Sweeti Yadav, Pt. Deen Dayal Upadhyay Govt. Girls P.G. College (University of Lucknow), U.P.

**June–July, 2023:** Rewa Dwivedi, Banasthali Vidyapeeth (Deemed University), Rajasthan

**15 May – 15 Aug, 2022:** Vijeta Choudhary, NIT Warangal

**1 June, 2019:** Shweta Choudhary, IIS University, Jaipur [[Ph.D, University of Manchester, UK](#)]

**20 May - 31 Aug, 2019:** Chitra Goswami, IIS University, Jaipur [[Ph.D \(Pursuing\), IIT Kanpur](#)]

**20 May - 10 July, 2019:** Shagun Singh, and Ruchita Goyal, IIS University, Jaipur

**1 July -30 June, 2019:** Richa Sharma [[Ph.D, MNIT Jaipur & Postdoc \(Pursuing\), Vrije Universiteit, Brussels, Belgium](#)]

**1 June, 2017-31 May, 2018:** Aarohi Gupta [[Ph.D, University of Massachusetts, Amherst, USA](#)]

**2017:** Mukesh Saharan, Manipal University, Jaipur [[Ph.D, University of Massachusetts, Amherst, USA](#)]

**2015:** Rahul Meena, Pratik Yadav (**IISER Bhopal**)

### Reviewer for Journals:

*Journal of Biochemical and Molecular Toxicology, European Journal of Medicinal Chemistry, Archiv Der Pharmazie, Journal of Chemistry (HINDAWI), DARU Journal of Pharmaceutical Sciences, Organic Chemistry Frontiers, Organic and Biomolecular Chemistry, Process Biochemistry, The Journal of Organic Chemistry, Medicinal Research Reviews, ACS Omega, RSC Advances, ChemMedChem, Bioorganic and Medicinal Chemistry Letters, BMC Chemistry, New Journal of Chemistry, Journal of Molecular Structure, Synthetic Communications, Plasma Processes and Polymers, BMC Infectious Diseases, Chemical Papers, Indian Journal of Pharmaceutical Sciences, Bioorganic Chemistry, Research on Chemical Intermediates (RINT), Ultrasonic Sonochemistry, Medicinal Chemistry Research, Acta*

*Chimica Slovenica (Slovenian Chemical Society), Saudi Pharmaceutical Journal, Arkivoc (Arkat USA), Journal of Agricultural and Food Chemistry (ACS), Current Organic Synthesis, Scientific Reports, Current Trends in Medicinal Chemistry, Studies in Natural Product Chemistry (SNPC)- Book Chapter, Reviews in Cardiovascular Medicine (RCM), Biomedicine & Pharmacotherapy*

### **Membership of Professional Scientific Societies / National and International Advisory Board**

- **Editorial Advisory Board Member:** Scientific Reports (Springer Nature) (2025- Present); *Current Drug Discovery Technologies* (2024- Present); *Current Indian Science* (2021-Present); *Current Organocatalysis* (2020-Present); *Arkivoc* (2011-Present); *National Advisory Board Member, 22<sup>nd</sup> ISCBC-2016 (6<sup>th</sup>-8<sup>th</sup> Feb, 2016); International Journal of Pharmaceutical Sciences and Research* (2012-Present);
- **Life Memberships:** Chemical Research Society of India, IISc Bangalore (2013 – Present); Indian Association of Nuclear Chemists and Allied Scientists, BARC, Mumbai (2014 – Present); Indian Society of Chemists and Biologists, CSIR-CDRI Lucknow (2013 – Present); Indian Science Congress Association, Kolkata (2014 – Present)
- **Fellows of Professional Societies:**  
Fellow of Indian Chemical Society (F.I.C.S.), Indian Chemical Society, Kolkata (2014 – Present)  
MRSC: Member, Royal Society of Chemistry (UK) (2025-Present)
- **Membership:** American Chemical Society, USA (2008 – Present)

### **Professional Training Received**

- “Principles and Hand-on expertise on ICP-MS Technologies”, (24-26 Sep, 2013), Centre of Excellence, Agilent Technologies, Bangalore, India.
- “**GRANT WRITING SEMINAR**”, Centre for study of gene structure and function, (9-10 Nov, 2009), The City University of New York, U.S.A.

### **List of Equipment’s made available at MNIT Jaipur/ NIPER-Raebareli**

| Equipment available in my Research Group | Generic Name of Equipment                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                  |
|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PI & his group                           | (a) 02 Low temperature Reaction bath<br>(b) 02 Two Rotavapors with vacuum pump and chiller<br>(c) 14 Magnetic Stirrers with hot plate<br>(d) 04 Weighing balance<br>(e) 10 UV lamps with box<br>(f) 10 computers with printer<br>(g) 01 Vertex Mixer<br>(h) 05 Oil-Free Diaphragm Vacuum Pump<br>(i) 03 Laboratory Ovens | (j) 01 Melting point apparatus<br>(k) 03 Refrigerator<br>(l) 03 Recirculating Chiller<br>(m) 05 Working Fumehoods<br>(n) 01 Centrifuge<br>(o) 01 Overhead Stirrer<br>(p) 01 Vertex Mixture<br>(q) 02 Ultrasonicator Bath<br>(r) 01 Microwave<br>(s) 01 Overhead Magnetic Stirrer |
| PI’s Department/<br>Institute            | FT- IR Spectrometer, UV/Vis Spectrometer, LC-MS, UPLC-MS, GC, HRMS, FT NMR Spectrophotometer, TEM Spectrophotometer, CD spectrometer, Powder X-Ray Diffractometer, CEM Microwave                                                                                                                                         |                                                                                                                                                                                                                                                                                  |

### **Administrative Experiences: Responsibilities and Professional Activities at NIPER-Raebareli**

#### **Dean, NIPER-Raebareli** [Feb, 2022 - May, 2025]

| Designation                                                                                                      | From       | To         | Nature of Work                                                      |
|------------------------------------------------------------------------------------------------------------------|------------|------------|---------------------------------------------------------------------|
| Dean, NIPER-Raebareli (NIPER-R/REG/2022/ dated 21-02-2022)                                                       | 21-02-2022 | 01-05-2025 | Academic and Administrative Responsibilities of the Institute       |
| Secretary, Academic Planning and Development Committee (APDC) NIPER-R/22-23/Office of Registrar dated 21-04-2023 | 21-04-2023 | 01-05-2025 | As per para 3.3.1 of NIPER Statutes                                 |
| Chairperson, Board of Studies and Research (BSR) NIPER-RBL/2022-23/Committee/23/653 dated 17-01-2023             | 17-01-2023 | 01-05-2025 | Work assigned to the committee as per NIPER ordinance               |
| Chairperson, Constitution of Executive Board of Alumni Association (NIPER-                                       | 18-05-2023 | 01-05-2025 | Draft the term of reference of the association and act accordingly. |

|                                                                                                                                                 |                          |                                                                            |                                                                                                                                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| R/Admin/2023-24/AAC/01 dated 18-05-2023)                                                                                                        |                          |                                                                            |                                                                                                                                            |
| Member, Results Committee (NIPER-RBL/Cte/15/2021-22 dated 03-11-2021)                                                                           | 21-02-2022               | 01-05-2025                                                                 | Result preparation and declaration                                                                                                         |
| Member, Timetable and Academic Committee (NIPER-RBL/Cte/14/2021-22 dated 03-11-2021)                                                            | 21-02-2022               | 01-05-2025                                                                 | Time-Table preparation and declaration                                                                                                     |
| Senate Member, NIPER-R (NIPER-RBL/2023/committee/39/1080 dated 27-09-2023)                                                                      | 21-02-2022<br>27-09-2023 | 26-09-2023 (1 <sup>st</sup> tenure)<br>01-05-2025 (2 <sup>nd</sup> tenure) | Academic duties and responsibilities                                                                                                       |
| Ex-officio member, Finance Committee (NIPER-RBL/2023-24/Committee/40/182 dated 27-09-2023)                                                      | 27-09-2023               | 01-05-2025                                                                 | All financial matters of NIPER-R                                                                                                           |
| Chairperson, Institute Safety Committee (Chemical/Biological/Electrical Hazard Committee) [NIPER-RBL/2022-23/Committee/18/548 dated 11-08-2022] | 11-08-2022               | 01-05-2025                                                                 | To draft a safety policy at the institute /dept. level and look upon all matters related to safety (Chemical/Biological/Electrical Hazard) |
| Ex-Officio member, Proctorial Board, NIPER-Raebareli                                                                                            | 05-08-2024               | 01-05-2025                                                                 | To foster a conducive environment for academic excellence and holistic development of students                                             |
| Director's Representative, Assessment of Acute Toxicity of Agrochemicals (NanoBioDAP) of NIPER-Raebareli                                        | 16-03-2023               | 31-03-2024                                                                 | Finalization of accounts and disbursement of intellectual fees for consultancy work                                                        |

#### Administrative Assignments at NIPER-Raebareli (Institute level)

| Assignments                                                                                                              | Designation                                                                                | From                                   | To                                     | Nature of Work                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|----------------------------------------|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BOG-Member                                                                                                               | Member-Professor of the Institute                                                          | 02-11-2022                             | 01-11-2025                             | Academic and Administrative Responsibilities of the Institute                                                                                                                       |
| NIPER-Raebareli/2022-23/Admin/ Internal Order dated 23-09-2022                                                           | Patron, International Symposium on Toxicology and Applied Pharmacology                     | 29-09-2022                             | 30-09-2022                             | Support and Cooperation to all the working committees and work as organizing team                                                                                                   |
| NIPER-R/2021-22/Committee/ dated 04-03-2022                                                                              | Coordinator, Common Research Program                                                       | 04-03-2022                             | 01-05-2025                             | To coordinate the Common Research Plan (CRP) going on NIPER-R campus.                                                                                                               |
| NIPER-R/2021-22/Committee/ dated 04-03-2022                                                                              | Member, SC/ST, OBC and PwD Welfare Cell                                                    | 04-03-2022                             | 01-05-2025                             | To work as Liaison officer and look after the matters related to the welfare of the SC/ST/OBC/PwD peoples.                                                                          |
| Committee Member                                                                                                         | Member, Tender Evaluation Committee                                                        | 19-08-2021                             | 31-03-2022                             | Technical and Financial Evaluation of the Tender for lab furniture of different departments                                                                                         |
| NIPER-RBL/Cte/04/2021-22 dated 05-08-2021                                                                                | Member, Committee for Technical and Financial Evaluation                                   | 05-08-2021                             | 31-03-2022                             | Technical and Financial Evaluation of the Tender dated 05-07-2021                                                                                                                   |
| NIPER-RBL/Cte/2021/10 dated 11-06-2021                                                                                   | Member, Physical Verification Committee                                                    | 11-06-2021                             | 30-09-2021                             | Physical verification of Assets of Computer Centre and Library                                                                                                                      |
| NIPER-RBL/2022-23/Swachhata packwada/2022 dated 31-08-2022<br>NIPER-RBL/2023-24/Swachhata Pakhwada/2023 dated 23-08-2023 | Committee member                                                                           | 01-09-2022<br>01-09-2023<br>01-09-2024 | 15-09-2022<br>15-09-2023<br>15-09-2024 | Execution of Swachhata Mass Pledge and various cleanliness activities                                                                                                               |
| NIPER-Raebareli/2022-23/Special Campaign Swacchata) 2.0/479 dated 03-10-2022                                             | Committee member                                                                           | 02-10-2022                             | 31-10-2022                             | Clearance of pending references from MPs; state government; cabinet-note; PMO references; parliamentary assurances; Record management, Identification of Cleanliness campaign sites |
| NIPER-RBL/CTE/Administration /2022-23 dated 06-12-2022                                                                   | Chairman, Committee for formulating the policy for establishing Canteen in NIPER-Raebareli | 06-12-2022                             | 31-03-2023                             | To formulate a policy for establishment of canteen                                                                                                                                  |

|                                                                                                                            |                                                                                                                                       |                          |                          |                                                                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NIPER-R/Recruit/01/2021-22/695 dated 22-02-2023                                                                            | Centre-In-Charge, Exam Centre management for 25-26 Feb, 2023                                                                          | 25-02-2023               | 26-02-2023               | Recruitment exam for various non-teaching posts 25-26 Feb, 2023                                                                                                                                     |
| NIPER-RBL/2022-23/Committee/31/837 dated 10-05-2023                                                                        | Chairperson, Evaluation of Specification of equipments for Central Purchase Committee of all NIPERs                                   | 10-05-2023               | 01-05-2025               | To evaluate specification of equipments which are proposed to be sent for CPC evaluation.                                                                                                           |
| NIPER-R/Approval/23-24/32 dated 08-09-2023                                                                                 | Institute Academic Committee, Dept. of Medicinal Chemistry                                                                            | 08-09-2023               | 31-03-2024               | Document verification of new admitted students through NIPER JEE 2023                                                                                                                               |
| NIPER-Raebareli/2022-23/Hindi Pakhwada/2022 dated 13-09-2022; NIPER-Raebareli/2022-23/Hindi Pakhwada/2022 dated 13-09-2022 | Committee member, Hindi Pakhwada                                                                                                      | 14-09-2022<br>14-09-2023 | 28-09-2022<br>28-09-2023 | Celebration of Hindi Pakhwada in NIPER-Raebareli campus                                                                                                                                             |
| NIPER-R/2023-24/Recruitments/Faculty positions/III dated 04-10-2023                                                        | Scrutiny committee member, Professor (Pharmaceutical Analysis) and Assistant Professor (AI/ML & Data Analysis)                        | 04-10-2023               | 31-03-2024               | With ref. to adv. No. NIPER-R/2023-24/Recruitment/Faculty positions/III date 07 July, 2023.                                                                                                         |
| NIPER-RBL/2023-24/Committee/43/ dated 03-01-2024                                                                           | Chairperson, Assessing the modalities for procurement of laboratory consumables considering the guidelines issued by GOI, for NIPER R | 03-01-2024               | 31-03-2024               | To assess the modalities for procurement of laboratory consumables as per GFR 2017.                                                                                                                 |
| NIPER-RBL./2023-24/Committee/44/1203 dated 02/05-01-2024                                                                   | Member, Preparation and Finalization of Reservation Roster of NIPER-R                                                                 | 02/05-01-2024            | 31-03-2024               | To prepare and finalize reservation roster                                                                                                                                                          |
| NIPER-RBL/2023-24/Committee/46/1222 dated 30-01-2024                                                                       | Chairperson, Reviewing and recommending the Guests/students for their stay in the Guest House and Hostel room                         | 30-01-2024               | 01-05-2025               | To establish an operational Guest house in the institute and to review and recommend the guest/students for their stay in the guest house and hostel rooms of NIPER-Raebareli                       |
| NIPER-RB</2023-24/Admin.9Estt.)/Probation/1259 dated 23/26-02-2024                                                         | Member, Probation Assessment committee for non-teaching employees due for their probation confirmation                                | 23/26-02-2024            | 31-03-2024               | To assess the probation confirmation of non-teaching employees                                                                                                                                      |
| NIPER-R/2023-24/Recruitment/Non Faculty/IV & V/1277 dated 05-03-2024                                                       | Centre-In-Charge, Exam Centre Management Committee, 9-10 March, 2024                                                                  | 09-03-2024               | 10-03-2024               | Management and fair conduct of recruitment exam scheduled on 9-10 Mar, 2024 for various non-teaching positions adv. No. NIPER-R/2023-24/Recruitment/Non Faculty/IV & V dated 0-07-2023 & 04-10-2023 |
| NIPER-R/A7E/OO/24-25/06 dated 13-08-2024                                                                                   | Member [Degree preparation and Registration of Students Committee, 9 <sup>th</sup> Convocation                                        | 13-08-2024               | 01-10-2024               | Preparation and printing of Degree/mark sheets, Fabrication of medals; Registration of Students, Correspondence with students                                                                       |
| NIPER-RBL/2022-23/Committee/27/7649A) dated 29-03-2023                                                                     | Chairperson, Asset Verification Committee-for laboratory Consumable (Chemicals)                                                       | 29-03-2023               | 01-05-2025               | Physical verification of assets for laboratory consumables in each lab of NIPER_R as per GFR 2017, Rule 213(I).                                                                                     |
| NIPER-R/Recruit/01/2021-22                                                                                                 | Member, Selection Committee for Library and Information officer, Estate and Security                                                  | 03-03-2023               | 31-03-2023               | Selection of suitable candidates for various post adv. No. NIPER-R/Recruit/01/2021-22 dated 20-12-2021                                                                                              |

|                                                     |                                                                                                                                                    |            |            |                                                                  |
|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|------------------------------------------------------------------|
|                                                     | officer, Medical officer, Public Relation officer, Guest house and Hostel Supervisor, Junior Hindi Translator, Receptionist and Telephone operator |            |            |                                                                  |
| NIPER-RBL/2023-24/Committee/34/972 dated 07-08-2023 | Member, Investment of funds lying in the internal revenue account of NIPER-Raebareli                                                               | 07-08-2023 | 31-03-2024 | To invest funds lying in the internal revenue account of NIPER-R |

#### **Administrative Assignments at Department level**

| Organization                                                  | Designation                                                    | From       | To         | Nature of Work                                                                                                                   |
|---------------------------------------------------------------|----------------------------------------------------------------|------------|------------|----------------------------------------------------------------------------------------------------------------------------------|
| NIPER-Raebareli (NIPER-RBL/01/2020-21/10 dated 04-08-2021)    | Head of Department (HoD)                                       | 04-08-2021 | 14-09-2025 | General Duties and Responsibilities related to the Department of Medicinal Chemistry including academic and Administrative works |
| NIPER Raebareli (NIPER/RBL/Cte/02/2021-22 dated 28 Sep, 2021) | Departmental Academic Advisory Committee (Medicinal Chemistry) | 28-09-2021 | 14-09-2025 | Duties as per NIPER Ordinance.                                                                                                   |

#### **Administrative Assignments at Other/Previous Organizations**

| Organization                                            | Designation                                                                                          | From       | To      | Nature of Work                                        |
|---------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------|---------|-------------------------------------------------------|
| Madan Mohan Malviya University of Technology, Gorakhpur | Member, Academic Expert, Board of Studies (BOS), Dept. of Chemistry and Environmental Science, MMMUT | 08-11-2023 | Present | Duties and Responsibilities related to academic works |

#### **Administrative Experiences: Responsibilities and Professional Activities done at MNIT Jaipur**

##### **Administrative Assignments at MNIT Jaipur (Institute level)**

| Order No.                                      | Designation                                                                              | From       | To         | No. of Semester | Nature of Work                                                                                        |
|------------------------------------------------|------------------------------------------------------------------------------------------|------------|------------|-----------------|-------------------------------------------------------------------------------------------------------|
| MNIT/Chief Warden/ 2013-14/07 dated 16-08-2013 | Warden                                                                                   | 16-08-2013 | 09-06-2014 | 2               | Responsibility and Maintenance of Hostel No. 3, MNIT Campus, MNIT Jaipur.                             |
| MNIT/CW/2014-5/24R dated 09-06-2014            | Warden                                                                                   | 11-06-2014 | 10-06-2015 | 2               | Responsibilities and maintenance of Hostel No.1, MNIT Campus, MNIT Jaipur                             |
| MNIT/CW/2015-16/42 dated 31-07-2015            | Warden                                                                                   | 01-08-2015 | 07-08-2016 | 2               | Responsibilities and Maintenance of Hostel No.1, MNIT Campus, MNIT Jaipur.                            |
| MNIT/DIR/2013/460 dated 23-07-2013             | Co-coordinators (SC/ST/OBC/Persons with Disability (PWD) Development and Liaison Officer | 23-07-2013 | 22-07-2014 | 2               | SC/ST/OBC/Persons with Disability Development and Liaison Officer                                     |
| Dean FW/MNITJ/2013/ dated 3rd Sep, 2013        | Adjunct Faculty Position, Faculty-in-charge (Spectroscopy lab), MRC, MNIT Jaipur         | 22-08-2013 | 21-08-2015 | 4               | Faculty-In-Charge (Spectroscopy lab)- Supervision and Maintenance of Instruments of Spectroscopy Lab  |
| MNIT Jaipur                                    | DPGC Convener                                                                            | 20-07-2017 | 03-06-2021 | 8               | As per MNIT Rules and Regulations of PG Schemes under the section no. 1.5.2: Responsibilities of DPGC |
| Dean Academics, MNIT                           | External Member                                                                          | 16-06-2017 | 15-06-2019 | 4               | External Member for DPGC, DSC                                                                         |

|                                                                           |                                                                                                                                                                                                                                                                                                                                             |                                   |            |                 |                                                                                      |
|---------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|-----------------|--------------------------------------------------------------------------------------|
| Jaipur                                                                    | for DPGC, DSC and Guest Faculty Committee " in Department of Mechanical Engineering.                                                                                                                                                                                                                                                        |                                   |            |                 | and Guest Faculty Committee " in Dept. of Mechanical Engineering, MNIT Jaipur        |
| Organizing Member                                                         | MNIT convocation<br>7 <sup>th</sup> (04 Nov, 2012)<br>8 <sup>th</sup> (10 July, 2014)<br>9 <sup>th</sup> (19 <sup>th</sup> Jan, 2015),<br>10 <sup>th</sup> (11 <sup>th</sup> Dec, 2015),<br>11 <sup>th</sup> (21 <sup>st</sup> Jan, 2017),<br>12 <sup>th</sup> (6 <sup>th</sup> Jan, 2018)<br>13 <sup>th</sup> (29 <sup>th</sup> Dec, 2018) | ----                              | ----       | <b>11</b>       | Printed Committee, Convocation brochure & Invitation cards                           |
| MNIT Faculty Recruitment (01/MNIT/Estt/2013) (No. MNIT/Dir./F-65/2013/)   | Scrutiny/Shortlisting committee member                                                                                                                                                                                                                                                                                                      | 30-01-2013                        | 30-05-2013 | <b>4 months</b> | Shortlisting/Scrutiny of candidates based on selection criteria.                     |
| MNIT Library Automation and up-gradation                                  | Task Force Member                                                                                                                                                                                                                                                                                                                           | 16-09-2013                        | 15-09-2014 | <b>1 year</b>   | Proposed a detailed plan and devised scheme to upgrade automation of central Library |
| CSAB-2013, 2014, 2015, 2016                                               | Reporting officer                                                                                                                                                                                                                                                                                                                           | June-July period of academic year |            |                 | Admission through JEE- Exam                                                          |
| Annual Technical and Cultural Event, Blitzschlag, 2014                    | Finance, Registration & Prizes Committee member                                                                                                                                                                                                                                                                                             | April 4-6, 2014                   |            |                 | MNIT Institute Cultural Event                                                        |
| MNIT Faculty Recruitment (01/MNIT/Estt/2014) (No. MNIT/Dir./F-65/2014/)   | Scrutiny/Shortlisting committee member                                                                                                                                                                                                                                                                                                      | 24-04-2014                        | 24-09-2014 | <b>5 months</b> | Shortlisting/Scrutiny of candidates based on selection criteria.                     |
| West Zone Vice Chancellor Meet 2014-15 Association of Indian Universities | Protocol Committee                                                                                                                                                                                                                                                                                                                          | 30/11/2014 to 03/12/2014          |            |                 | To plan and execute the protocol for the WZ VC meet 2014-15                          |
| Felicitation Ceremony-Silver Jubilee and Alumni Day celebration           | Committee member                                                                                                                                                                                                                                                                                                                            | 27-12-2014                        |            |                 | Organizing the felicitation ceremony as committee member.                            |
| MNIT TA Chemistry Recruitment (F. No. AES-22/1/13/2014-Vol-III/94         | Evaluator for Screening test                                                                                                                                                                                                                                                                                                                | 25-04-2015                        |            |                 | Recruitment of non-teaching post                                                     |
| PHED JEN Exam, 2014                                                       | Observer                                                                                                                                                                                                                                                                                                                                    | 15-02-2015                        |            |                 | Observe and inspect the exam                                                         |
| Hon'ble HRM and Co-NIT meet, 2015                                         | Committee member                                                                                                                                                                                                                                                                                                                            | Oct, 10-12, 2015                  |            |                 | Duties for coordinating visit                                                        |

#### Administrative Assignments at Department level

| Organization                         | Designation                                                             | From       | To         | No. of Semester | Nature of Work                                                                                     |
|--------------------------------------|-------------------------------------------------------------------------|------------|------------|-----------------|----------------------------------------------------------------------------------------------------|
| Department of Chemistry, MNIT Jaipur | Programme Advisor                                                       | 07-07-2015 | 06-07-2017 | <b>4</b>        | Serving as M.Sc (Chemistry) Course advisor to M.Sc Students 2015-2017 related to academic affairs. |
|                                      | Member, Department Purchase Committee                                   | 07-07-2015 | 06-07-2016 | <b>2</b>        | Serving as member in the DPC for procurement of equipment, chemicals, glassware, software etc.     |
|                                      | Committee member for Construction of New Research lab including OMC lab | 07-07-2015 | 06-07-2016 | <b>2</b>        | To monitor the progress of construction work of new research OMC lab.                              |
|                                      | Member, DPGC                                                            | 04-07-2013 | 03-06-2021 | <b>16</b>       | Roles of members given in DPGC rules and regulation of MNIT Institute                              |
|                                      | Member, DUGC                                                            | 04-07-2013 | 03-06-2021 | <b>16</b>       | As per given in DUGC rules and regulations of MNIT Institute.                                      |
|                                      | Faculty-In-Charge,                                                      | 18-07-2016 | 03-06-2021 | <b>16</b>       | To look upon and guide students for placement to                                                   |

|  |                                                    |            |            |           |                                                                                     |
|--|----------------------------------------------------|------------|------------|-----------|-------------------------------------------------------------------------------------|
|  | Placement                                          |            |            |           | various companies.                                                                  |
|  | Member, Department<br>Selection Committee<br>(DSC) | 01-06-2016 | 03-06-2021 | <b>16</b> | To carry out written exam and interviews for Ph.D<br>admissions, Guest Faculty etc. |