

# Sandeep Chaudhary

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## Work Experience

- 21 Feb, 2022 – Present** Dean, **NIPER-Raebareli**, Lucknow, Uttar Pradesh 226301, INDIA.
- 04 Aug, 2021 – Present** *Head of the Department (HOD)*, Department of Medicinal Chemistry, **NIPER-Raebareli**, Lucknow, Uttar Pradesh 226301, INDIA.
- 04 Jun, 2021 – Present** *Associate Professor*, Department of Medicinal Chemistry, **NIPER-Raebareli**, Lucknow, Uttar Pradesh 226301, INDIA.
- 11 Feb, 2019 – 03 June, 2021** *Assistant Professor Grade I*, Department of Chemistry, MNIT Jaipur-302017, INDIA.
- 03 Oct, 2012 – 10 Feb, 2019** *Assistant Professor Grade II*, Department of Chemistry, MNIT Jaipur-302017, INDIA.
- Aug, 2013 – Aug, 2015** *Adjunct Faculty*, Materials Research Centre, MNIT Jaipur-302017, Rajasthan, INDIA.
- Nov, 2010 – Sep, 2012** *JSPS Postdoctoral Fellow, MCRF-Institute of Microbial Chemistry*, Tokyo, JAPAN.  
(Advisor: **Prof. Dr. Masakatsu Shibasaki**, Emeritus Professor, University of Tokyo & University of Hokkaido)
- Aug, 2009 – Oct, 2010** *Postdoctoral Fellow (NIH)*, The City University of New York at Hunter College, New York, USA. (Advisor: **Prof. Wayne W. Harding**)
- Jan, 2008 – July, 2009** *Postdoctoral Fellow (NCCR-NIH)*, The City University of New York at Hunter College, New York, USA. (Advisor: **Prof. Wayne W. Harding**)

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

## Academic and Professional Awards

Award	University/Research Organization /Funding Sponsor	Year
“Certificate of Reviewing” by Journals-Bioorganic Chemistry, Journal of	Elsevier, Amsterdam, The Netherlands	2019

<b>Molecular Structure</b>		
<b>VIFA 2016 Outstanding Faculty Award</b>	<b>Venus International Foundation, Chennai</b>	<b>2016</b>
<b>BMCL Certificate of Outstanding Contribution in Reviewing</b>	<b>Elsevier, Amsterdam, The Netherlands</b>	<b>2015, 2017</b>
<b>BMCL Certificate of Reviewing</b>	<b>Elsevier, Amsterdam, The Netherlands</b>	<b>2015, 2017</b>
<b>DST-SERB Young Scientist Award</b>	<b>Department of Science and Technology, Ministry of HRDG, New Delhi</b>	<b>2014</b>
<b>Certificate of Appreciation</b>	<b>American Chemical Society, U.S.A</b>	<b>2013</b>
<b>2012 Top 10 Best Reviewer award</b> for "Bioorganic and Medicinal Chemistry Letters" Journal	<b>Elsevier B.V. Registered Office, Amsterdam, The Netherlands &amp; BMCL Regional Journal Office, Tokyo, Japan</b>	<b>2012</b>
<b>JSPS Postdoctoral Fellowship</b>	<b>Japan Society for the Promotion of Science, Japan</b> Host Institute: <i>Institute of Microbial Chemistry, Microbial Chemistry Research Foundation (IMC-MCRF), Tokyo, Japan</i>	<b>2010 – 2012</b>
<b>Postdoctoral Fellowship (NIH)</b>	<b>The City University of New York at Hunter college, New York, U.S.A</b> Funding agency: <i>National institute of drug abuse (NIDA), National institute of health (NIH), U.S.A</i>	<b>2009-2010</b>
<b>Postdoctoral Fellowship (NCRR-NIH)</b>	<b>The City University of New York at Hunter college, New York, U.S.A</b> Funding agency: <i>National centre for research resources (NCRR), National institute of health (NIH), U.S.A</i>	<b>2008-2009</b>
<b>CSIR S.R.F</b>	<b>Council of Scientific &amp; Industrial Research, New Delhi, India</b>	<b>Jul, 2005</b>
<b>CSIR J.R.F</b>	<b>Council of Scientific &amp; Industrial Research, New Delhi, India</b>	<b>Jul, 2003</b>
<b>CSIR-NET (Lectureship) (3 times Qualified)</b>	<b>CSIR-UGC, New Delhi, India</b>	<b>Jun, 2002 Dec, 2001 Jun, 2001</b>
<b>GATE</b>	<b>Six old IIT's &amp; IISc, Bangalore, India</b>	<b>Apr, 2002</b>
<b>CDRI PGRT</b>	<b>Ministry of Health (MOH), New Delhi, India</b>	<b>Feb, 2002</b>
<b>ASRB NET Certificate</b>	<b>Agricultural Scientist Recruitment Board, New Delhi, India</b>	<b>Oct, 2001</b>
<b>Research Entrance Test</b>	<b>DDU Gorakhpur university, India</b>	<b>Mar, 2001</b>

### Teaching Experience (~ > 10 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

**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:**

<b>CYT 513</b> Organic Chemistry	<b>CYT 632</b> Organic Synthesis	<b>CYT 635</b> Bioorganic Synthesis
<b>CYT 601</b> Bio-inorganic Chemistry	<b>CYT 611</b> Stereochemistry, structure & reaction mechanism of Organic compounds	
<b>CYT 514</b> Analytical Chemistry	<b>CYT 638</b> Heterocyclic Chemistry	<b>CYT 643</b> Pharmaceutical Chemistry
<b>CYP604</b> Chemistry Practicals	<b>CYP614</b> Organic Chemistry Practicals	<b>CYT 603</b> Analytical Chemistry

#### Achievements in Nutshell

<b>Sponsored Projects Ongoing = 02</b>	<b>Projects Completed = 14</b>	<b>Projects as Host Researcher = 04</b>
<b>Total List of Publications in SCI journals</b>	<b>Invited Talks/ Plenary lecture/</b>	<b>Conferences/ Workshops/Invited</b>

= ~75 [h-index: 19, i10 index 38, Citation: 931]	<b>Chaired Session = 56</b>	<b>lectures organized = 04</b>
<b>Patents = 02</b> <b>Book Chapter = 06</b> (01 under production)	<ul style="list-style-type: none"> <li>➤ <b>International Conferences = 21</b></li> <li>➤ <b>National/ International Collaborations: 20</b></li> </ul>	<b>International/ National Conferences with proceedings = 68</b>
<b>Teaching Experience:</b> 10 years 3 months <b>Research Experience:</b> 4 years 9 months as Postdoc & 10 years 03 months as Asst. / Asso. Prof. <b>Total Working Experience = ~15 years</b>	<ul style="list-style-type: none"> <li>➤ MOU Signed between MNIT Jaipur and PGNIU, Perm, Russia</li> <li>➤ Foreign Expert in International Project funded by Ministry of Education and Science, Perm, Russia</li> </ul>	<b>Postdoc Supervision: 04</b> <b>Ph.D Supervision: 10</b> (06 completed & 07 ongoing) <b>PG Project Supervision:</b> Completed (30 Students) Ongoing (11 Students)

### International / National Assignments:

- (a) **Selection Committee Member (Chemistry)**, MEXT Research Fellowship **2020, 2021 and 2022**, Embassy of Japan, Government of Japan.
- (b) **French Grant Reviewer Committee Member**, French National Research Agency (ANR), 2021 Generic Call for Proposal (AAPG2021), France

### Research Areas

- **Medicinal Chemistry, Drug Discovery & Process Development:** Mechanism/target/structure-based drug discovery, lead generation and lead optimization; Design, Synthesis and SAR study of new bioactive molecules/NCE's, particularly in the field of novel antimalarials, antitubercular, anti-infective agents, anticancer agents and neurodegenerative disorders.
- **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 arylation reactions. Investigation of cross coupling, hydroarylations, and Cyclization as well as addition reactions via development of metal-ligand catalytic systems will also be pursued.
- **Development of New Synthetic Methodologies.**
- **Total synthesis of biologically active Natural Products/Drugs/Therapeutics.**
- **Green chemistry:** Application of microwave-assisted/ ultrasound-assisted organic transformations; Explorations of organic reactions either under solvent-free conditions or using cheap innocuous alternate reaction media such as water and ionic liquids.
- **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.

### Sponsored Projects Ongoing

1. **ICMR Grant (Adhoc) in collaboration with AIIMS New Delhi (2022-2025).**  
**Funding Agency: ICMR (2021-2024);** Total Sanctioned Amount: Rs. 88,98,000/-  
**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.
2. **Core Research Grant (CRG) in collaboration with AIIMS New Delhi (2020-2023).**  
**Funding Agency: SERB (2020-2023);** Total Sanctioned Amount: Rs. 67,81,480/-  
**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.

### Projects Completed as PI

3. **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.

4. **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.
5. **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.
6. **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 Bed-side: 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.
7. **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 bed-side: Synthesis, chemistry, stereochemical assignment, structure-activity relationship studies and biological evaluation.
8. **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  $sp^2$  C-H bond activation: Application to an efficient synthesis of bioactive heterocycles.
9. **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 bed-side: An efficient, cost-effective, asymmetric synthesis and SAR study of new non-opioid anti-pain lead compound, Conolidine.
10. **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
11. **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

12. **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  $sp^2$  C-H Arylation methodology on Antimalarial lead Cassiarin F Alkaloids: A Potential Chemotherapeutic approach towards Antimalarial Drug Development.
13. **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

14. **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 ( $sp^3$ )-H functionalization and its applications.
15. **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  $sp^2$  and  $sp^3$  C-H bond activation reactions: Application towards the synthesis of Novel Bioheterocycles.
16. **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 =19, Total citations = 931)**

1. Sharma, R.; Rahaman, A.T.A.; Sen, J.; Mashevskaya, I. V.; **Chaudhary, S.**\* “Discovering the role of *N*-Heterocyclic Carbene as Hydrogen Borrowing Organocatalyst: Metal-free, Direct *N*-Alkylation of Amines with Benzyl Alcohols” *Org. Chem. Frontiers* **2023**, DOI: [10.1039/D2QO01522F](https://doi.org/10.1039/D2QO01522F)
2. Sharma, R.; **Chaudhary, S.**\* “Regiodivergent Cu-Promoted, AcOH switchable Distal vs Proximal Direct Cyanation of 1-Aryl-1*H*-Indazoles and 2-Aryl-2*H*-Indazoles via Aerobic Oxidative C–H Bond Activation” *J. Org. Chem.*, **2022**, DOI: [10.1021/acs.joc.2c01603](https://doi.org/10.1021/acs.joc.2c01603) (I.F = 4.198)
3. Yadav, L.; Shyamlal, B. R. K.; Tiwari, M. K.; Rahaman, A.T.A.; Sen, J.; **Chaudhary, S.**\* “TMEDA-Catalyzed Regioselective Decarboalkoxy C–N Bond Formation: A Unified Direct Access to Indolo[2,1-*a*]isoquinoline and Dibenzopyrrocoline Alkaloids” *Chemistry- An Asian Journal*, **2022**, 17(16), e202200398 [DOI: [10.1002/asia.202200398](https://doi.org/10.1002/asia.202200398)] (I.F = 4.839)
4. Ng, J. P. L.;<sup>†</sup> Tiwari M. K.;<sup>†</sup> Nasim A. A.; Zhang, R. L.; Qu Y.; Sharma, R.; Law, B. Y. K.; Yadav D. K.;\* **Chaudhary S.**\*; Coghi P.\*; Wong, V. K. W.\* “Biological Evaluation in Resistant Cancer Cells and Study of Mechanism of Action of Arylvinyl-1,2,4-Trioxanes” *Pharmaceuticals*, **2022**, 15, 360. [DOI: [10.3390/ph15030360](https://doi.org/10.3390/ph15030360)] (I.F = 5.215)
5. Sharma, R.; Yadav, R. K.; Jain, M.; Joshi, J.; and **Chaudhary, S.**\* “Oxidant-Switched Palladium-catalyzed Regioselective Mono- versus Bis-ortho-Aroylation of 1-Aryl-1*H*-indazoles with Aldehydes via C–H Bond Activation” *J. Org. Chem.*, **2022**, 87(5), 2668-2685. [DOI: [10.1021/acs.joc.1c02628](https://doi.org/10.1021/acs.joc.1c02628)] (I.F = 4.198)
6. Lukmanova, D. N.; Pchelintseva, D. I.; Dmitriev, M. V.; Balandina, S. Y.; Mashevskaya, I. V.; **Chaudhary, S.**\* “Reaction of Hetareno[*e*]pyrrole-2,3-diones with Thiols: An Approach to Two Distinct 5-Thio-substituted Pyrrole-2-one Derivatives” *ChemistrySelect*, **2021**, 6(45),12623-12627. [DOI: [10.1002/slct.202103243](https://doi.org/10.1002/slct.202103243)] (I.F = 2.307)
7. Shyamlal, B. R. K.; Mathur, M.; Yadav, D. K.; Mashevskaya, I. V.; El-Shazly, M.; Saleh, N.\* and **Chaudhary, S.**\* “Discovery of Natural Product Inspired 3-Phenyl-1*H*-isochromen-1-ones as Highly Potent Antioxidant and Antiplatelet Agents: Design, Synthesis, Bio-evaluation, SAR and in silico studies” *Current Pharmaceutical Design*, **2021**, (Accepted). [DOI: 10.2174/1381612827666211116102031] (I.F = 3.310)
8. Tiwari, M. K.;<sup>†</sup> Coghi, P.;<sup>†</sup> Agarwal, P.;<sup>†</sup> Yadav, D. K.; Yang, L. J.; Congling, Q.; Sahal, D.\*; Wong, V. K.W.\*; **Chaudhary, S.**\* “Novel Halogenated Arylvinyl-1,2,4 Trioxanes as Potent Antiplasmodial as well as Anticancer Agents: Synthesis, Bioevaluation, Structure-Activity Relationship and in-silico Studies” *Eur. J. Med. Chem.*, **2021**, 224, 113685. (I.F = 7.088) [DOI: 10.1016/j.ejmech.2021.113685]
9. Anand, A.; Saran, M.; **Chaudhary, S.**; Ronin R. S.; Swami A.K.; Mathur, M.; Burov, A.; Bagaria, A. “A novel approach towards green synthesis of nanodiamonds as biocompatible agents” *J. nano-electron. phys.*, **2021**, 13, 03040-(1-6). [DOI: 10.21272/jnep.13(3).03040].
10. Sharma, R.; Yadav, R. K.; Sharma, R.; Sahu, N. K.; Jain, M. and **Chaudhary, S.**\* “Recent Advancements in the Synthesis and Chemistry of Benzo-fused Nitrogen- and Oxygen-based Bioactive Heterocycles” *Current Topics in Medicinal Chemistry*, **2021**, 21, 1538-1571. [DOI:10.2174/1568026621666210715122919] [Invited Article] (I.F = 3.570)
11. Yadav, L. and **Chaudhary, S.**\* “Developments in Organocatalyzed C<sub>(sp<sup>2</sup>)</sub>-H bond formation reactions involving single electron transfer mechanism: An Overview” *Current Organocatalysis*, **2021**, 8(3), 289-307 [Invited Article] (I.F = 0.942) [DOI: [10.2174/2213337208666210114125815](https://doi.org/10.2174/2213337208666210114125815)]
12. Yadav, R. K.; Sharma, R.; Gautam, D.; Joshi, J. and **Chaudhary, S.**\* “Lewis Acid/Oxidant as Rapid Regioselective Halogenating Reagent system for Direct Halogenation of Fused Bi-/Tri-cyclic Hetero-aromatic Congeners via C(sp<sup>2</sup>)-H bond Functionalization” *Asian J. Org. Chem.*, **2021**, 10(7), 1726-1741. (I.F = 3.116) [DOI: [10.1002/ajoc.202100156](https://doi.org/10.1002/ajoc.202100156)]
13. Sharma, R.; Yadav, L.; Yadav, R. K. and **Chaudhary, S.**\* “Oxidative Cross-Dehydrogenative Coupling (CDC) via C<sub>(sp<sup>2</sup>)</sub>-H bond Functionalization: *tert*-Butyl Peroxybenzoate (TBPB)-promoted Regioselective Direct C-3 Acylation of 2*H*-Indazoles with Aldehydes/Benzyl Alcohols/Styrenes” *RSC Advances*, **2021**, 11, 14178 – 14192. (I.F = 4.036) [DOI: [10.1039/D1RA02225C](https://doi.org/10.1039/D1RA02225C)]
14. Maksimov, A. Y.; Balandina, S. Y.; Topanov, P. A.; Mashevskaya, I. V. and **Chaudhary, S.** “Organic Antifungal Drugs and Targets of Their Action” *Current Topics in Medicinal Chemistry*, **2021**, 21, 705-736. (I.F = 3.570) [DOI:10.2174/1568026621666210108122622]
15. Tiwari, M. K.; Yadav, L.; and **Chaudhary, S.**\* “[2,3-Bis-(2-pyridyl) pyrazine] as an Efficient Organocatalysis for the Direct C<sub>(sp<sup>2</sup>)</sub>-H Arylation of Unactivated Arenes/Heteroarenes via C-H bond activation” *ChemistrySelect*, **2020**, 5, 11968-11975. [DOI: 10.1002/slct.202003140] (I.F = 2.307)
16. Yadav, L. and **Chaudhary, S.**\* “Bu<sub>4</sub>Ni-Catalyzed, oxidative C<sub>(sp<sup>2</sup>)</sub>-C<sub>(sp<sup>3</sup>)</sub> cross-dehydrogenative coupling for the regioselective direct C-3 Benzoylation of 2*H*-indazoles” *Org. Biomol. Chem.*, **2020**, 18, 5927 - 5936. [DOI:

- 10.1039/D0OB01282C] (I.F = 3.89).
17. Yadav, R. K.; Kumar, Y.; **Chaudhary, S.**\* “Metal-free, H<sub>2</sub>O<sub>2</sub>-mediated regioselective direct C-3 hydroxylation of imidazo[1,2-a]pyridines via C(sp<sup>2</sup>)-H bond functionalization” *ChemistrySelect* **2020**, 5, 9235-9239. [DOI: 10.1002/slct.202002219] (I.F = 2.307)
  18. Yadav, L.; Tiwari, M. K.; Shyamlal, B. R. K.; **Chaudhary, S.**\* “Organocatalyst in Direct C(sp<sup>2</sup>)-H Arylation of Unactivated Arenes: [1-(2-Hydroxyethyl)-piperazine]-catalyzed Inter-/Intra-molecular C-H bond activation.” *J. Org. Chem.*, **2020**, 85, 12, 8121-8141. [DOI: 10.1021/acs.joc.0c01019] (I.F = 4.198)
  19. Roy, E.; Nagar, A.; **Chaudhary, S.**; Pal, S. “Advanced Properties and Applications of AIEgens-Inspired Smart Materials” *Ind. Eng. Chem. Res.* **2020**, 59, 23, 10721-10736 [DOI: 10.1021/acs.iecr.0c01869] (I.F = 4.326)
  20. Tiwari, M. K.;<sup>†</sup> Coghi, P.;<sup>†</sup> Agarwal, P.;<sup>†</sup> Shyamlal, B. R. K.; Yang, L. J.; Yadav, L.; Peng, Y.; Sharma, R.; Yadav, D. K.; Sahal, D.; Wong, V.K.W.; **Chaudhary, S.**\* “Design, synthesis, structure-activity relationship and docking studies of novel functionalized arylvinyl-1,2,4-trioxanes as potent antiplasmodial and anticancer agents” *ChemMedChem.*, **2020**, 15, 1216-1228. [DOI: 10.1002/cmcd.202000045] (I.F = 3.540)
  21. Yadav, D. K.; Kumar, S.; Choi, E. H.; **Chaudhary, S.** Kim, M. -H. “Computational Modeling on Aquaporin-3 as Skin Cancer Target: A Virtual Screening Study” *Front. Chem.* **2020**, 8, 250. [DOI: 10.3389/fchem.2020.00250]. (I.F = 5.545) *Preprints* **2019**, 2019100174 (DOI: 10.20944/preprints201910.0174.v1).
  22. Kumar, K.;<sup>‡</sup> Shyamlal, B. R. K.;<sup>‡</sup> Verma, R. B.; Kondaiah. P.; **Chaudhary, S.**\* Self-assembled nanospheres of lipoylated caffeine for reduction-triggered doxorubicin delivery” *ChemMedChem*, **2020**, 15, 733-737. [DOI: 10.1002/cmcd.202000070] (I.F = 3.540) *Special Collection on Nanomedicine (2020 Hot Topic Series)* [bit.ly/cmcd-2020-nanomed](http://bit.ly/cmcd-2020-nanomed)
  23. Shyamlal, B. R. K.; Mathur, M.; Yadav, D. K.; **Chaudhary, S.**\* “Microwave-Assisted Modified Synthesis of C<sub>8</sub>-Analogues of Naturally Occurring Methylxanthines: Synthesis, Biological Evaluation and their Practical Applications” *Fitoterapia*, **2020**, 143, 104533. [DOI: 10.1016/j.fitote.2020.104533] (I.F = 3.204)
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#### **List of Publications (Ready for Communication)**

68. Atpadkar, P. P.;<sup>†</sup> Sumanth, G.;<sup>†</sup> and **Chaudhary, S.\*** "Prominence of Microbial Origin Surfactant as Detergents: Recent Advancements and Future Perspectives" **2022**, *Aus. J. Chem.* (Under Review). DOI:
69. Yajnashri, M.;<sup>†</sup> Sumanth, G.;<sup>†</sup> Atpadkar, P. P.;<sup>†</sup> and **Chaudhary, S.\*** "Recent Developments and Practical Applications of Biosurfactant as Stabilization Agents" *Acta Chimica Slovenica*, **2022** (Under Review) DOI:
70. **Chaudhary, S.\*** "Analysis of diastereomeric ( $\alpha/\beta$ ) ratio in artemisinin analogues: 3D conformational effects of sterically hindered & bulky substituent's" *J. Chem. Sci.*
71. **Chaudhary, S.\*** "Recent Developments in the Chemistry of Linezolid derivatives as Synthetic Antimicrobial agents", *Current Pharmaceutical Design*, **2022**, in progress.
72. **Chaudhary, Sandeep\*** "Microwave-assisted direct arylations: Recent developments in transition-metal catalysed C-C bond formations" *Mini Rev. Org. Chem.* **2022**, in progress.

#### **Patents**

1. Singh, C.; **Chaudhary, S.**; and Puri, S. K. "Novel ester derivatives of dihydroartemisinin as Antimalarials" Indian Patent, **2012**, Patent No. **253045 A1 20120622 (IN2006DE00391)**. [Date of Grant: **20 June, 2012**]



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### Book Chapters

1. Yadav, R.K.; Sen, J.; Rahaman, A.T.A.; and Chaudhary, S.\* (2023) "Microbes/Microbial Enzyme-Catalyzed Synthesis of Natural-Product-Inspired Bioactive Scaffolds/Therapeutics/Molecules: Application in Microbial Industry and Technology" In: Atta-Ur-Rahman Series Editor of "Advances in organic Synthesis", Elsevier Science Publishing, UK. DOI:
2. Atpadkar, P. P.;† Sumanth, G.;† and Chaudhary, S.\* (2023) "Natural-Product-Inspired Bioactive Alkaloids agglomerated with Potential Antioxidant Activity: Recent Advancements on Structure-Activity Relationship studies and Future Perspectives" In: Gerald Litwack "Antioxidants", Series Editor of Vitamins and Hormones, Vol 120, Academic Press/Elsevier, UK. DOI: [10.1016/bs.vh.2022.10.002](https://doi.org/10.1016/bs.vh.2022.10.002)
3. Mahajan, A. T.;† Khatik, G. L.;\* and Chaudhary, S.\* (2022) "Anti-Biofilm Properties of Biosurfactants: A Tool against the food pathogens" In: Inamuddin and Charles Oluwaseun Adetunji, Editors, (1<sup>st</sup> Ed.) "Next Generational Biosurfactant and their Practical Application in Food Sector", Elsevier, UK. DOI: [10.1016/B978-0-12-824283-4.00017-4](https://doi.org/10.1016/B978-0-12-824283-4.00017-4); ISBN: 978-0-12-824283-4.
4. Yadav, R. K.; Deshmukh, V. V.; Boralkar, T. M., Jain, M.; and Chaudhary, S.\* (2022) "Cheaper Transition-Metals-Based Nanocatalyzed Organic Transformations towards Synthesis of Bio-heterocycles: Strategic Approaches and 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. UK. DOI: [10.1201/9781003141488-5](https://doi.org/10.1201/9781003141488-5); ISBN: 9780367693541; Book ISBN: 9780367693541.
5. Tiwari, M.K.; and Chaudhary, S.\* (2022) "Artemisinin Analogues as a Novel Class of Antimalarial Agents: Recent Developments, Current Scenario and Future Perspectives" In: Atta-ur-Rahman and M. Iqbal Choudhary (Eds.) "Frontiers in Drug Design and Discovery" (FDDD), Bentham Science Publishers, Vol. 11, 1-41. Book ISBN: 978-981-5036-87-9; Book ISSN: 2212-1064
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### International/ National Conferences/ Symposium with proceedings (Abstract published) (Total = 68)

1. 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).
2. 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.
3. 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.
4. 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.
5. Sharma, R.; Chaudhary, S. "Transition-Metal Free C(sp<sup>2</sup>)-C(sp<sup>2</sup>) 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<sup>th</sup> - 19<sup>th</sup> March, 2021.

- 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.
- 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.
- 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.
- 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.
- 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*)
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.

19. 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.
20. 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.
21. 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.
22. 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.
23. 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.
24. 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.
25. 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.
26. 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.
27. 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.
28. 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.
29. 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**.

30. 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**.
31. 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.
32. 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.
33. Yadav, L.; Tiwari, M. K.; Shyamlal, B. R. K.; Mathur, M.; Swami, A. K.; Puri, S. K.; Naikade, N. K.; Chaudhary, S. “*Synthesis and Antimalarial Activity of Novel Bicyclic and Tricyclic Aza-peroxides*” *ChemInform*, **2016**, 47(28), 215.
34. Singh, S.; Panwar, R.; Althagafi, I.; Sharma, V.; **Chaudhary, S.**; Pratap, R. “*Base mediated regioselective synthesis of highly functionalized conjugated enones*” *ChemInform*, **2015**, 47(1), 148.
35. 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.
36. 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.
37. Tiwari, M. K.; Yadav, L.; Bharti Shyamlal, R. K. and **Chaudhary, S.** (Nov, **2015**), “*Development of New Organocatalysed Intermolecular Direct Arylation of Arenes with haloarenes/ halo-heteroarenes*” 23<sup>rd</sup>-25<sup>th</sup> Nov, 2015 Abstracts of papers ISBN No. 978-93-84869-93-9 (PP-114) International Conference on “*Current Challenges in Drug Discovery Research CCDDR-2015*”, MNIT Jaipur-302017, Rajasthan, India.
38. Tiwari, M. K.; Naikade, N. K.; Puri, S.K.; Singh, C. and **Chaudhary, S.** (Nov, **2015**), “*New Orally Active Diphenylmethyl-based Ester Analogues of Dihydroartemisinin: Synthesis and Antimalarial Assessment against multidrug-resistant Plasmodium Yoelii Nigeriensis in Swiss mice*” 23<sup>rd</sup>-25<sup>th</sup> Nov, 2015 Abstracts of papers ISBN No. 978-93-84869-93-9 (PP-115) International Conference on “*Current Challenges in Drug Discovery Research CCDDR-2015*”, MNIT Jaipur-302017, Rajasthan, India.
39. Tiwari, M. K.; Naikade, N. K.; Puri, S.K. and **Chaudhary, S.** (Nov, **2015**), “*Synthesis & Antimalarial activity of novel Artemisinin-1, 2, 4-Trioxane hybrids*” 23<sup>rd</sup>-25<sup>th</sup> Nov, 2015 Abstracts of papers ISBN No. 978-93-84869-93-9 (PP-116) International Conference on “*Current Challenges in Drug Discovery Research CCDDR-2015*”, MNIT Jaipur-302017, Rajasthan, India.
40. 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.
41. 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.
42. 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.

43. 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.
44. 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.
45. 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.
46. 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.
47. 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.
48. Sharma, V.; Jaiswal, P. K. and **Chaudhary, S.** (Nov, 2015), “*Microwave-assisted green synthesis of novel functionalized Benzo (1, 4) oxazine analogues and their Anti-oxidant activity*” 23<sup>rd</sup>-25<sup>th</sup> Nov, 2015 Abstracts of papers ISBN No. 978-93-84869-93-9 (PP-182) International Conference on “*Current Challenges in Drug Discovery Research CCDDR-2015*”, MNIT Jaipur-302017, Rajasthan, India.
49. *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.
50. *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.
51. **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.
52. *Poster presentation*, Pradeep k. Jaiswal, **Chaudhary, S.**; and Sampak Samanta (27 Feb, 2015) “*An organocatalytic novel C-C bond forming approach for the direct synthesis of highly substituted tetrahydrocarbazoles and carbazoles*”, 21<sup>st</sup> ISCB international conference (ISCBC 2015)-Current trends in drug discovery and developments, CSIR-Central Drug Research Institute, Lucknow, India.
53. *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
54. *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.

55. **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.
56. *Poster presentation*, **Chaudhary, S.** “*Frontiers of medicinal science*” 8<sup>th</sup> AFMC International medicinal chemistry symposium (AIMECS), **Nov-Dec, 2011**, Tokyo, JAPAN.
57. *Poster presentation*, **Chaudhary, S.** “*Chembiomolecular Science: at the frontier of Chemistry and Biology*”, The Uehara memorial foundation international symposium, (June, **2011**), Tokyo, JAPAN.
58. Legendre, O.; Pecic, S.; **Chaudhary, S.**; Zimmerman, S. M.; Fantegrossi, W. E.; and Harding, W. W. “*Synthetic Studies and pharmacological evaluation on the MDMA (“Ecstasy”) antagonist nantenine*” *ChemInform*, **2010**, 41(25), 175.
59. **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.
60. 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.
61. **Chaudhary, S.**; Pecic, S.; Legendre, O.; and Harding, W. W. (Sep, **2009**), “*Microwave-assisted direct biaryl coupling: First application to the synthesis of Aporphines*” *ChemInform*, **2009**, 40(35), 190.
62. **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 Sci Finder and *Poster presentation*, 238<sup>th</sup> ACS national meetings & expositions, Washington D C, U.S.A.
63. 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.
64. *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.
65. *Poster presentation*, **Chaudhary, S.**; Puri, S. K. and Singh, C. (Jan, **2006**) “*Novel orally active C-10 $\alpha$  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.
66. **Chaudhary, S.**; Gaikwad, A. N.; Sinha, S.; Chaturvedi, V. Manju, Y. K. and Singh, C. “*Artemisinin derived stable ozonides: Synthesis and antitubercular activities*”, *Med. Chem. Res.*, **2006**, 15 (1/6), 246-247. (Impact factor: **1.965**)
67. *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.
68. **Chaudhary, S.**; Puri, S. K. and Singh, C. “*Orally active artemisinin derivatives*”, *Med. Chem. Res.*, **2004**, 12 (6/7), 362. (Impact factor: **1.965**)

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

1. 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**.
2. 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**.
3. Attended RSC-IISER Desktop Seminar with OBC, organized by RSC publishing Webinars, Royal Society of Chemistry, UK on **Nov 25, 2021**.
4. Attended RSC-IISER Desktop Seminar with ChemComm, organized by RSC publishing Webinars, Royal Society of Chemistry, UK on **Aug 06, 2021**.
5. 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**.
6. 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).

7. 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**.
8. 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**.
9. 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.
10. 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.
11. National Workshop attended on “*Modern Sophisticated Instruments*”, Indian Institute of Technology, Indore (Feb, **2013**), India.
12. “21st Symposium on optically active compounds” Institute of microbial chemistry, Microbial chemistry research foundation, **Nov, 2011**, Tokyo, JAPAN.
13. Workshop attended on “*Responsible conduct of research*”, (May, **2010**), the City University of New York, New York, U.S.A.
14. “*Sponsored Program & Funding: CUNY postdoctoral development program*”, (April, **2010**), The City University of New York, U.S.A.
15. “*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.
16. Workshop attended on “*Responsible conduct of research*”, (Oct, **2009**), The City University of New York, New York, U.S.A.
17. “*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.
18. 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**

1. **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. (Convener & Organizing Secretary, CCDDR 2015)
2. “***AIDS Awareness Programme***” as part of Community Development Programme organized at Department of Chemistry, MNIT Jaipur on 1<sup>st</sup> Dec, **2014**. (Programme Coordinator)
3. “***CANCER Awareness Programme***” as part of Community Development Programme organized at Department of Chemistry, MNIT Jaipur on 19<sup>th</sup> Nov, **2014**. (Programme Coordinator)
4. 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. **CHAired SESSION** on “*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).
2. **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).
3. **CHAired SESSION** on “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.
4. **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.
5. **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**.

6. **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**.
7. **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**.
8. **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**.
9. **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**.
10. **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**.
11. **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**.
12. **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**.
13. **ONLINE Invited Lecture** on “*Oxidative Cross-Dehydrogenative Coupling (CDC) via C<sub>(sp<sup>2</sup>)</sub>-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**.
14. **ONLINE Invited Lecture** on “*Pd-Catalyzed Oxidant Switched Regioselective Mono- and Bis-ortho-Aroylation of 1-Aryl-1H-Indazole with Aldehydes via C<sub>(sp<sup>2</sup>)</sub>-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**.
15. **ONLINE Invited Lecture** on “*N-Heterocyclic Carbene-Catalyzed Deoxygenative  $\alpha$ -Benzoylation of Ketones via C<sub>(sp<sup>3</sup>)</sub>-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**.
16. **ONLINE Invited Lecture** on “*Cu-Catalyzed C-N Bond formation via C<sub>(sp<sup>2</sup>)</sub>-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**.
17. **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**.
18. **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**.
  19. **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**.
  20. **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.
  21. **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.
  22. **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**.
  23. **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**.
  24. **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**.
  25. **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**.
  26. **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**.
  27. **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**.
  28. **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**.
  29. **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**.
  30. **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**.
  31. **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**.
  32. “*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.
33. **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**.
  34. “*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**.
  35. “*Development of Organocatalyzed sp<sup>2</sup> 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**.
  36. “*Ag<sub>2</sub>O 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**.
  37. **Invited Lecture** “*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**.
  38. **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**.
  39. “*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**.
  40. “*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**.
  41. “*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**.
  42. **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**.
  43. “*Recent developments in the Chemistry and biology of Antimalarial drug Artemisinin*” at National Conference (OCSD-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**.
  44. “*Carbon-Carbon Bond Forming Reactions: Classical vs Modern*” at Department of Chemistry, Goa University, Goa, India on **22nd March, 2016**.
  45. “*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**.
  46. “*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**.
  47. “*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**.
  48. “*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**.
  49. “*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**.
  50. “*Perspective and Challenges in Antimalarial Chemotherapy: Design and Synthesis of Novel Artemisinin Analogues as Antimalarials*” at 22nd ISCB International Conference (ISCB-2016) on “*Recent Trends in Affordable and sustainable Drug Discovery and Developments*” held at Uka Tarsadia University, Bardoli, Surat, India on **6th February, 2016**.

51. "*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**.
52. "*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**.
53. "*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**.
54. "*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**.
55. "*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 (ISCB-2015), Jointly organized by ISCB, India and CSIR-CDRI, Lucknow, India on 25<sup>th</sup>-28<sup>th</sup> Feb, **2015**. (*oral presentation*)
56. "*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.
57. "*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.
58. "*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

1. **Indo-Macau Collaboration (Project: Anticancer Drug Discovery Programme)**  
Prof. Vincent Wong & 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.
2. **Indo-Russian Collaborators**  
Prof. Irina V. Mashevskaya, Department of Organic Chemistry, Faculty of Chemistry, Perm State University, Perm, Russia Federation.
3. **Indo-Korean Collaboration (In Silico Molecular Docking Studies)**  
Dr. Dharmendra Kumar Yadav, College of Pharmacy, Gachon University of Medicine and Science, Yeonsu-gu, Incheon City, 21924, Korea
4. **India-UAE-Egypt Collaboration (Bioactive heterocycles)**  
Prof. Na'il Saleh, Department of Chemistry, College of Science, United Arab Emirates (UAE) University, Al Ain, United Arab Emirates  
Prof. Mohamed El-Shazly, Department of Pharmaceutical Biology, Faculty of Pharmacy and Biotechnology, The German University in Cairo, Cairo, Egypt.

#### National/International Collaborations (2013-2022)

1. Prof. Magda H. M. Abdellattif, Department of Chemistry, Faculty of Science, Taif University, Kingdom of Saudi Arabia (KSA).
2. Prof. Andrey N. Maslivets, Department of Organic Chemistry, Faculty of Chemistry, Perm State University, Perm, Russia Federation.
3. Dr. Vinita Chaturvedi, CSIR-CDRI, Lucknow.
4. 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*)
5. 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*)
6. Prof. Kristof Kranjc, Department of Chemistry and Biochemistry, University of Ljubljana, Slovenia.
7. Prof. Franc Perdih, Department of Chemistry and Biochemistry, University of Ljubljana, Slovenia.
8. Department of Advance Molecular Microbiology, M/s Seminal Applied Sciences Pvt. Ltd, Jaipur.
9. Dr. Roman V. Shchepin, Department of Radiology & Radiological Sciences, Vanderbilt University, Institute of Imaging Science, Vanderbilt University Medical Center, Nashville, Tennessee, USA.
10. Prof. Nadezhda Shchepina, Head of the Laboratory of Radiochemistry, Natural Sciences Institute of Perm State University, 4, Genkel St., Perm-614990, Russia.

11. **Prof. Nonhlanhla P. Khumalo**, Hair and Skin Research lab, Head of Dermatology, Groote Schuur Hospital & the University of Cape Town, Capetown, South Africa.
12. **Dr. Ahmed Mohammed**, Department of Chemistry, Faculty of the Natural Sciences, University of the Western Cape, Cape Town, South Africa.
13. **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]
14. **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*)
15. **Prof. Paturu Kondaiah**, Department of Molecular Reproduction, Development and Genetics, Indian Institute of Science, Bangalore-560012, India.
16. **Dr. Rajbala Verma**, Department of Zoology, University of Rajasthan, Jaipur-302004, India. (Biological Investigation = Antitubercular, Antimicrobials, Antioxidants, Antiplatelets etc.)
17. **Dr. Dinkar Sahal**, International Centre for Genetic Engineering and Biotechnology. Aruna Asaf Ali Marg, New Delhi, New Delhi. (*Antimalarial Drug Development Programme*)
18. **Dr. Ramendra Pratap**, Department of Chemistry, University of Delhi.

### International Visits

1. 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.
2. 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.
3. 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.
4. 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.
5. 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.
6. 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> March, 2015.

### 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)

*Coming soon*

### Ph.D Supervision [13 Students: 06 Awarded and 07 Ongoing]

S. No.	Name of Ph.D student	Title of Thesis	Status
1.	<b>Dr. Vashundhra Sharma</b> (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> (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> (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> (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> (Jan, 2015- July, 2020)	<i>Synthetic Studies Towards Organocatalyzed <math>C_{(sp^2)}-H</math> 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> (July, 2016-Sep, 2021)	<i>Studies on Bioactive Heterocycles via <math>C_{(sp^2)}-H</math> and <math>C_{(sp^3)}-H</math> 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>Richa Sharma</b>	<i>Chemistry on Natural Product Inspired Fused Bio-heterocycles: Synthesis and Practical Applications</i>	Thesis submitted on ..... & Ph.D awarded on ..... (2023)
8.	<b>Nawal Kishore Sahu</b> (TEQIP Part-Time Scholar) <b>Current Position:</b> Asst. Professor, Govt. Engg. College, Bharatpur	<i>Indole-Based Novel Bioactive Alkaloids: Synthesis, Chemistry and Biological Assessment</i>	Thesis submitted on ..... & Ph.D awarded on ..... (2023)
9.	<b>Abdul Rahaman TA</b>	<i>Transition-Metal-Free/Organocatalytic Oxidant-Promoted C-H Bond Activation Reactions: Synthesis, Methodology Development, Chemistry and its Practical Applications</i>	Ongoing (Sep, 2021-Present)
10.	<b>Janmejaya Sen</b>	<i>Transition-Metal-Free/Organocatalytic Oxidant-Promoted C-H Bond Activation Reactions: Synthesis, Methodology Development, Chemistry and its Practical Applications</i>	Ongoing (Sep, 2021-Present)
11.	<b>Amol Tarachand Mahajan</b>	<i>Synthetic Studies on Pharmaceutically Important Bioactive Aza-heterocycles: Synthesis, Chemistry and Biological Evaluation</i>	Ongoing (24 Aug, 2022-Present)
12.	<b>Shivani</b>	<i>Medicinal Chemistry on Natural Product Inspired Fused Bioactive Aza-heterocycles: Synthesis, Chemistry and Practical Applications</i>	Ongoing (24 Aug, 2022-Present)
13.	<b>Tanmoy Tantra</b>	<i>Synthetic Studies on Natural Product Inspired Pharmaceutically Relevant Biomolecules: Synthesis, Chemistry and Biological Evaluation</i>	Ongoing (24 Aug, 2022-Present)

## ALUMNI

### Postdoc Supervised (04)

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

1<sup>st</sup> April, 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> April, 2020: Dr. Krishan Kumar, Ph.D (IISc Bangalore), *CSIR-RA*

**M.Pharm (Med Chem) Supervision [04 =Passed out; 05 = Pursuing; 06 = Allotted]**

S. No.	Name of M.S. Pharm Student(s)	Title of Dissertation / M.S. Thesis	Year of Completion
1.	Samir Tikaram Sahu (753/MS-MC/21)	<i>Pyrazoles-Based Bioactive Aza-heterocycles as Potential Acetylcholinesterase Inhibitors: Design, Synthesis, Bioevaluation and In silico Studies</i>	Ongoing (2021-23)
2.	Kshirsagar Prasad Suhas (746/MS-MC/21)	<i>Novel 3-(Pyridin-2-yl)-1H-indoles as Multitargeted Anti-Alzheimer's Agents: Design, Synthesis, Bioevaluation and In Silico Studies</i>	
3.	Thakar Neha Rajendra (760/MS-MC/21)	<i>Design, Synthesis, and In Silico Studies of 2-phenylbenzo[d]imidazo[2,1-b]thiazoles as Anti-Alzheimer Agents</i>	
4.	Saswat Gaurab Dash (754/MS-MC/21)	<i>Weak Bases-Mediated, Metal-Free A3 Coupling: Design, Synthesis, Bio-evaluation and In Silico Studies of Functionalized Propargylamines as Anti-Alzheimer's Agents</i>	
5.	Prem S (751/MS-MC/21)	<i>Design, Synthesis, Bio-evaluation and In silico Studies of Substituted Triaryl Pyrazole derivatives as Anti-Alzheimer Agents</i>	
6.	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>	2022
7.	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>	
8.	Vedant V. Deshmukh (674/MS-MC/20)	<i>Microwave-Assisted Synthesis of Novel Spirooxindole Derivatives as Anti-Alzheimer Agents</i>	
9.	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>	2021
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>	2020
4.	Vikas Kumar (2018PCY5314)	<i>An efficient synthesis of substituted 1-phenethyl-1,2,3,4-tetrahydroisoquinolines: 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>	2019
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>	2018
9.	Neelam Rawat (2016PCY5141)	<i>Synthesis, Characterization of Curcumin Analogues Bearing Pyrazole/ Pyrimidine Ring Targeting Anti-</i>	

		<i>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 (09 Students)

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

**20 May, 2019 to 31 Aug, 2019:** Chitra Goswami, IIS University, Jaipur

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

**1 July, 2018-30 June, 2019:** Richa Sharma

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

**2017:** Mukesh Saharan, Manipal University, Jaipur

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

### Reviewer for Journals:

*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:** *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 Chemist and Biologist, 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)
- **Membership:** American chemical society, USA (2008 – Present)

### **Professional Training Received**

- “Principle 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**

<b>Equipment available in my Research Group</b>	<b>Generic Name of Equipment</b>	
PI & his group	(a) 02 Low temperature Reaction bath (b) 02 Two Rotavapor with vacuum pump and chiller ® 14 Magnetic Stirrers with hot plate (d) 04 Weighing balance (e) 10 UV lamp with box (f) 10 Computer with printer (g) 01 Vertex Mixer (h) 05 Oil Free Diaphragm Vacuum Pump (i) 03 Laboratory Oven	(j) 01 Melting point apparatus (k) 03 Refrigerator (l) 03 Recirculating Chiller (m) 05 Working Fumehoods (n) 01 Centrifuge (o) 01 Overhead Stirrer (p) 01 Vertex Mixture (q) 02 Ultrasonicator Bath ® 01 Microwave (s) 01 Overhead Magnetic Stirrer
PI’s Department/ 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**

<b>Designation</b>	<b>From</b>	<b>To</b>	<b>Nature of Work</b>
Chairman (Dean), Institute Safety Committee	11-08-2022	Till date	Policy/Guideline making and SOPs for Safety of the institute
Ex-Officio Senate Member, NIPER-R	21-02-2022	Till date	Academic duties and responsibilities
Ex-Officio member, Time-table and Academic Committee (NIPER-	21-02-2022	Till date	Technical and Financial Evaluation of the Tender for lab furniture of different



RBL/Cte/14/2021-22 dated 03-11-2021)			departments
Ex-Officio member, Results Committee (NIPER-RBL/Cte/15/2021-22 dated 03-11-2021)	21-02-2022	Till date	Result preparation and declaration
Dean, NIPER-Raebareli (NIPER-R/REG/2022/ dated 21-02-2022)	21-02-2022	Till date	Academic and Administrative Responsibilities of the Institute

#### **Administrative Assignments at Institute level**

<b>Organization</b>	<b>Designation</b>	<b>From</b>	<b>To</b>	<b>Nature of Work</b>
BOG-Member, NIPER-Raebareli	Member-Professor of the Institute	02-11-2022	Till date	Academic and Administrative Responsibilities of the Institute
NIPER-R (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 (NIPER-R/2021-22/Committee/ dated 04-03-2022)	Coordinator, Common Research Program	04-03-2022	Till date	To coordinate the Common Research Plan (CRP) going on NIPER-R campus.
NIPER-R (NIPER-R/2021-22/Committee/ dated 04-03-2022)	Member, SC/ST, OBC and PwD Welfare Cell	04-03-2022	Till date	To work as Liaison officer and look after the matters related to the welfare of the SC/ST/OBC/PwD peoples.
NIPER-Raebareli	Member, Tender Evaluation Committee	19-08-2021	Till date	Technical and Financial Evaluation of the Tender for lab furniture of different departments
NIPER-Raebareli (NIPER-RBL/Cte/04/2021-22 dated 05-08-2021)	Member, Committee for Technical and Financial Evaluation	05-08-2021	Till date	Technical and Financial Evaluation of the Tender dated 05-07-2021
NIPER-Raebareli (NIPER-RBL/Cte/2021/10 dated 11-06-2021)	Member, Physical Verification Committee	11-06-2021	30-09-2021	Physical verification of Assests of Computer Centre and Library

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

<b>Organization</b>	<b>Designation</b>	<b>From</b>	<b>To</b>	<b>Nature of Work</b>
NIPER-Raebareli (NIPER-RBL/01/2020-21/10 dated 04-08-2021)	Head of Department (HoD)	04-08-2021	Present	General Duties and Responsibility related to Department of Medicinal Chemistry including academic and Administrative works

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

#### **Administrative Assignments at Institute level**

<b>Organization</b>	<b>Designation</b>	<b>From</b>	<b>To</b>	<b>No. of Semester</b>	<b>Nature of Work</b>
MNIT Jaipur (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 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 Jaipur (MNIT/CW/2015-16/42 dated 31-07-2015)	Warden	01-08-2015	07-08-2016	<b>2</b>	Responsibilities and Maintenance of Hostel No. 1, MNIT Campus, MNIT Jaipur.
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	<b>2</b>	SC/ST/OBC/Persons with Disability Development and Liaison Officer
MNIT Jaipur (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	<b>4</b>	Faculty-In-Charge (Spectroscopy lab)- Supervision and Maintenance of Instruments of Spectroscopy Lab
MNIT Jaipur	DPGC Convener	20-07-2017	03-06-2021	<b>8</b>	As per MNIT Rules and Regulations of PG Schemes under the section no. 1.5.2: Responsibilities of DPGC
MNIT Jaipur (circulated by Dean Academics, MNIT)	External Member for DPGC, DSC and Guest Faculty Committee " in Department of Mechanical Engineering.	16-06-2017	15-06-2019	<b>4</b>	External Member for DPGC, DSC and Guest Faculty Committee " in Dept. of Mechanical Engineering, MNIT Jaipur
Organizing Member	MNIT convocation 7 <sup>th</sup> (04 Nov, 2012) 8 <sup>th</sup> (10 July, 2014) 9 <sup>th</sup> (19 <sup>th</sup> Jan, 2015), 10 <sup>th</sup> (11 <sup>th</sup> Dec, 2015), 11 <sup>th</sup> (21 <sup>st</sup> Jan, 2017), 12 <sup>th</sup> (6 <sup>th</sup> Jan, 2018) 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-	Scrutiny/Shortlisting committee member	24-04-2014	24-09-2014	<b>5 months</b>	Shortlisting/Scrutiny of candidates based on selection criteria.

65/2014/				
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	4	Serving as M.Sc (Chemistry) Course advisor to M.Sc Students 2015-2017 related to academic affairs.
Department of Chemistry, MNIT Jaipur	Member, Department Purchase Committee	07-07-2015	06-07-2016	2	Serving as member in the DPC for procurement of equipment, chemicals, glassware, software etc.
Department of Chemistry, MNIT Jaipur	Committee member for Construction of New Research lab including OMC lab	07-07-2015	06-07-2016	2	To monitor the progress of Construction work of new research OMC lab.
Department of Chemistry, MNIT Jaipur	Member, DPGC	04-07-2013	03-06-2021	16	Roles of members given in DPGC rules and regulation of MNIT Institute
Department of Chemistry, MNIT Jaipur	Member, DUGC	04-07-2013	03-06-2021	16	As per given in DUGC rules and regulation of MNIT Institute.
Department of Chemistry, MNIT Jaipur	Faculty-In-Charge, Placement	18-07-2016	03-06-2021	16	To look upon and guide students for placement to various companies.
Department of Chemistry, MNIT Jaipur	Member, Department Selection Committee (DSC)	01-06-2016	03-06-2021	16	To carry out written exam and interviews for Ph.D admissions, Guest Faculty etc.