Professor Diwan S Rawat, FNASc, FRSC, CChem (London) Department of Chemistry, University of Delhi Vice Chancellor, Kumaun University, Nainital E. Mail: diwansrawat@gmail.com, dsrawat@chemistry.du.ac.in Mobile No : 9810232301 ORCID No: orcid.org/0000-0002-5473-7476 Web of Science ResearcherID: B-1150-2008 Scopus Author ID: 35498443400 Date of Birth : January 1, 1970



## **Visiting Professor:**

Japan Advanced Institute of Science and Technology (JAIST), Japan.

## **Associate Editor:**

- Nature Scientific Reports, Impact Factor : 4.122 (2019 2021).
- RSC Advances (Royal Society of Chemistry), Impact Factor : 4.012 (2016 2020).

## **International Editorial Board Member:**

- Bioconjugate Chemistry (ACS), Impact Factor : 4.774 (2022 2025).
- Journal of Biochemical and Molecular Toxicology (Wiley), Impact Factor: 3.61 (2021 2023).
- Anti-Cancer Agents in Medicinal Chemistry (Bentham), Impact Factor 3.14 (2007-Till Date).
- Marine Drugs (MPDI), Impact Factor 3.978 (2005-2015).
- Indian Journal of Heterocyclic Chemistry (2013-Till Date)
- Indian Journal of Chemistry (**2022 2025**).

**Expertise :** Development of small organic molecules as antimalarial, antimicrobial, anticancer and anti-Parkinson agents. Nanocatalysis

 Total Publications: 169;
 Citations : 7150;
 h-index : 50;
 i10-index: 134

# **Patents:** 7 (One molecule has cleared preclinical trials and industry has taken it up for Parkinson treatment, <u>Times of India, Feb 16, 2020</u>).

Our group in collaboration with Prof Kim at McLean Hospital identified a NURR1 activator which stops the death of dopamine neurons, and also protects the neurons from inflammation in case of PD and other neurodegenerative diseases. This molecule has been licenced recently to NurrON pharmaceuticals for development as anti-Parkinson drug.

#### **PhD Supervision :** 26

#### **EDUCATION:**

**Ph. D**, Organic Chemistry, Central Drug Research Institute (CDRI), Lucknow, UP/ Kumaun University, Nainital, Uttrakhand, India, 1998.

Thesis Title: Studies on Nitrogen Heterocyclics Related to Purines and Xanthines

Wednesday, April 24, 2024

**M.Sc.\***, Chemistry, Kumaun University, Nainital, Uttrakhand, India, 1993, <u>First Position in the</u> <u>University</u>.

## **AWARDS/HONORS:**

- Chief Guest, 4th Convocation of Far Western University, Nepal (April 21, 2024).
- Council Member, NOST (2023-2026; CRSI (2023-2026); Indian Chemical Society North Zone (2023-2025).
- ISCB Excellence Award in Drug Research 2022.
- Fellow of National Science Academy (FNASc), Allahabad (2021).
- Vasvik Research Award (2021).
- Special Appreciation Award for Exemplary Services, University of Delhi (2021).
- Platinum Jubilee Lecture, Indian Science Congress (2021).
- **Pratap Bhaiya Smiriti Alankar**, Awarded by Acharya Narendra Dev Shiksha Nidhi, Nainital (2020).
- Sectional President (Chemical Sciences), Indian Science Congress Association (2019 2020).
- Brand Ambassador, Bentham Science Publishers (2017).
- Associate Editor, RSC Advances (2016, Impact Factor 3.84).
- Fellow, Royal Society of Chemistry (FRSC, 2016).
- CChem, Royal Society of Chemistry (London, 2016)
- **Professor SP Hiremath Memorial Award**, Indian Council of Chemist, **2016**.
- **Professor RC Shah Memorial Lecture Award**, Indian Science Congress, **2015 16**.
- Visiting Professor, Japan Advanced Institute of Science and Technology (JAIST), Japan.
- **Gold Badge and Diploma**, International Scientific Partnership Foundation, Russia (**2015**).
- **Executive Member:** Indian Society of Chemist and Biologist (2013-2015).
- VC's Pratik Chinha Samman, Kumaun University Nainital, November, 2011.
- Young Scientist Award, Indian Society of Chemist and Biologist (ISCB), 2010.
- **Elected Life Member**, The National Academy of Sciences, Allahabad **2007**.
- **Prof. D. P. Chakraborty 60<sup>th</sup> Birth Anniversary Commemoration Award 2007** (Awarded by Indian Chemical Society).
- Young Researcher Award, Chemical Research Society of India (CRSI) 2007.
- Merit Certificate (MSc Topper), Kumaun University, Nainital, UK, India, 1993.

## AWARDS/HONORS (PhD Students):

- **Best poster award** in ACS on Campus India Roadshow-2018, University of Delhi, Delhi, December 9-10, 2018 [Upasana Gulati].
- **Best poster award** in ACS on Campus India Roadshow-2018, University of Delhi, Delhi, **February 5**, **2018** [Dr Archana Gupta].
- **Best oral presentation award** in RSC Workshop on Chemistry for Tomorrow's World, New Delhi, India, **2-3<sup>rd</sup> December, 2015 (Upasana Gulati)**.
- International Best Research Scholar Award-2014 from International Science Congress Association (ISCA), Indore, India December 8, 2014 (U. Chinna Rajesh).

- Young Researcher Award-2015 received from Prof. Robert Huber (Nobel Laureate in **Chemistry**, **1988**) during NANO-15 International Conference. K. S. R. College of Technology. Tiruchengode, India (U. Chinna Rajesh).
- Best Poster Award in 3rd International Conference and Exhibition on Materials Science & • Engineering, San Antonio, USA, October 6-8, 2014 (U. Chinna Rajesh).
- Poster-Walkway of Discovery recognition received from Bharat Ratna Prof. C. N. R. Rao, in 7th Banglore India Nano International Conference, Product & Technology Exhibition, Bangalore, India, December 5-6, 2014 (U. Chinna Rajesh).
- Young Researchers Forum Award from Material Science and Engineering, OMICS Group, San • Antonio, USA, October 6-8, 2014 (U. Chinna Rajesh).
- Young Scientist Award for best oral presentation in 4<sup>th</sup> International Science Congress, Pacific • University, Udaipur, India, December 8-9, 2014 (U. Chinna Rajesh).
- Best poster award in 19th ISCB International Conference (ISCBC-2013), Recent Advances and Current Trends in Chemical and Biological Sciences, Mohanlal Sukhadia University, Udaipur, India, March 2-5, 2013 (U. Chinna Rajesh).
- Best poster award in 21<sup>st</sup> National Symposium on Catalysis for Sustainable Development ٠ (CATSYMP-21), CSIR-IICT, Hyderabad, India, February 11-13, 2013 (U. Chinna Rajesh).
- **Best poster award** in National Conference on Green and Sustainable Chemistry (NCGSC-2010), ٠ Chemistry Group, Birla Institute of Technology and Science, Pillani, Rajasthan, February 19th-21st, **2010** (Sunny Manohar).
- Best poster award in 14th ISCB International Conference (ISCBC-2010), Chemical biology for • discovery: Perspectives and challenges, Central Drug Research Institute, Lucknow, Lucknow, January 15th-18th, 2010 (Nitin Kumar).
- **Best poster award** in 13<sup>th</sup> ISCB International Conference on Interplay of Chemical and Biological ٠ Sciences: Impact on Health and Environment. University of Delhi, Delhi, 26th February - 1st March 2009 (Nitin Kumar).

### **GUEST EDITRO OF SPECIAL JOURNAL ISSUES:**

- Current Protein and Peptide Science (Impact Factor 3.154; 2015); •
- **Anti-Cancer** Agents in **Medicinal** Chemistry (Impact **Factor** 3.14; 2013); • http://benthamscience.com/cmcaca/Special-Issues.htm).
- Anti-Cancer Agents in Medicinal Chemistry (Impact Factor 3.14; Two issues, 2008). •
- Indian Journal of Chemistry-Section B (Impact Factor 0.66; 2009). •

#### **AFFILIATIONS:**

- **Fellow**, National Academy of Science, India 2021. **Fellow**, Royal Society of Chemistry (**FRSC, 2016**). **Sectional President**, Chemical Science Section, Indian Science Congress Association 2020.

- Life member, Indian Chemical Society, India [F 4685, 1996].
- Life member, UP Association for the Advancement of Science and Technology, India [Since 2000].
- Life member, Chemical Research Society of India [LM 1109, 2008].
- Life member, Indian Society of Chemist and Biologist [LF 499/09, 2009].
- Life member, Association of Chemistry Teachers, India [2013].
- Elected Life Member, The National Academy of Sciences, Allahabad 2007.
- Life member, Indian Science Congress Association, India [L 23152, 2013].
- Life member, Indian Council of Chemist, India [LF/1686, 2014].
- Life member, Association of Chemistry Teachers, India [LM 1301, 2013].

## **RESEARCH/TEACHING EXPERIENCE: Over 22 Years**

### Academic Experience:

- Vice Chancellor, Kumaun University, Nainital, India (July 2023 Till date).
- Senior Professor, Department of Chemistry, University of Delhi, Delhi, 110007, India (March 2020-Till Date).
- **Professor**, Department of Chemistry, University of Delhi, Delhi, 110007, India (March 2010-March 2020).
- Associate Professor, Department of Chemistry, University of Delhi, Delhi, 110007, India (July 2006-March 2010).
- **Reader**, Department of Chemistry, University of Delhi, Delhi, 110007, India **(July 2003-July 2006)**.
- Assistant Professor, Department of Medicinal Chemistry, National Institute of Pharmaceutical Education and Research (NIPER), Mohali, Punjab, India (November 2002-July 2003).
- National Institute of Health (NIH) Postdoctoral Fellow, Department of Medicinal Chemistry and Molecular Pharmacology, Purdue University, West Lafayette, IN, USA (September 2001-November 2002).
- American Cancer Society (ACS) Postdoctoral Fellow, Department of Chemistry, Indiana University, Bloomington, IN, USA (November 1999 September 2001).
- Research Fellow, Central Drug Research Institute, Lucknow, India (April 1994 August 1997).

### Industrial Expereicne:

- Scientist, R & D Department, Lupin Laboratories Ltd. Mandideep, M.P., India (September 1998- November 1999). Involved in the process and development of Lisinopril, quinalapril based antihypertensive drugs, and handled reaction on 50 kg scale.
- **R & D Executive**, **Panchsheel Org. Ltd. MP, India. (August 1997- September 1998)**. Process and development of Loperamide hydrochloride, promethazine hydrochloride, and triclosan. Handled reaction on 50 kg scale.

## **ADMINSTRATIVE EXPERIENCE:**

- Vice Chancellor, Kumaun University, Nainital, India (July 2023 Till date).
- **Dean Examinations**, University of Delhi, Delhi (August 2020 July 2023).
- **Dean Works**, University of Delhi, Delhi (**2020**).
- **Provost, Jubilee Hall**, University of Delhi, Delhi (May 2012 Jan 2019).
- OSD, University Press, and Head, Graphic Art Centre, University of Delhi, Delhi (January 2011 May 2017).
- **Chairman, Governing Body,** Shaheed Rajguru College, (**2011- 2012**), Deen Dayal Upadhyay College, (**2019 2020**) University of Delhi; Kirorimal College, University of Delhi (**2021 2022**).
- Warden, Jubilee Hall, University of Delhi (September 2003 May 2012).
- **Coordinator, M. Tech.** (Chemical Synthesis and Process Technologies), Department of Chemistry, University of Delhi (**December 2010 July 2017**).
- Treasurer, Governing Body, Swami Shraddhanand College, (2011-2012), SGTB Khalsa Colleges, (2014-2014), Adity Mahavidyalaya, (2014-2015), Sri Arvindo College, University of Delhi, Delhi (2017).
- **Treasurer, Delhi University Students Union (DUSU)**, University of Delhi, Delhi (**June 2012-May 2017**).
- Chief Election Officer (2014-2016), Chief Returning Officer (2012-2013), Returning Officer (2011), DUSU Election, University of Delhi.

## **PROFESSIONAL TRAINING:**

- **Trained GLP Lead Inspector**, National GLP Compliance Monitoring Authority of India, Department of Science and Technology, Govt of India.
- Trained on 400 MHz NMR, JEOL Ltd, Tachikawa, Tokyo 190-0012, Japan.

## **MEMBER OF COMMITTIES:**

### **Selection Committees:**

• Member selection committees (Professor/Lecturers/Assistant Professor/Associate Professors/Scientist): Central University Mizoram, Central University, Manipur, Central Drug Research Institute, Lucknow, North East Institute of Science and Technology, Jorhat, National Institute of Technology (NIT), Jalandhar; National Institute of Pharmaceutical Education and Research (NIPER), Rai Barielly; Sant Longwal Institute of Engineering and Technology (MHRD), Sangrur, Punjab; Kumaun University, Nainital; G. B. Pant Institute of Himalayan Environment and Development, Kosi Katarmal, Almora; Council for Scientific and Industrial Research (CSIR), New Delhi; Forest Research Institute, Dehradun; Kanahiya Lal DAVPG College, Roorkee; Dolphin (PG) Institute of Biomedical and Natural Sciences, Dehradun; Central Council for Research in Ayurveda and Siddha, Janakapuri, Delhi; Hansh Raj College, University of Delhi; St. Stephens' College, University of Delhi; Zakir Hussain College; Acharya Narender Dev College, University of Delhi; Panipat Institute of Engineering Technology, Panipat; DAV University, Jalandhar; KM College, DU; All India Institute of Medical Sciences (AIIMS), New Delhi; Uttrakhand Public Service Commission, Mizoram Central University.

## **Expert-Funding Agencies:**

- Member, INSPIRE Fellowhip NBHF/HOPE Committee, DST (2019 2022).
- Member, Subject Expert Committee, Women Scientist Scheme-A (WOS-A), DST (2016 2020; 2022 2025).
- **Member Expert Committee**, Technological Intervention for Addressing Societal Needs (TIASN), Department of Science & Technology (DST), New Delhi (**2016 2019**).
- Project Advisory Committee (PAC), International Cooperation Division (ICD), Department of Science & Technology (DST), New Delhi (2014 – 2019, 2022 – 2025).
- **UGC-Nominee, SAP Programme**, Department of Chemistry, Shivaji University, Kolhapur (2013 2018).
- **UGC-Nominee, SAP Programme**, Department of Chemistry, Guru Nanak Dev University, Amritsar (**2015 2020**).
- **Member project evaluation committee**, Uttarakhand State Council for Science and Technology (UCOST), Dehradun, Uttrakhnad (**2007 2014**).

### Board of Higher Studies/Advisory Committee/ Committee of Courses:

- Member Text Book Writing Committee, NCERT, New Delhi (2024).
- Chairman, Scientific Advisory Committee, GB Pant National Institute of Hymalayan Environment (**2024 2027**).
- Member, Board of Studies/Research Council: Member, Governing Body of the Board, CBSE (2021 - 2023); Expert Member of Board of School of Basic Sciences, Central University of Punjab, Bathinda (2023-206), Banasthali Vidyapeeth, Rajasthan (2021 - 2024), Shobal Singh Jeena University, Almora (2021 - 2024), Guru Nanak Dev University, Amritsar (2018 -2020; 2021 - 2022, 2022 - 2024), Central University, Mizoram (2018 - 2021). Kumaun University, Nainital, UA (2012-2015, 2020-2023). HNB Garhwal University, Srinagar, Srinagar (Garhwal), UA (2012-2014; 2014-2017; 2017-2019). MJP Rohilkhand University, Bareilly (2013-2015). Gautam Budha University, Noida (2016 - 2018). Faculty of Technology, Kumaun University, Nainital, UA (2016-2019). Uttrakhand Open University, Chemistry, Haldwani (2014-2016). Jamia Hamdard University, Department of Pharmaceutical Chemistry, Delhi (2013 - 2016). Amity University, Gurgaon, School of Applied Sciences (2018-2020). SRM University, Sonepat, (2017-2019). Amity University, School of Natural Sciences, Gurgaon (2014-2016). Amity University, Centre for Phytomedicine and Phytochemistry, Noida (2014-2016, 2019-2021).
- **Chairman, Research Advisory Committee (RAC)**, GB Pant Himalayan Institute of Environment, Koshi Katarmal, Almora (**2024 2027**).
- Member, Institutional Advisory Board (IAB)/Departmental Advisory Board (DAB), National Council of Educational Research and Training (NCERT) (2017-2020).
- Member, Governing Body, Uttrakhand Council of Science and Technology (2023 2025).
- Member, Academic Council, SwamiRama Himalayan University (2023 2026).
- Visitors Nominee, Academic Council Member, HNB Garhwal University, Srinagar, Srinagar (Garhwal), UA (2016-2018) and Uttrakhand Open University (2022 2025).
- **Member Advisory Committee**, University Science Instrumentation Center-Central Instrument Facility (USIC-CIF), University of Delhi, (**2010 2015**).
- Member Committee of Courses, University of Delhi, Delhi, (March 2010 Till Date).
- **Co-ordinator, CPDHE Refresher Course**, University of Delhi, (February 15<sup>th</sup> to March 9<sup>th</sup>, 2010).
- **Member, Project Review Committee**, Department of Scientific and Industrial Research (DSIR), Delhi.

- **Jury Member** 2<sup>nd</sup> and 3<sup>rd</sup> National Level Exhibition and Project Competition (NLEPC)- 2013 under INSPIRE Awards component of Department of Science and Technology, **2012**, **2013**.
- **Member young scientist award committee**, Uttarakhand State Council for Science and Technology (UCOST), Dehradun, Uttranchal (**2007 2014**).

## Member Governing Body/University Nominee:

- Member Governing Body, Hansraj College, University of Delhi, Delhi, (2010-2012); Swami Shraddhanand College, University of Delhi, Delhi, (2011-2013); Shaheed Rajguru College, University of Delhi, Delhi, (2010-2012); Ramjus College, University of Delhi, Delhi, (2012 2014). SGTB Khalsa Colleges, University of Delhi, Delhi, (2013-2017); Aditya Mahavidyalaya, University of Delhi, Delhi, (2014-2017); Sir Arvindo College, University of Delhi, Delhi, (2017 2019). Deen Dayal Upadhyay College, University of Delhi, Delhi (2019 -2020).
- **University nominee**, Higher Secondary School, Maurice Nagar, University of Delhi, Delhi, (2010-2011; 2011-2012).

### **Development of Teaching Materials/Review of Text Books:**

- Member, Development of need based package for the orientation of master trainers in Science for Hr. Sec. Stage (Chemistry, NCERT), **December 26-29, 2011**
- Member, Development of In-service Teacher Training Material through Interactive Audio Visual Presentation in Chemistry for Hr. Sec. Stage (Chemistry, NCERT), **November 24-28**, **2008**.
- Member, Quick Review of NCERT Textbooks for Higher Secondary Stage (Chemistry-Practical), August-September **2007**, **2006**, **2004**.
- Member curriculum development committee for BSc courses, M. Tech in Chemical Synthesis and Process Technologies, University of Delhi.
- Member, Bureau of Indian Standards, New Delhi.

### **Conferences and Symposia:**

- **Session Chairman,** JAIST Japan-India Symposium on Materials Science 2017, Japan Advanced Institute of Science and Technology, **June 7 7, 2017.**
- **Convener; CARBO**-XXXI International **Conference** on "New Frontiers in**Carbohydrate** Chemistry and Biology" University of Delhi, **November 14<sup>th</sup> 16<sup>th</sup>, 2016**.
- Session Chairman, Assian Network for Natural and Unnatural Materials National University of Singapore, June 8 – 11, 2016.
- Convener; DU-JAIST Indo-Japan Symposium on Functional Molecules/Materials, University of Delhi, February 26<sup>th</sup> 27<sup>th</sup>, 2016.
- Session Chairman, Drug Discovery and Therapy World Congree 2015 (DDTWC 2015), Boston July 22 25, 2015.
- **Session Chairman,** Indo Japan Symposium on Material Science, Japan Advanced Institute of Science and Technology (JAIST), Japan. **March 2 3, 2015.**
- Session Chairman, 4<sup>th</sup> Biennial International Conference on New Development in Drug Discovery from Natural Products and Traditional Medicines, Department of Natural Products, National Institute of Pharmaceutical Education and Research (NIPER), Mohali. November 20 – 22, 2014.
- Convener; 20<sup>th</sup> ISCB International Conference (ISCBC-2014) on Chemistry and Medicinal Plants in Translational Medicine for Healthcare held at University of Delhi, March 1<sup>st</sup> 4<sup>th</sup>, 2014.

- **Joint Secretary**, Trends in Drug Discovery and Development, International conference held at University of Delhi, 2010.
- **Joint Secretary**, 13<sup>th</sup> ISCB International conference held at University of Delhi, 2009.
- Session Chairman, 20<sup>th</sup> ISCB International Conference (ISCBC-2014) on Chemistry and Medicinal Plants in Translational Medicine for Healthcare held at University of Delhi, March 1<sup>st</sup> - 4<sup>th</sup>, 2014.
- Session Chairman, International Conference on Chemistry and Materials: Prospects & Perspectives" Babasaheb Bhimrao Ambedkar University (A Central University), Lucknow, 14-16 December, 2012.
- Session Chairman, 4<sup>th</sup> NIPER (Rbl)-CDRI Symposium on Medicinal Chemistry and Pharmaceutical Sciences, CDRI, Lucknow, February 23-25, 2012
- **Session Chairman**, National Seminar on Recent Trends in Chemical and Biological Sciences" Holker Science College, Indore, **January 13-15, 2012.**
- **Session Chairman**, 48<sup>th</sup> Annual Convention of Chemist and Celebration of the International Year of Chemistry, Allahabad University, Allahabad, **December 3-7, 2011**.
- Session Chairman, T3D International Symposium on Trends in Drug Discovery and Development, University of Delhi, Delhi, January 5<sup>th</sup>-8<sup>th</sup> 2010.

#### **Examination:**

 Lucknow University; Kumaun University; H. N. B. University, Garwal, Srinagar; G. B. Pant University of Agriculture and Technology, Pant Nagar; RML Avadh University Faizabad; Pune University; Jammu University; Jammia Millia Islamia University; Kanpur University; Rohilkhand University; Jamia Hamdard University; Banaras Hindu University; Allahabad University; Panjab University; Guru Nanak Dev University; Jawaharlal Nehru University; Indian Institute of Technology, Delhi; Periayar University, Selam; Rajasthan University; Central Drug Research Institute (CDRI), Lucknow; Kurukshetra University; National Institute of Pharmaceutical Education and Research (NIPER), Mohali; Agra University, Jammu University, Jawaharlal Nehru Technological University, Hyderabad; University of Kwa Zulu-Natal, South Africa, Jawaharlal Nehru University; Culcutta University, National Chemical Laboratory, Pune. Indian Institute of Integrative Medicine, Jammu; Indian Institute of Technology, Delhi, Mizoram Central University.

### **COURSES TAUGHT:**

### • MSc (University of Delhi, 2003 onwards)

- 1. Paper 102A: Organic Stereochemistry
- 2. Paper 102B; Study of Reactive Intermediates
- 3. Paper 202A: Spectroscopy
- 4. Paper 202B: Methods in Organic Synthesis
- 5. Paper 3201B: Heterocyclic Chemistry
- 6. Paper 4203A: Terpens and Stereiods
- 7. Paper 4203B: Alkaloids and Polyphenols

### • M.Tech-CSPT (University of Delhi)

- 1. Paper 102B: Name Reaction in Organic Synthesis
- 2. Paper 201A: Reagents in Organic Synthesis
- 3. Paper 201B: Newer Synthetic Reactions and Methodologies

### • M. Pharm (NIPER Mohali, 2002-2003)

Wednesday, April 24, 2024

## 1. Metals in organic synthesis

## • PhD (University of Delhi, 2003 onwards)

- 1. Unit-XXV: Medicinal Chemistry
- 2. Unit XXXVI: Spectroscopy: Applications for Organic Chemist

## **RESEARCH GRANTS FUNDED:**

S. No	Client/ Organisation'sname	Nature of Project	Duration of project	Amount ₹
1.	Department of Science and Technology (DST) New Delhi	Electronic control of thermal Bergman cyclization reactions: A new approach towards thedevelopment of novel enediyne anticancer molecules	2004-2007	10,32,000/-
2.	Council of Scientific and Industrial Research (CSIR), Delhi	Design and synthesis of Tetraoxanes and Tetraoxane based modular molecules as potential antimalarial agents.	2004-2008	10,52,970/-
3.	University Grants Commission (UGC), Delhi.	Syntheses and Biological Evaluation of PhidolopinAnalogues.	2007-2010	6,50,854/-
4.	Department of Science and Technology (DST) New Delhi.	Synthesis of substituted tetraoxanes and tetraoxane-aminoquinoline/amine conjugates as potential antimalarial agents.	2009-2012	37,68,000/-
5.	DU-PURSE Grant, University of Delhi.	Synthesis, anticancer activity, QSAR, and mechanistic studies of curcumin derivatives.	2012-2013	23,50,000/-
6.	University Grants Commission (UGC), Delhi.	Design and Syntheses of Novel 4- Aminoquinoline- triazine/triazole and 4- Aminoquinoline-Curcumin Conjugates as Potential Antimalarial Agents.	2012-2015	13,04,800/-
7.	Council of Scientific and Industrial Research (CSIR), Delhi.	Synthesis and anti-cancer activity evaluation of C5-curcuminoids and C5-curcuminoid-hybrids.	2012-2015	18,42,000/-
8.	The Michael J. Fox Foundation, USA.	Synthetic Nurr1 ligand as novel neuroprotective therapeutics to treat Parkinson's disease.	2014-2016	24,60,000/-
9.	SERB- Govt of India (File Number: EMR/2014/001127)	Aminoquinoline-pyrimidine based molecular hybrids: Synthesis, antimalarial activity, docking and heme binding studies"	2015-2018	30,26,000/-
10.	DST- Govt of India (File Number: DST/INT/JSPS/P- 214/2016).	Development of Nanocatalysts for the sustainable synthesis of novel C5-curcuminoid- indolizine/quinoline/benzofuran hybrids as anticancer agents"	2016-2018	5,16,600/-
11.	Council of Scientific and Industrial Research (CSIR), Delhi	Imidazolopyridine based molecular hybrids: Synthesis, anti-tubercular activity and mode of action studies.	2017-2020	6,98,387/-

**Total Publications:** 169;

Citations: 7150;

**h-index :** 50;

**i10-index:** 134

# **Key Publications:**

Wednesday, April 24, 2024

## Nature Communication.

American Chemical Society: J. Am. Chem. Soc. (IF = 15.42); ACS Chem. Biol. (IF = 5.1); Org. Lett. (IF = 6.492); ACS Sus. Chem. Engg. (IF = 9.224); J. Org. Chem. (IF = 4.805); Inorg. Chem. (IF = 9.224); ACS Med. Chem. Lett. (IF = 4.345); J. Agric. Food Chem. (IF = 5.279), ACS Omega (IF = 4.132).

**Royal Society: Green Chem. (IF = 11.034)**; Chem. Commun. (**IF = 6.222**); RSC Adv (**IF = 4.036**); New J. Chem. (**IF = 3.925**); Org. Biomol. Chem. (**IF = 3.876**); Med. Chem. Commun. (**IF = 3.597**).

**Elsevier Publication:** Eur. J. Med. Chem. (**IF** = **7.088**); BBA Biomembrane (**IF** = **4.647**); Bioorg. Med. Chem. (**IF** = **3.641**); Biorg. Med. Chem. Lett. (**IF** = **2.823**); Tetrahedron Lett (**IF** = **2.39**).

**Wiley Publication:** Med. Res. Rev. (**IF** = **13.59**); Adv. Synth. Catal. (**IF** = **6.453**); ChemCatChem (**IF**: **5.497**); Chemistry - An Asian Journal (**IF**: **4.568**); FEBS J (**IF** = **5.542**); Asian J. Org. Chem. (**IF** = **3.275**); Chem. Biol. Drug. Des. (**IF** = **2.802**).

## **Research work Highlighted in the Cover Page**:

- Tetrahedron Letters 59 (24), 13 June 2020
- **Tetrahedron Letters** 59 (24), 13 June **2018**
- Tetrahedron Letters 57 (4), 5 October 2016
- ACS Sustainable Chemistry and Engineering 3 (1), 2015

### **Research work Highlighted by Synfacts:**

Green Chemistry 22, 3170 (2020)	<b>SYNFACTS</b> 2020, 16(08): 0995
Tetrahedron Letters 59, 2341 (2018)	<b>SYNFACTS</b> 2018, 14(08): 0883
Chemistry - An Asian Journal 12, 785 (2017)	<b>SYNFACTS</b> 2017, 13(07), 0766
Tetrahedron Letters 57, 4468 (2016)	<b>SYNFACTS</b> 2016, 12(12), 1314
RSC Advances 6, 2935 (2016)	SYNFACTS 2016, 12(4), 0427
RSC Advances 5, 92121 (2015)	SYNFACTS 2016, 12(2), 0214

### **PUBLICATIONS :**

#### **2024**

 Shashikant Tiwari, Manisha Kumari, <u>Diwan S Rawat</u>\*, Air induced phosphoryl radical mediated stereoselective hydrosulfonylation of alkynes via halogen atom transfer (XAT): Ingress of Z-vinyl sulfones, Organic Letters, 6, 2303–2308 (2024). Impact Factor: 6.072.  Rahul, Gunjan Purohit, <u>Diwan S Rawat</u>\*, Zinc-aluminum mixed oxide nanocomposites catalyzed KA2 coupling of ketone, amine, and an alkyne: An environmentally benign approach, <u>Tetrahedron</u> Letters, 139, 154987 (2024). Impact Factor: 2.03.

## 2023

- 3. Vipin Maikhuri, Manish Rawat, <u>Diwan S Rawat</u>\*, Recent advances in the 3d-transition-metalcatalyzed synthesis of isoquinolines and its derivatives, Adv. Synth. Catal. 365, 4458-4494 (2023). Impact Factor: 5.981.
- Woori Kim, Mohit Tripathi, Chunhyung Kim, Satyapavan Vardhineni, Young Cha, Shamseer Kulangara Kandi, Melissa Feitosa, Rohit Kholiya, Eric Sah, Anuj Thakur, Yehan Kim, Sunny Manohar, Youngbin Kong, Gagandeep Sindhu, Yoon-Seong Kim, Bruce Cohen, <u>Diwan S Rawat</u>\*, Kwang-Soo Kim,\* An optimized Nurr1 agonist provides disease-modifying effects in Parkinson's disease models, <u>Nature Communications</u> 14:4283 (https://doi.org/10.1038/s41467-023-39970-9). (2023). Impact Factor: 17.694.
- 5. Shashikant Tiwari, <u>Diwan S. Rawat</u>\* Regiodivergent synthesis of densely functionalized indolizines" J. Org. Chem. 88, 6805–6815 (2023). Impact Factor: 4.192.
- Manish Rawat, <u>Diwan S. Rawat</u>\* Mesoporous Copper-Magnesium Oxide Hybrid Nanocatalyzed Synthesis of 3-Substituted Isocoumarins from 2-Iodobenzoic Acid and Terminal Alkyne under Green Condition" ACS Omega. ACS Omega 8, 16263–16272 (2023). Impact Factor: 4.345.

- Manish Rawat, <u>Diwan S. Rawat</u>\* Cu<sub>2</sub>O decorated MHAM (Marigold hollow alumina microspheres) nanoparticles as robust and efficient catalyst for the synthesis of isoquinolone" ACS Sustainable Chem. Eng. 10, 30, 10014–100237 (2022). Impact Factor: 9.224.
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- <u>Diwan S Rawat</u>\*, Sunny Manohar, Ummadisetty Chinna Rajesh, Deepak Kumar, Anuj Thakur, Mohit Tripathi, Panyala Linga Reddy, Shamseer Kulangara Kandi, Satyapavan Vardhineni, Kwang-Soo, and Chun-Hyung Kim, Amino-quinoline based hybrids and uses thereof. ES2899730T3 (2022).
- <u>Diwan S Rawat</u>\*, Sunny Manohar, Ummadisetty Chinna Rajesh, Deepak Kumar, Anuj Thakur, Mohit Tripathi, Panyala Linga Reddy, Shamseer Kulangara Kandi, Satyapavan Vardhineni, Kwang-Soo, and Chun-Hyung Kim, Amino-quinoline based hybrids and uses thereof. EP2822936B1 (2021).

- 3. <u>Diwan S Rawat</u>\*, Sunny Manohar, Ummadisetty Chinna Rajesh, Deepak Kumar, Anuj Thakur, Mohit Tripathi, Panyala Linga Reddy, Shamseer Kulangara Kandi, Satyapavan Vardhineni, Kwang-Soo, and Chun-Hyung Kim, Amino-quinoline based hybrids and uses thereof. **US20170209441A1** (**2021**).
- 4. <u>Diwan S Rawat</u>\*, Binghe Wang, Nitin Kumar, Sunny Manohar, Xiaochuan Yang, Guojing Sun, Curcumin analogues and methods of making and using thereof. **US9884825B2** (2018).
- <u>Diwan S Rawat</u>\*, Sunny Manohar, Ummadisetty Chinna Rajesh, Deepak Kumar, Anuj Thakur, Mohit Tripathi, Panyala Linga Reddy, Shamseer Kulangara Kandi, Satyapavan Vardhineni, Kwang-Soo, and Chun-Hyung Kim, Amino-quinoline based hybrids and uses thereof. US9567316B2 (2017).
- 6. <u>Diwan S Rawat</u>\*, Sunny Manohar, U. Chinna Rajesh, Amino-quinoline based hybrids and uses thereof, IN 283657 (2017).
- 7. Diwan S Rawat\*, Binghe Wang, Nitin Kumar, Sunny Manohar, Xiaochuan Yang, Guojing Sun, Curcumin analogues and methods of making and using thereof. **WO/2014/022660** (2014).
- 8. <u>Diwan S. Rawat</u>,\* Mukul Sharma, Nilanjan Roy, Rajesh K. Rohilla, Preparation of Substituted cyclohexane-1,2-diamine derivatives and related compounds as antimicrobial agents. **IN 2008DE01462 A 20120914 (2012).**
- <u>Diwan S. Rawat</u>,\* Nitin Kumar, Mukul Sharma, Symmetrically and asymmetrically substituted tetraoxane compounds, methods of preparation and uses thereof. IN 2008DE02103 A 20100423 (2010).
- Jeffrey M. Zaleski; <u>Diwan Singh Rawat</u>, Enediyne compounds and methods related thereto. US 7,211,603 B1 (2007).
- Jeffrey M. Zaleski; <u>Diwan Singh Rawat</u>, Compounds, compositions, and methods for photodynamic therapy. US Patent No: US 6,828,439 B1 (2004).

## **BOOK/BOOK CHAPTERS:**

- Bioactive Marine Natural Products: Dewan S. Bhakuni and <u>Diwan S. Rawat</u>, ISBN: 1-4020-3472-5 (2005), Publishers: Springer, New York, USA, and Anamaya Publisher, New Delhi, India. Book was forwarded by Sir Derek Barton, Noble Laureate. Book was reviewed by *Journal of American Chemical Society*, and comments were published in *J. Am. Chem. Soc.* 128, 4494 (2006).
- Science and Life: Foundation Course under FYUP, University of Delhi (Co-Author, 2013).
- Gunjan Purohit, Diwan S Rawat, "Metal organic framework (MOFs) Encapsulated Nanoparticles: Potential Catalysts for Diverse Organic Reaction". In: Metal\_Organic Frameworks (MOFs) as Catalyst; Springer, 2022; pp. 705 – 729.
- Diwan S Rawat, Girjesh Verma "Six-Membered Rings With 1,2,4-Oxygen or Sulfur Atoms". In: Black, David StC, Cossy, Janine and Stevens, Christian V. Eds., Comprehensive Heterocyclic Chemistry IV; Elsevier, 2022; pp. 542-585.
- Book chapter entitled "Organometallic and Organosulphur Compounds" e-book on "Organic Chemistry" published by National Science Digital Library, [http://nsdl.niscair.res.in/dspace/handle/123456789/179/items-byauthor?author=Rawat%2C+Diwan+S], 2008.

- Book chapter entitled "Synthetic and Clinical Status of Marine Derived Anticancer Peptides" in a book series Compendium of Bioactive Natural Products, Volume 7, Chapter 1, M/S. Studium Press LLC, USA; Authros: Diwan S.Rawat,\* Ram Singh, Nitin Kumar, Mukul Sharma, and M. S. M. Rawat P. 1-28 (2010).
- Book chapter entitled "Marine Natural Alkaloids as Anti-Cancer Agents" on *Opportunity, Challenge and Scope of Natural Products in Medicinal Chemistry*' Authors: Deepak Kumar, and Diwan S Rawat\*, PP 213-268 (2011); ISBN: 978-81-308-0448-4 (http://www.trnres.com/ebookcontents.php?id=95).
- Reviewed a book entitled **"Natural Products Chemistry"** to be published by Elsevier **(June 2007)**. Reviewed a book entitled **"Organic Reaction Mechanism"** to be published by Macmillan India Ltd (**June 2008**).
- **Edited** especial issues of Anti-Cancer Agents in Medicinal Chemistry (*Published by Bentham*).
- Research Paper *J. Am. Chem. Soc.* 123, 9675-9676 (2001) has been mentioned in the book entitled "Strategic Applications of Named Reactions in Organic Synthesis" Publisher: Elsevier, ISBN: 0-12-429785-4, p 56.
- Developed on youtube lectures on Organic Spectroscopy of students and faculty members (<u>https://www.youtube.com/channel/UCd6J69xYw4dvjbxXOTa62AQ</u>).

## **INVITED LECTURES:**

- 1. Diwan S Rawat, Molecular Hybridization and its Implication in Drug Development: Development of Clinical Candidate for the Treatment of Parkinson Disease, Current Trends in Chemical Sciences for Sustained Living, Shyamlal College, University of Delhi, April 4 5, 2024 (KEY NOTE SPEAKER).
- 2. Diwan S Rawat, Story of Development of Clinical Candidate for the Treatment of Parkinson Disease, International Symposium on Global Trends in Health, Technology and Management, Uttrakhand Technical University, Dehradun, March 15 – 17, 2024.
- **3.** Diwan S Rawat, Integrity and Reverberation of Misconduct in Research, Emerging Trends in STEM and Health Agri Science for Sustainable Development, MEIT Haldwani, March 11 12, 2024 (Key Note Speaker).
- Diwan S Rawat, Navigating the Expected and Unexpected Twists and Turns of Lead Optimization: The Discovery of Clinical Candidate for the Treatment of Parkinson Disease, 3<sup>rd</sup> International Conference of Integrative Chemistry, Biology and Translational Medicine, Pacific University, Udaipur, March 8 – 10, 2024. (Key Note Speaker).
- Diwan S Rawat, "Discovery of a molecule that has potential to cure irremediable disease: A ray of hope for Parkinson patients" 18<sup>th</sup> Uttrakhand State Science and Technology Congress – 2024, Uttrakhand Open University, Haldwani. February 8 – 9, 2024 (Lead Speaker).

- Diwan S Rawat, "Small Molecules Performs Big: Phase I Clinical Trials of Aminoquinoline Based Molecular Hybrids for the Parkinson Disease"32<sup>nd</sup> CRSI-National Symposium in Chemistry (CRSI-NSC-32), Department of Chemistry, Birla Institute of Technology and Science (BITS), Pillani, January 11 – 12, 2024.
- Diwan S Rawat, "Excitement and agony during the discovery of clinical candidate for Parkinson treatment" 29<sup>th</sup> International Conference (ISCB-2024), Bhakta Kavi Narsinh Mehta University, Junagadh, Gujrat, January 11 – 12, 2024.
- Diwan S Rawat, "Identification of Phase I Clinical Candidate for the Parkinson Disease through Hybrid Drug Discovery Approach" Fostering Sustainable Catalysis-2024, University of Delhi. January 19 – 20, 2024.
- Diwan S Rawat, "From basic to translational research: Story of discovery of a clinical candidate for Parkinson treatment" Japan Advanced Institute of Science and Technology (JAIST), December 14, 2023.
- Diwan S Rawat, "Story of discovery of a pre-clinical candidate for Parkinson's disease treatment" 11<sup>th</sup> Asian Newtwork for Natural and Unnatural Materials (ANNUM XI), National Sun Yat-sen University Taiwan, July 3 – 7, 2023.
- 11. **Diwan S Rawat**, Professional Ethics and their Implications in Life, KR Mangalam University, Sohana, May 16, 2023.
- 12. **Diwan S Rawat**, Discovery of Nurr1 agonist: A ray of hope for the treatment of Parkinson disease. April 26, 2023 (**Invited Talk on the retirement of Dr Atul Kumar**).
- 13. **Diwan S Rawat,** From basic to translational research: Story of discovery of a clinical candidate for Parkinson treatment, Internation conference on Recent Advanced on Material Chemistry and Catalysis, Dibrugarh University. March 1-3, 2023 (**Plenary Talk**).
- 14. **Diwan S Rawat,** A journey from malaria research to a discovery of a clinical candidate for the treatment of Parkinson disease, 2<sup>nd</sup> International Conference on Integrative Chemistry, Biology & Translational Medicine, Hansraj College, University of Delhi. December 6-8, 2022 (Keynote Talk).
- 15. **Diwan S Rawat,** Development of clinical candidate for the treatment of Parkinson's disease, National Conference on Science for Society, Environment and Sustainability. North East Institute of Science and Technology (NEIST), Jorhat. November 24-26, 2022 (**Plenary Talk**).
- 16. **Diwan S Rawat**, Fundamentals of NMR Spectroscopy, DST-Synergistic Training Program Utilizing the Scientific and Technological Infrastructure (STUTI), Jamia Hamdard University. November 3, 2022.
- 17. **Diwan S Rawat,** NMR Spectroscopy: Basic introduction to structure determination, DST-Synergistic Training Program Utilizing the Scientific and Technological Infrastructure (STUTI), BITS Pilani. Ocober 15, 2022.
- Diwan S Rawat, Discovery of a clinical candidate for the Parkinson treatment: From basic to translational research, 17<sup>th</sup> Joint Conference on Chemistry, University of Negeri Semarang, Indonesia, Septemebr 10-11, 2022.

- 19. **Diwan S Rawat**, "NMR Spectroscopy: Basic introduction to structure determination" CPDHE Refresher course, University of Delhi, July 12, 2022.
- 20. **Diwan S Rawat**, "NMR Spectroscopy: Basic introduction to structure determination" CPDHE Refresher course, Kumaun University, Nainita, July 9, 2022.
- 21. **Diwan S Rawat** "Research Methodology and Research Ethics" CPDHE Refresher course, Kumaun University, Nainita, July 8, 2022.
- 22. **Diwan S Rawat** "Research Publication During Post-graduation" COMMONWEALTH POSTGRADUATE FORUM "Postgraduate Publications – Opportunity or Necessity" Commonwealth Tertiary Education Facility (CTEF), Malaysia, **June 30, 2022.**
- 23.Diwan S Rawat "Science of medicinal chemistry in the discovery of medicines: From ideas totrenches-to-the bed" 15<sup>th</sup> Uttrakhand State Science Congress, June 23-25, 2022 (Key Note Spekear).
- 24. Diwan S Rawat "Journey from Anti-Malarial Molecule to Clinical Candidate for Parkinson Treatment" International conference on recent advancement in chemical sciences: Health, environment, and society, Deshbandhu College, University of Delhi, April 8 – 9, 2022 (Key Note Spekear).
- 25. Diwan S Rawat, "Making spectroscopy teaching a fun" CPDHE Lecture at DAV University Indore, January 19, 2022.
- 26. Diwan S Rawat, "From conceptual design to clinical candidate: Hybridization in medicinal chemistry and catalysis" STP on Bio-Privileged and Sustainable Chemistry, Manav Rachana University, Faridabad, January 18, 2022.
- 27. **Diwan S Rawat "Hybrid nanomaterials and its role in sustainable organic synthesis**" 58<sup>th</sup> Annual convention of Indian Chemical Society, December 22, 2021.
- 28. Diwan S Rawat "Development of Heterocycles Based Molecular Hybrids for Pharmaceutical Applications" World Class Professor Program "Green Chemistry Approaches for The Efficient Synthesis of Heterocyclic Compounds, Universitas Gadjah Mada, Indonesia and Institut des Sciences Moléculaires de Marseille, France, October 29, 2021.
- 29. Diwan S Rawat "A Ray of Hope for Parkinson Treatment: Excitement and Torment During its Development" Two Days International Conference on Recent trends in Drug Discovery and Development, Maitrey College, University of Delhi, October 8, 2021.
- 30. **Diwan S Rawat "Developmen of organic chemistry and its impact on human health"** Central University Punjab, Bhatinda, September 14, 2021.
- 31. **Diwan S Rawat "Chemistry, Structure and Spectroscopy**" UGC Sponsored 2<sup>nd</sup> Online Refresher Course in Chemistry, Ahambabad University, Ahambabad, August 27<sup>th</sup>, 2021.
- 32. **Diwan S Rawat "Chemistry, Structure and Spectroscopy**" UGC Sponsored 2<sup>nd</sup> Online Refresher Course in Chemistry, Ahambabad University, Ahambabad, August 27<sup>th</sup>, 2021.

- 33. **Diwan S Rawat "Principles and Applications of NMR Spectroscopy**" Orientation Program of M Pharm Students, Nirma University, Ahambabad, August 26<sup>rd</sup>, 2021.
- 34. **Diwan S Rawat "Principles and Applications of NMR Spectroscopy"** Refresher Course in Chemistry on Emerging Trends in Chemical Sciences, Ranchi University, Ranchi, August 23<sup>rd</sup>, 2021.
- 35. **Diwan S Rawat "Reforms in the examination system of University of Delhi**" Faculty Development Programm, ARSD College, University of Delhi, July 20<sup>th</sup>, 2021.
- 36. **Diwan S Rawat "Reforms in the examination system of University of Delhi**" Faculty Development Programm, Hansraj College, University of Delhi, July 17<sup>th</sup>, 2021.
- 37. Diwan S Rawat "Organic Chemistry after Urea Discovery and Beyond: Impact on Human Health" Faculty Development Programm, Mirinda House, University of Delhi, July 7<sup>th</sup>, 2021.
- 38. **Diwan S Rawat, "Organic Spectroscopy**" UGC-Human Resource Development Centre, Jammu University, Online Refresher Course in Chemistry March 13<sup>th</sup>, 2021.
- 39. Diwan S Rawat "Making Chemistry Teaching a Fun: Historical and Contemporary Research Approach" Guru Angad Dev-Teaching Learning Centre of Ministry of Education (PMMMNMTT scheme) and National Resource Centre of Chemistry of Ministry of Education, "Enhancing Quality of Chemistry Education in India" March 2<sup>nd</sup>, 2021.
- 40. **Diwan S Rawat, "Challegnes of Teaching NMR Spectroscopy**" UGC-Human Resource Development Centre, Kumaun University, Nainital Online Refresher Course in Chemistry February 22<sup>nd</sup>, 2021.
- **41. Diwan S Rawat, "Chemistry Teaching Through Historical Examples and Contemporary Research**, The National Resource Centre for Education (NRCE), Webinar on Faculty Enrichment Program, Februray 11, 2021.
- **42. Diwan S Rawat, "Hybrid concept in medicinal chemistry and nano-catalysis: An insight story**, Kolkata, December 12, 2020.
- 43. Diwan S Rawat, "Hybrid materials in drug development and catalysis, MNIT, Manipur, December 6, 2020.
- 44. **Diwan S Rawat,** "Development of organic chemistry and its impact on human health", UGC Sponsored Online Refresher Course in Chemistry, HRDC, Gujrat University, October 3, 2020.
- 45. **Diwan S Rawat**, "Hybrid materials in medicinal chemistry and nano-catalysis: A concept based design and application" Virtual International Conference on Emerging Research Trends in Chemical Sciences (ERTCS-2020), Govt. Post Graduate College, Rajori, Kashmir, July 25, 2020.
- 46. **Diwan S Rawat**, "NMR Spectroscopy for strutter determination" First Webinar, Mahila Mahavidyalaya, Haldwani, July 24, 2020.
- 47. **Diwan S Rawat**, "Research methodology: Why it is so important for a PhD students to know about it" Webinar, Amity University, June 6, 2020.

- 48. **Diwan S Rawat**, "Research methodology: Why it is so important for a PhD students to know about it" First Webinar, BITS, Pillani, June 6, 2020.
- 49. **Diwan S Rawat**, "NMR spectrosocpy: Basic introduction to structure determination" First Webinar, Panjab University, Chandigarh, May 29, 2020.
- 50. **Diwan S Rawat**, "Research methodology" Research methodology for physical sciences and engineering, Webinar by Maharshi Dayanand University, Rohtak, March 14, 2020.
- 51. **Diwan S Rawat**, "Sustainable organic synthesis via nanocatalysis" International Conference on Advances in Physical, Chamical and Mathematical Sciences, RTM University, Nagpur, February 13-16, 2020.
- 52. **Diwan S Rawat**, "The Death of Vitalism and Birth of Organic Chemistry: Impact on Human Health" National Conference on Relationship between Chemical Sciences and Society 2020, Shivaji College. January 17, 2020.
- 53. **Diwan S Rawat**, "Chemistry After Wöhler`s Urea: Impact on Health and Environment" INSPIRE Camp, KIET Institutes, Gaziabad, January 8, 2020.
- 54. **Diwan S Rawat**, "Hybrid strategy: A versatile approach for design and development of antimalarial and nanocatalysis" Presidential address, 107<sup>th</sup> Indian Science Congress, Chemical Sciences Section. Jan 4<sup>th</sup>, 2020. University of Agriculture Sciences, Bangalore.
- 55. **Diwan S Rawat**, "Resetting the antimalarial arms race: Development of novel molecules based on hybrid approach" National Seminar on Science and Technology: Rural Development, CSMJ University, Kanpur, December 3-4, 2019.
- 56. **Diwan S Rawat**, "Nanocatalysts in Organic Synthesis: A Contemporary Approach" 7<sup>th</sup> Asian Network for Natural and Unnatural Materials, Gujrat University, Ahmedabad, September 27-29, 2019.
- 57. **Diwan S Rawat** "Wöhler's Urea to Modern Organic Chemistry: Impact on Health and Environment" Sri Aurvindo College, Delhi, September 27, 2019.
- 58. **Diwan S Rawat** "Wöhler's Urea to Modern Organic Chemistry: Impact on Health and Environment" Sri Aurvindo College, Delhi, September 27, 2019.
- 59. **Diwan S Rawat** "Wöhler`s urea to molecular hydrids in drug discovery" Torrent Research Centre, Ahmdadad, August 14, 2019.
- 60. **Diwan S Rawat "**NMR spectroscopy and its role in structure determination" Dolphin Institute, Dehradun, April 27, 2019.
- 61. **Diwan S Rawat** "Sustainable development via nano-catalysis" Global Conference on Control of Green House Gases at the Source by Physical and Chemical Technology, BBAU, Lucknow, April 22-24, 2019.
- 62. **Diwan S Rawat** "Development of organic chemistry and its impact on human health", BITS, Pilani, April 18, 2019.

- 63. **Diwan S Rawat "**Chemistry, sustainable development and human health", Hansraj College, University of Delhi, March 16, 2019.
- 64. **Diwan S Rawat** "Chemistry, sustainable development and human health", Hansraj College, University of Delhi, March 16, 2019.
- 65. **Diwan S Rawat** "Road of drug discovery: from idea to bench to market", National conference on chemistry and human health, Aurvindo College, March 8, 2019.
- 66. **Diwan S Rawat** "Organic spectroscopy and its role in structure determination", ARSD College, Delhi, March 1, 2019.
- 67. **Diwan S Rawat "**NMR spectroscopy: basic introduction to structure determination", Sriram Institute, Delhi, February 27, 2019.
- 68. **Diwan S Rawat "**NMR: Basic introduction to structure determination", 3<sup>rd</sup> One day National Conference: New Horizons in Drug Discovery and Development, the Role of NMR, Jamia Hamdard, February 18, 2019.
- 69. **Diwan S Rawat** "Science of medicinal chemistry in the discovery of medicines: From ideas to trenches to market", 11<sup>th</sup> NIPER (R) Symposium on Natural products based therapeutics in drug development: NIPER Raebarelli, February 14-15, 2019.
- 70. Diwan S Rawat "Lead identification via rationale drug design", 25<sup>th</sup> ISCB International Conference, Trends in chemical and biological sciences: Impact on health and environment, Lucknow, January 12-14, 2019.
- 71. **Diwan S Rawat,** "Green Chemistry by Nano-Catalysis: Nano-Materials for Organic Transformations", National seminar on frontiers in heterogeneous catalysis, MS University, Vadodara, December 8-9, 2018.
- 72. **Diwan S Rawat** "Molecular hybridization in drug discovery: Challenges and opportunitie' National seminar on chemistry in interdisciplinary research, Nagaland University, Nagaland, November 9-10, 2018 [KEY NOTE SPEAKER].
- 73. **Diwan S Rawat "**National seminar on quality improvement in higher education-Gyan Kumbh 2018" Uttakhand Government and Patanjali Yog Peeth, Haridwar, November 3-4, 2018.
- 74. **Diwan S Rawat** "Nano catalysis in organic conversions" National seminar on role of science and technology in nation building, Indian Science Congress Asspciation, Haridwar Chapter, GB Pant Agriculture University, Pantnagar, October 13, 2018.
- 75. **Diwan S Rawat "**Fundamentals of NMR spectroscopy and its role in structure determination" Daulat Ram College, Delhi University, October 9, 2018.
- 76. **Diwan S Rawat** "Green chemistry by nanocatalysis" National Conference on "Energing trends and advances in chemical science" St. Stephans College, Delhi University, September 26, 2018.
- 77. **Diwan S Rawat "**NMR Spectroscopy: Basic introduction to structure determination" Kirorimal College, Delhi University, September 18, 2018.

Wednesday, April 24, 2024

- 78. **Diwan S Rawat** "Organic Spectroscopy: Sailing through confluence of introduction & structure determination" National Institute of Technology, Jalandhar, August 17, 2018.
- 79. **Diwan S Rawat** "Spectrum to Structure" UGC Refresher Course, UGC-HRDC Center, Kumaun University, Nainital. July 30, 2018.
- 80. **Diwan S Rawat** "Organic Spectroscopy" UGC Refresher Course, UGC-HRDC Center, Kumaun University, Nainital. July 30, 2018.
- 81. **Diwan S Rawat** "Lead identification via rationale drug design" ISCB National Conference on "Role of Chemistry & Biology Interface in Drug Research" Grand Tulip Hotel, Lucknow. June 23, 2018.
- **82.Diwan S Rawat**, "An art of drug discovery" HNB Central University, Srinagar. April 27-28, 2018 [Key Note Speaker].
- **83.Diwan S Rawat**, "Hybridization approach: An alternative of combination therapy in medicinal chemistry" DAV University, Indore, March 24, 2018 [Key Note Speaker].
- 84. Diwan S Rawat, "Joy of drug discovery" Amity University, Manesar, February 6, 2018.
- 85. **Diwan S Rawat**, "Characterization of organic compounds by spectroscopic techniques" National Tobacco Research Laboratory, Noida, January 30, 2018.
- 86. **Diwan S Rawat**, "Systematic structural variation: The way of drug development" National conference on Chemical sciences: An interndisciplinary approach, Modern College of Arts, Science and Commerce, Pune, January 18-20, 2018.
- 87. **Diwan S Rawat**, "Aminoquinolines: Exploration of medicinal potential" Emerging trends in drug development and natural products, University of Delhi, January 12-14, 2018.
- 88. **Diwan S Rawat**, "Molecular hybridization a new approach drug discovery" School of Material Sciences, Japan Advanced Institute of Science and Technology, October 5, 2017.
- 89. **Diwan S Rawat**, "Molecular hybridization: Reality or myth" Toyama University, Toyama, October 4, 2017.
- 90. **Diwan S Rawat**, "Molecular hybridization and drug discovery" Almeno Pvt Ltd Hyderabad, September 9, 2017.
- 91. **Diwan S Rawat**, "Nano-catalysis and sustainable synthesis" Indian Institute of Technology (ISM) Dhanbad, June 15, 2017.
- 92. **Diwan S Rawat**, Organic Spectroscopy: Entertainment or Melancholy, Indian Institute of Technology (ISM) Dhanbad, June 15, 2017.
- 93. Diwan S Rawat, "Why young minds should persue chemistry" Hansraj College, April 10, 2017.

- **94. Diwan S Rawat**, "Sustainable nanocatalysts for organic transformation" JAIST Japan-India Symposium on Materials Science 2017" Japan Advanced Institute of Science and Technology, March 6 7, 2017.
- **95.Diwan S Rawat**, "Molecular hybrid based drug design: A lesson from the nature" 23<sup>rd</sup> ISCB International Conference (ISCBC 2017) "Interface of Chemical Biology in Drug Research" SRM University, Chennai, February 8 10, 2017.
- **96.Diwan S Rawat**, "Nano-catalysis and sustainable synthesis" National conference on innovation in chemical sciences, Shivaji University, Kolhapur, Kolhapur, February 1 2, 2017 (Key Note Address).
- 97. **Diwan S Rawat**, "Chemistry, human health and environment" INSPER-Mentor, GD Goenka University, Gurgaon, January 13, 2017.
- 98. **Diwan S Rawat**, "How to make spectroscopy instresting?" Refresher course for college teachers, Jawaharlal Nehru University, Delhi, January 5, 2017.
- 99. **Diwan S Rawat**, "Molecular hybrid based drug design: A myth or reality" 35<sup>th</sup> National Conference of Indian Council of Chemist, HV Desia College, Pune, September 22 24, 2016 [Professor SP Hiremath Award Lecture].
- 100. **Diwan S Rawat**, "Nanocatalysis and prospects of green chemistry" School of Material Science, Japan Advanced Institute of Science and Technology (JAIST), October 12, 2016.
- 101. **Diwan S Rawat**, "Molecular hybrids: Future prospectes" Agharkar Research Institute, Pune, September 27, 2016.
- 102. **Diwan S Rawat**, "Molecular hybrids: innovative approach of drug desgn, Central Drug Research Institute, Lucknow, August 24, 2016.
- 103. Diwan S Rawat, "Catalysis on the Nanoscale: Preparation and Application in Multi-component Organic Synthesis" Asian Network for Natural and Unnatural Materials (ANNUM-IV, 2016), National University of Singapore, June 8 – 11, 2016.
- 104. Diwan S Rawat, "Molecular hybrid based drugs", International Conference on Frontiers at the Chemistry-Allied Sciences Interface, Department of Chemistry, University of Rajasthan, April 25-26, 2016.
- 105. **Diwan S Rawat**, "Nano materials and their application in organic conversions", National Conference on Chemistry: Environment and Harmonious Development and Ecosystems, Shyamlal College, Delhi, **April 7-8, 2016 (Plenary Lecture).**
- 106. **Diwan S Rawat**, "Recent advances in the development of molecular hybrids based drug, National Conference on Chemistry and Ecosystems, Arya PG College, Panipat, **March 19, 2016 (Plenary Lecture).**

- 107. Diwan S Rawat, "Aminoquinoline based molecular hybrids: From antimalarial to anti-Parkinson potential, 103<sup>rd</sup> Indian Science Congress, University of Mysore, Mysore, January 3-7, 2016 (Prof RC Shah Memorial Award).
- 108. **Diwan S Rawat**, "Antimalarial and anti-Parkinson potential of aminoquinoline based molecular hybrids, 52<sup>nd</sup> Annual Convention of Chemist2 1015 and International Conference on Recent Advances in Chemical Sciences, JECRC University, Japipur, **December 29-30, 2015**.
- 109. **Diwan S Rawat**, "Hybrid durgs: An alternative method of designing new drug molecules" National seminar on chemistry and healthcare, Jamia Millia Islamia, Delhi, **December 17, 2015.**
- 110. **Diwan S Rawat**, "Significance of chemical education" INSPIRE camp, SRM University, **December** 16, 2015.
- Diwan S Rawat, "Life of a chemist without spectroscopy" TEQUIP-II Sponsored Short Term Coruse on Recent Trends in Synthetic Chemistry and its Relevance, NIT, Jalandhar, December 07 -13, 2015.
- Diwan S Rawat, "Spectroscopy: Introduction to structure determination" TEQUIP-II Sponsored Short Term Coruse on Recent Trends in Synthetic Chemistry and its Relevance, NIT, Patna, December 10 - 11, 2015 (Chief Guest, Key Note Lecture).
- 113. **Diwan S Rawat,** "Molecualr hybridization in drug discovery: A myth or reality" Current Challenges in Drug Discovery Research" MNIT, Jaipur, **November 23-25, 2015 (Planary Lecture)**.
- 114. **Diwan S Rawat**, "Catalysis at nano scale: One step towards green and sustainable processes" JAIST Symposium on Advanced Science and Technology, Japan Advanced Institute of Sceicne and Technology, Japan, **November 10 12, 2015.**
- 115. **Diwan S Rawat**, "Nanocatalysis for sustainable society" National Workshop on "Recent Trends in Environmental Science and Carbon Management'(RTCM-2015), Central University Himanchal, **November 19-20, 2015.**
- 116. Diwan S Rawat, "Hybrid drugs: A myth or reality" National Conference on Innovation, Advance Research in Biomedical and Environmental Dynamics, Dayal Singh College, Delhi University, October 09 – 10, 2015
- 117. **Diwan S Rawat**, "Molecular hybridization in drug discovery" National Conference on Science and Technology for Indegenous Development in India, Indian Science Congress Associattion: Haridwar Chapter, Gurukul Kangari University, Haridwar, **September 28 30, 2015.**

- 118. **Diwan S Rawat**, "Challenges and new opportunities in drug discovery" Chem Fest, Hindu College, University of Delhi, **August 22, 2015**.
- 119. **Diwan S Rawat**, "Medicinal chemistry: Challenges and new approaches" National Inter-Disciplinary Science Conference-2015, Recent Research Trends in Chemical and Environmental Sciences, Sri Pratap College, Srinagar, **August 18 – 19, 2015**.
- 120. **Diwan S Rawat**, "Molecular hybrids: An innovative approach in drug discovery" Drug Discovery and Therapy World Congree 2015 (DDTWC 2015), Boston **July 22 25, 2015.**
- 121. **Diwan S Rawat**, "Medicinal chemistry: Opportunities and challenges" McLean Hospital, Harvard University, Boston **July 20, 2015.**
- 122. **Diwan S Rawat**, "Spectrosocpic tools for organic chemist: An introduction" CPDHE Refresher Course, **University of Delhi**, **June 30**, **2015**.
- 123. Diwan S Rawat, "Nanocatalysis: A Green and Sustainable Approach Towards Organic Synthesis" National Conference on Science and Technology for Human Development, Gurukul Kangari University, Haridwar. March 20-21, 2015.
- 124. Diwan S Rawat, "Nanocatalysis in Multicomponent Organic Synthesis: A Green and Sustainable Approach" Indo-Japan Symposium of Material Sciences, Department of Material Sciences, Japan Advanced Institute of Science and Technology (JAIST), Japan. March 2-3, 2015.
- 125. Diwan S Rawat, "Molecualr hybridization: a useful tool in the design of new drug prototype" 21<sup>st</sup> ISCB International Conference on Current trends in drug discovery and developments, Central Drug Research Institute, Lucknow. February 25 to 28, 2015.
- 126. Diwan S Rawat, "Nano Materials as Heterogeneous Catalyst in Multicomponent Organic Synthesis: One Step Towards Green and Sustainable Processes" International Conference on Green Initiatives in Science and Technology-GIST 2015, Department of Chemistry, Manav Rachana University, Faridabad. January 15, 2015.
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- 128. Diwan S Rawat, "NMR Spectrosocpy and its applications" CPDHE Refresher Course, Delhi Technological University, Delhi, December 21, 2014.
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- 132. **Diwan S Rawat**, "Spectroscopy: Introduction to Structure Elucidation" CPDHE Refresher Course, **Jamia Millia Islamia University, Delhi, October 25, 2014**.
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- 134. **Diwan S Rawat**, "Excitement and agony of a medicinal chemist!" Deen Dayal Upadhaya College, University of Delhi, **August 26, 2014**.
- 135. **Diwan S Rawat,** "Aminoquinoline pharmacophore: It's impossible to abandon!" Him Science Congress Association, 2<sup>nd</sup> Annual National Conference - Science: Emerging Scenario & Future Challenges, Shimla, **17-18 May, 2014.**
- *136.* **Diwan S Rawat,** "Discovery of lead antimalarial through rational drug design" International conference on Drugs for Furtue: Infectious Diseases, **NIPER Hyderabad**, *March 27-28, 2014*.
- *137.* **Diwan S Rawat, "**NMR Spectroscopy and its Role in Structure Determination" M.J.P *ROHILKHAND UNIVERSITY, February 21, 2014.*
- *138.* **Diwan S Rawat,** "Drug Discovery: Long Road with Complete Uncertainty", Gautom Budha University, Noida, *Science Day Celebration*, *February 28, 2014.*
- 139. <u>Diwan S Rawat</u>, "Histroy of chemical and nano sciences" UGC-SAP National Symposium on recent trends in chemical and nano sciences. Shivaji University, Kolhapur, January 17-18, 2014 (Address as a Chief Guest).
- 140. <u>Diwan S Rawat</u>, "Aminoquinoline based molecular hybrids as potential antimalarials" UGC-SAP National Symposium on recent trends in chemical and nano sciences. Shivaji University, Kolhapur, January 17-18, 2014 (Key Note Address).
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- 149. <u>Diwan S Rawat</u>, "Antimalarial Lead Identification through Rational Drug Design" 5<sup>th</sup> NIPER (Rbl)-CDRI Symposium on Chemical and Biological Approaches in Drug Development and Delivery Strategies, CDRI, Lucknow, **March 21-23, 2013**.
- 150. <u>Diwan S Rawat</u>, "Antimalarial Drug Development From Simple in vitro Screening to Lead Identification" 19th ISCB International Conference (ISCBC-2013), Recent Advances and Current Trends in Chemical and Biological Sciences, Department of Chemistry, Mohanlal Sukhadia University, Udaipur, Rajasthan, March 2-5, 2013.
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- 155. <u>Diwan S Rawat</u>, Spectral Problems: A Puzzle!, Thiagarajar College, Madurai Kamraj University, Madurai, **26<sup>th</sup> December 2012**.
- 156. <u>Diwan S Rawat</u>, Malaria: How to takle it?, Thiagarajar College, Madurai Kamraj University, Madurai, **26<sup>th</sup> December 2012**.
- 157. <u>Diwan S Rawat</u>, Nuclear Magnetic Resonance: Introduction to structure elucidation, National Workshop on Advance Analytical Techniques in Research and Development, **Amity Institute of Applied Sciences, Amity University, Noida, 20-21 December 2012**.
- 158. <u>Diwan S Rawat</u>, Catalysis in organic synthesis: Some trends and applications, "International Conference on Chemistry and Materials: Prospects & Perspectives" **Babasaheb Bhimrao Ambedkar University** (A Central University), Lucknow, **14-16 December**, **2012**.
- 159. <u>Diwan S Rawat</u>, Aspirin: From tree bark to Bayer's drug for the ages. Workshop on Microbial Biotechnology, Ramjus College, University of Delhi, Delhi, December 10, 2012 (KEY NOTE ADDRESS).
- 160. <u>Diwan S Rawat</u>, "Aminoquinoline and tetraoxane based antimalarials: Lead identification through reversed genomics approach" <sup>3rd</sup> Biennial International Conference on New Developments in Drug Discovery from Natural Products and Traditional Medicines, NIPER, Mohali, November 22-24, 2012.
- 161. <u>Diwan S. Rawat</u>, "Library of small organic molecules and their medicinal potential" **Swami Shradhanand College**, University of Delhi, Delhi, **April 11, 2012.**
- 162. <u>Diwan S. Rawat</u>, "Spectroscopy: Why it is so important" **Centre for Professional Development in Higher Education**, Banaras Hindu University, **March 23, 2012.**
- 163. <u>Diwan S. Rawat</u>, "Spectrum to structures" **Centre for Professional Development in Higher Education**, Banaras Hindu University, **March 23, 2012.**
- 164. **Diwan S Rawat**, "Is <sup>1</sup>H NMR spectroscopy is more important than other spectroscopic techniques" 150<sup>th</sup> Years celebration of Lucknow Christan College, Lucknow, **February 25, 2012**.
- 165. <u>Diwan S Rawat</u>, "Nitrogen and oxygen heterocycles: Synthesis and antimalarial activity evaluations", 4<sup>th</sup> NIPER (Rbl)-CDRI Symposium on Medicinal Chemistry and Pharmaceutical Sciences, CDRI, Lucknow, **February 23-25, 2012**.
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- **167.** <u>**Diwan S Rawat**</u>, "Tetraoxane and aminoquinoline scaffolds as antimalarials", Chemical Research Society of India, South Zonal Meeting, Pondicherry University Pondicherry, **December 16-17, 2011**.
- **168.** <u>Diwan S Rawat</u>, "Natural product inspired biologically active compounds: Synthesis and biological evaluation", National Symposium on Traditional Indian Medicinal Plants in the

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- 176. <u>Diwan S Rawat</u>, "Tetraoxanes, and tetraoxane based hybrids as potential antimalarial agents" 14<sup>th</sup> National Organic Symposium Trust (NOST), Goa, December 4<sup>th</sup> - 8<sup>th</sup>, 2010.
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- **191.** <u>Diwan S. Rawat</u>\* Nitin Kumar, S. I. Khan, Mukul Sharma, Ritu Mamgain, Himanshu Atheaya, Symetrically and Asymetrically Substituted Tetraoxanes: Synthesis Tetraoxanes as Artemisinin Mimics: Synthesis and Antimalarial Activity Evaluation, "INDO-Italian Seminar on Green Chemistry and Natural Products, Department of Chemistry, University of Delhi, 5-6 December 2008.
- **192.** <u>Diwan S. Rawat</u>, Natural Product Chemistry: Opportunity and Challenges. "Eight National Convention of Chemistry Teachers NCCT-2008 and National Conference on Chemistry: Emerging Trends in Chemistry" Department of Chemistry, HNB Garhwal University, Srinagar, Garhwal, Uttrakhand, November 8-9, 2008.
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- **200.** <u>**Diwan S. Rawat**</u> "Bergman cyclization: Old reaction-New developments" G. B. Pant University of Agriculture and Technology, Pant Nagar, UA. **December 23, 2005.**
- **201.** <u>Diwan S. Rawat</u> "Synthesis and Biological Significance of Natural Product Analogues". National Seminar on Chemistry-Industry Interface</u>, ARSD College, University of Delhi, 8-9 December 2005.
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- 206. <u>Diwan S. Rawat</u>, "Design and Synthesis of Genotoxic Enediynes. Centre for Professional Development in Higher Education, University of Delhi, Delhi-110007. September 11, 2003.

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- 208. <u>Diwan S. Rawat</u> and Richard A. Gibbs, "Synthesis and Biological Evaluation of Farnesyl Transferase Inhibitors". Department of Medicinal Chemistry and Molecular Pharmacology, Purdue University, West Lafayette, IN, USA, **September, 2002.**
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#### PRESENTATION OF WORK IN NATIONAL/INTERNATIONAL SEMINARS/CONFERENCES:

- 1. Gunjan Purohit and Diwan S. Rawat\*, Sustainable synthesis of nanomaterial: Application for one-pot multicomponent reactions, Virtual Conference on Materials for Energy Harvesting and Catalysis MEHC-2020, India, May 1 3, 2020 (Oral Presentation).
- 2. Gunjan Purohit and Diwan S. Rawat\*, Sustainable synthesis of nanomaterial and their catalytic potential for one pot multicomponent reactions, 107<sup>th</sup> ISC Conference-2020, University of Agricultural Sciences, GKVK, Bangalore, India, January 3-7, 2020 (Oral Presentation).
- Aparna Bahuguna, P. V. Bharatam and Diwan S. Rawat\*, 3D QSAR studies on cationic amphiphilic indole derivatives for antimycobacterial activity, 107<sup>th</sup> ISC Conference-2020, UAS, GKVK, Bangalore, India, January 3-7, 2020 (Poster).
- 4. Upasana Gulati, U. Chinna Rajesh, Jeffery M. Zaleski and Diwan S. Rawat\*, MgO@Ag hybrid nanocatalyst for ambient pressure activation of CO2 to afford esters and lactones, Indian Science Congress-2020, University of Agricultural Sciences, Bangalore, India, January 3-7, 2020 (Poster).
- Srishti Rawat, Tannu Priya Gosain, Ramandeep Singh and Diwan S. Rawat\*, Design, synthesis and biological evaluation of novel benzoxazole derivative as anti-tubercular compounds, 107<sup>th</sup> ISC -2020, University of Agricultural Sciences, Bangalore, India, January 3-7, 2020 (Poster).
- 6. Manish Rawat and Diwan S. Rawat\*, Fe<sub>3</sub>O<sub>4</sub>@PmPDs@Cu<sub>2</sub>O and CuO@g-C<sub>3</sub>N<sub>4</sub> nanoparticles catalysed synthesis of biologically active heterocycles, 107<sup>th</sup> Indian Science Congress Conference-2020, University of Agricultural Sciences, GKVK Campus, Bangalore, Karnataka, India, January 03-07, 2020 (Poster).
- 7. Gagandeep, Garima Arora, Assirbad Behura, Tannu Priya Gosain, Ravi P Shaliwal, Saqib Kidwai, Padam Singh, Shamseer Kulangara Kandi, Rohan Dhiman, Ramandeep Singh and Diwan S. Rawat, Identification of NSC 18725, a pyrazole derivative via phenotypic screening as the intracellular Mycobacterium tuberculosis inhibitor by induction of autophagy, 107<sup>th</sup> Indian Science Congress-2020, University of Agricultural Sciences, GKVK Campus, Bangalore, Karnataka, January 3-7, 2020 (Poster).

- 8. Shashikant tiwari and Diwan S. Rawat\*, Metal and base free regioselective synthesis of polysubstituted indolizines. 107<sup>th</sup> ISC Conference-2020, University of Agricultural sciences, GKVK, Bangalore, India, January 03-07, 2020 (Poster).
- Upasana Gulati, U. Chinna Rajesh and <u>Diwan S. Rawat</u>\*, RGO@CuI composites and Ni@CuI coreshells as recyclable nanocatalysts for the synthesis of biologically active N-heterocycles, 25<sup>th</sup> ISCB Conference-2019, Hotel Golden Tulip, Lucknow, India, January 12-14, 2019 (Poster).
- 10. Srishti Rawat, Tannu Priya Gosain, Ramandeep Singh and <u>Diwan S. Rawat</u>\*, *Mycobacterium tuberculosis* membrane inhibitors: Design, synthesis, biological evaluation and ADME analysis, 25<sup>th</sup> ISCB Conference-2019, Hotel Golden Tulip, Lucknow, India, January 12-14, 2019 (Poster).
- 11.Manish Rawat and <u>Diwan S. Rawat</u>\*, CuO@NiO and CuI@Al<sub>2</sub>O<sub>3</sub> nanoparticles catalysed synthesis of biologically active heterocycles, 25<sup>th</sup> ISCB Conference-2019, Hotel Golden Tulip, Lucknow, India, January 12-14, 2019 (Poster).
- 12. <u>Gagandeep</u>, Shamseer Kulangara Kandi, Prince Kumar, Kasturi Mukhopadhyay, and <u>Diwan S.</u> <u>Rawat</u>\*, C-5 Curcuminoids: Synthesis and antibacterial activity against Staphylococcus aureus and their mechanistic studies, 25<sup>th</sup> ISCB Conference-2019, Hotel Golden Tulip, Lucknow, India, January 12-14, 2019 (Poster).
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- **16.**Srishti Rawat, Upasana Gulati, U. Chinna Rajesh and <u>Diwan S. Rawat</u>\* CuO@Fe<sub>2</sub>O<sub>3</sub> MNPs catalyzed C1-alkynylation of tetrahydroisoquinolines under green conditions, ACS on **Campus India** Roadshow-2018, University of Delhi, Delhi, February 5, 2018 (Poster).

- 17. Upasana Gulati, U. Chinna Rajesh and <u>Diwan S. Rawat</u>\* Development of copper nanocatalysts for decarboxylative organic coupling reactions, ACS on Campus India Roadshow-2018, University of Delhi, Delhi, February 5, 2018 (Poster).
- 18.Gagandeep, Shamseer Kulangara Kandi, Shabana I. Khan and <u>Diwan S. Rawat</u>\* Lead optimization of 4-aminoquinoline based molecular hybrids as potent antimalarial agents, ACS on Campus India Roadshow-2018, University of Delhi, Delhi, February 5, 2018 (Poster).
- **19.**Manish Rawat and <u>Diwan S. Rawat</u>\* Hierarchically porous sphere like copper oxide (HS-CuO) Nanoparticles catalysed synthesis of Imidazo[1,2-a]pyrimidine derivatives and study of their optical properties, ACS on Campus India Roadshow-2018, University of Delhi, Delhi, February 5, 2018 (Poster).
- 20. Aparna Bahuguna and <u>Diwan S. Rawat</u>\* Exploring the differences in chemical features of the Wild-type (D6) and mutant (W2) P.falciparum inhibitors using 3D-QSAR And Pharmacophore Modelling approach, ACS on Campus India Roadshow-2018, University of Delhi, Delhi, February 5, 2018 (Poster).
- 21.Archana Gupta and <u>Diwan S. Rawat</u>\* BF<sub>3</sub>·OEt<sub>2</sub> mediated highly stereoselective synthesis of trisubstituted-tetrahydrofuran via [3+2] cycloaddition reaction of 2-arylcyclopropyl ketones with aldehydes, ACS on Campus India Roadshow-2018, University of Delhi, Delhi, February 5, 2018 (Poster) [Best poster award].
- 22. Girijesh Kumar Verma and <u>Diwan S. Rawat</u>\* Cp\*Co(CO)I<sub>2</sub> in catalyst in Organic Synthesis, ACS on Campus India Roadshow-2018, University of Delhi, Delhi, February 5, 2018 (Poster)
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- 24. Gunjan Purohit, U. Chinna Rajesh, and Diwan S. Rawat\* Sustainable synthesis of nanomaterial and their catalytic potential for one pot multicomponent reactions, CACEE-2018; TIFR-Mumbai; January 10-12, 2018 (Poster).
- 25. Upasana Gulati, U. Chinna Rajesh and Diwan S. Rawat.\* Development of copper nanocatalysts for decarboxylative organic coupling reactions, CACEE-2018, TIFR-Mumbai; January 10-12, 2018 (Poster).
- **26.**Gagandeep, Shamseer Kulangara Kandi, Shabana I. Khan and **Diwan S. Rawat\*** Lead optimization of 4-aminoquinoline based molecular hybrids as potent antimalarial agents, **ISCBC-2018**, **Manipal university, Jaipur; January 11-13, 2018 (Poster)**.
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- 106. <u>Nitin Kumar</u>, Anuj Thakur, Himanshu Atheaya, Shabana I. Khan and <u>Diwan S Rawat</u>, "Design, synthesis, characterization and antimalarial activity of tetraoxane based compounds, 7<sup>th</sup> Indo-Italian Workshop on "Chemistry and Biology of Antioxidants", Department of Chemistry, University of Delhi, Delhi, November 16<sup>th</sup>, 2010 (Poster).
- **107.** <u>Deepak Kumar</u>, Beena, N. Roy and **Diwan S. Rawat**, "Synthesis of benzyl-[3-(benzylaminomethyl)-cyclohexylmethyl]-amine derivatives and metronidazole-triazole conjugates and their antibacterial activity evaluation" 7<sup>th</sup> Indo-Italian Workshop on "Chemistry and Biology of Antioxidants", Department of Chemistry, University of Delhi, Delhi, **November 16<sup>th</sup>**, **2010 (Poster)**.
- 108. <u>Sunny Manohar</u>, Himanshu Atheaya, Shabana I. Khan and <u>Diwan S Rawat</u>, "Synthesis and antimalarial activity evaluation of 4-aminoquinoline-triazine and aminoquinoline-triazole hybrid molecules" National Conference on Green and Sustainable Chemistry (NCGSC-2010), Chemistry Group, Birla Institute of Technology and Science, Pillani, Rajasthan, February 19<sup>th</sup>-21<sup>st</sup>, 2010 (Poster) (*Best poster award*).
- 109. <u>Deepak Kumar</u>, Beena, Rajesh K. Rohilla, N. Roy and <u>Diwan S Rawat</u>, "Synthesis and antimicrobial activity evaluation of metronidazole-triazole conjugates and benzyl-[3-benzylamino-methyl]-cyclohexylmethyl]-amine derivatives" National Conference on Green and Sustainable Chemistry (NCGSC-2010), Chemistry Group, Birla Institute of Technology and Science, Pillani, Rajasthan, **February 19<sup>th</sup>-21<sup>st</sup>, 2010 (Poster).**

- 110. <u>Nitin Kumar</u>, H. Atheaya, Mukul Sharma, Shabana I. Khan and <u>Diwan S Rawat</u>, "Design, synthesis, characterization and antimalarial activity evaluation of tetraoxane based compounds" 14<sup>th</sup> ISCB International Conference (ISCBC-2010), Chemical biology for discovery: Perspectives and challenges, Central Drug Research Institute, Lucknow, Lucknow, January 15<sup>th</sup>-18<sup>th</sup>, 2010 (*Best poster award*).
- 111. <u>Sunny Manohar</u>, Himanshu Atheaya, Shabana I. Khan and <u>Diwan S Rawat</u>, "Synthesis and antimalarial activity evaluation of 4-aminoquinoline-triazine and aminoquinoline-triazole conjugates" 14<sup>th</sup> ISCB International Conference (ISCBC-2010), Chemical biology for discovery: Perspectives and challenges, Central Drug Research Institute, Lucknow, Lucknow, January 15<sup>th</sup>-18<sup>th</sup>, 2010 (Poster).
- 112. <u>Beena</u>, Deepak Kumar, R. K. Rohilla, N. Roy and <u>Diwan S Rawat</u>, "Metronidazole-triazole conjugates as antibacterial and antiamoebic agentes" 14<sup>th</sup> ISCB International Conference (ISCBC-2010), Chemical biology for discovery: Perspectives and challenges, Central Drug Research Institute, Lucknow, Lucknow, January 15<sup>th</sup>-18<sup>th</sup>, 2010 (Poster).
- 113. Seema Joshi, Gopal S Bisht, Shruti Yadav, Diwan S Rawat and <u>Santosh Pasha</u>, "Interaction studies of novel cell selective amphipathic antimicrobial peptides using microscopic techniques" 14<sup>th</sup> ISCB International Conference (ISCBC-2010), Chemical biology for discovery: Perspectives and challenges, Central Drug Research Institute, Lucknow, Lucknow, January 15<sup>th</sup>-18<sup>th</sup>, 2010 (Poster).
- 114. <u>Nitin Kumar</u>, H. Atheaya, Mukul Sharma, Shabana I. Khan and **Diwan S. Rawat**\*, "Design, synthesis, characterisation and antimalarial activity of the tetraoxane based compounds" T3D International Symposium on Trends in Drug Discovery and Development, University of Delhi, Delhi, January 5<sup>th</sup>-8<sup>th</sup> 2010.
- 115. <u>Nitin Kumar</u>, Mukul Sharma, H. Atheaya, and **D. S. Rawat\***, "Synthesis and Antimalarial Activity of Substituted Tetraoxanes" **11<sup>th</sup> CRSI National Symposium in Chemistry,** National Chemical Laboratory, Pune, **February, 6-8, (2009)**.
- 116. <u>Nitin Kumar</u>, Mukul Sharma, Himanshu Atheaya, D. S. Rawat\*, "Symmetrically and asymmetrically substituted tetraoxanes" Synthesis and antimalarial activity evaluations" 13<sup>th</sup> ISCB International Conference on Interplay of Chemical and Biological Sciences: Impact on Health and Environment. University of Delhi, Delhi, 26<sup>th</sup> February 1<sup>st</sup> March 2009 (<u>Best poster award</u>)
- 117. <u>Mukul Sharma</u>, Mukesh C Joshi, N. Roy, Diwan S. Rawat\*, Synthesis and antimicrobial activity of cyclic enediynes. "12<sup>th</sup> ISCB Conference, International Conference on the Interface of Chemistry-Biology in Biomedical Research" BITS, Pillani, Feburary 22-24, 2008.
- 118. <u>Mukul Sharma</u>, M. C. Joshi, P. Joshi, H. Atheaya, R. Mamgain, M. Sharma, N. Aggarwal, S. Pahwa, N. Roy and D. S. Rawat\*, "Synthesis and Biological Evaluation of Natural Product Analouges" 9th CRSI National Symposium in Chemistry, Department of Chemistry, University of Delhi, Delhi, February, 1-4, (2007).
- 119. <u>Mukesh Chandra Joshi</u>, and **Diwan S. Rawat**<sup>\*</sup> "Synthesis, characterization, antimicrobial activity and thermal reactivity of cyclic/acyclic enediynes" **Third J-NOST Symposium**" Guru Nanak Dev University, Amritsar, **November 15-17, 2007** [ORAL PRESENTATION].

- 120. <u>Mukesh Chandra Joshi</u>, Diwan S. Rawat\*, "Synthesis, characterization and thermal reactivity of cyclic/acyclic enediynes" 10<sup>th</sup> International conference of ISCB on Drug discovery: Perspective and challenges, Central Drug Research Institute, Lucknow, UP, India, February, 24-27, (2006).
- 121. Amanda J. Krzysiak, Sarah A. Reigard, <u>Diwan S. Rawat</u>, Richard A. Gibbs, Abstracts of Papers, 229<sup>th</sup> ACS National Meeting, San Diego, CA, United States, March 13-17, 2005 (2005).
- 122. Sarah A. Reigard, <u>Diwan S. Rawat</u>, Richard A. Gibbs, Abstracts of Papers, 229<sup>th</sup> ACS National Meeting, San Diego, CA, United States, March 13-17, 2005 (2005).
- 123. Sarah A. Reigard, <u>Diwan S. Rawat</u>, Katherine A. Hicks, Carrol A. Fierke, Richard A. Gibbs, "Combinatorial Modulation of Protein Prenylation." 227th ACS National Meeting Anaheim, CA, USA, April, 28-30, 2004 (Paper).
- 124. K. Venkatrao, Monika Singhal, <u>Diwan S. Rawat</u>, K. P. Ravindranathan Kartha, "Towards Carbohydrate-Based Antimalarial Agents: Model Reactions." Chemistry Biology Interface: Synergistic New Frontiers (CBISNF). ACBR, University of Delhi, Delhi 110007, India, November 21-26, 2004 (Poster).
- 125. Sarah A. Reigard, <u>Diwan S. Rawat</u>, Richard A. Gibbs, "Synthesis and Evaluation of New Farnesyl Diphosphate Analogues: On the Interplay of the Isoprenoid and Peptide Substrate Specificity in Protein-Farnesyl Transferase." MAGGS University of Michigan, USA, June 26-28, 2003 (Poster).
- 126. Sarah A. Reigard, <u>Diwan S. Rawat</u>, and Richard A. Gibbs. "Synthesis and Biological Evaluation of New Farnesyl Diphosphate Analogues" MAGGS University of Chicago, USA, June 26-28, 2002 (Poster).
- 127. <u>Diwan S. Rawat</u>, Pedro J. Benites, and Jeffrey M. Zaleski, "Syntheses of Flexible Metalloenediyne Constructs with Low Thermal Cyclization Temperatures". 222<sup>nd</sup> ACS National Meeting Chicago, IL, USA, August, 26-30, 2001 (Paper).
- 128. Pedro. J. Benites, Brain J. Kraft, <u>Diwan S. Rawat</u>, and Jeffrey M. Zaleski, "Photoinduces Bergman Cyclization of Copper Metalloenediynes." 222<sup>nd</sup> ACS National Meeting Chicago, IL, USA, August 26-30, 2001 (Paper).
- 129. David F. Dye, <u>Diwan S. Rawat</u>, Brain J. Kraft, and Jeffrey M. Zaleski, "Near-IR Photocyclization of Vanadium metalloenediynes." 222<sup>nd</sup> ACS National Meeting Chicago, IL, USA, August 26-30, 2001 (Poster).
- 130. Jeffrey M. Zaleski, Pedro J. Benites, Nicole L. Coalter and <u>Diwan S. Rawat</u>, "Transition Metal Activation and Inhibition of Enediyne Cyclization Reactions". 220th ACS National Meeting Washington, DC, USA, August 20-24, 2000 (Paper).
- 131. Pedro J. Benites, <u>Diwan S. Rawat</u> and Jeffrey M. Zaleski, "Metalloenediynes for Thermal and Photochemical Control of Bergman Cyclization. Metals in Medicine Target, Diagnostics and Therapeutics". Natcher Conference Center, National Institute of Health, Bethesda, MD, USA, June 28, 29, 2000 (Paper).

- 132. <u>D. S. Rawat</u>, K. Avasthi and D. S. Bhakuni, "Synthesis and Antiallergic Activity of Some Theophyllinyl Pyrozolo[3,4-d]Pyrimidies", Indian Society of Chemist and Biologist, Annual conference on chemistry, Biology and Healthcare, Central Drug Research Institute, Lucknow, U. P. India, March 23-24, 1996 (Poster).
- 133. VII National Users' Workshop: Application of High Resolution NMR, Mass Spectrometry and Electronic Microscopy, Regional Sophisticated Instrumentation Centre, Lucknow, U. P. India, January 4-6, 1995
- 134. Global Challenges in Drug Development, **Central Drug Research Institute, Lucknow. U. P.** India, December 16-18, 1994.

#### **COLLABORATION:**

- Dr. Shabana Khan, University of Mississippi, USA
- Prof. Tanya Parish, Infectious Disease Research Institute, 1124 Columbia Street, Suite 400, Seattle, Washington, USA
- \* **Prof. Binge Wang,** Georgia State University, Athens, USA
- **Prof. AK Tyagi,** University of Delhi
- Prof. Kwang-Soo Kim, Molecular Neurobiology Laboratory MRC216, McLean Hospital/Harvard Medical School, Boston, USA.
- Dr. Ramandeep Singh, Translational Health Science and Technology InstituteVaccine and Infectious Disease Research Centre Gurgaon, Haryana.
- Prof. SV Malhotra, Laboratory of Synthetic Chemistry, SAIC, Frederick Inc, National Cancer Institute at Frederick, MD, USA.
- **Professor Lube Wiesner**, Division of Pharmacology, University of Cape Town, South Africa.

#### **PhD SUPERVISED:**

- 1. **Mukesh C Joshi**, Synthesis and Biological Evaluation of Cyclic and Acyclic Enediynes, University of Delhi, **2007**
- 2. **Gopal S Bisht**, Designing, synthesis and characterization of antimicrobial peptides and study of their biological activity, University of Delhi. **2007**
- 3. **Penny Joshi**, SYNTHESIS OF PHIDOLOPIN AND CYANURIC ACID ANALOGS AS BIODYANAMIC AGENTS, 2008
- 4. **Himanshu Aethaya**, Design, synthesis and characterization of modified tetraoxanes and tetraoxane-aminoquinolines as antimalarial agents, **2009**
- 5. **Ritu Mamgain**, Synthesis and Characterization of Biologically Relevant Nitrogen and Oxygen Heterocycles, **2009**
- 6. **Mukul Sharma**, Synthesis and characterization of biologically relevant natural product analogues and nitrogen heterocycles, **2009**
- 7. Nitin Kumar, Synthesis and biological evaluation of tetraoxane and curcumin analogues, 2011
- 8. **Beena Negi**, Synthesis and biological activity evaluation of cyclohexane-1,2-diamine, metronidazole, curcumin and thymol derivatives, **2012**

- 9. **Sunny Manohar**, DESIGN, SYNTHESIS AND BIOLOGICAL ACTIVITY EVALUATION OF HYBRID MOLECULES BASED ON 4-AMINOQUINOLINE, CURCUMIN, CHALCONE AND CYCLOHEXANEDIAMINE, **2012**
- 10. **Seema Joshi**, Antimicrobial Peptides and peptidomimetics: Design, synthesis and Biological evaluation, **2012**
- 11. Rini Joshi, Studies on protein acetyltransferase function of calreticulin, 2012
- 12. Deepak Gupta, A Library of Aryls, Alkyl Aryls and Heteroaryls as Biodynamic Agents, 2013
- 13. **Anuj Thakur**, Design, Facile Synthesis and Development of Novel Molecular Hybrids as Therapeutic Agents, **2016**
- 14. **U Chinna Rajesh**, Design and Development of Nanocatalysts for Green and Sustainable Synthesis of Biologically Active Heterocycles, **2016**
- 15. Satya V Pavan, Facile and Green Synthesis of Biologically Relevant Heterocycles, 2016
- 16. **Mohit Tripathi**, Rational Strategies for Facile Synthesis of Medicinally Relevant Molecules and their Biological Activity Evaluation, **2017**
- 17. **P. Linga Reddy**, Design and Application of Nanomaterials for Organic Transformations & Synthesis of Medicinal Hybrids, **2017**
- 18. **Rohit Kholia**, Development of Facile Synthetic Strategies for Medicinally Important Molecules, Biological Evaluations and Mechanistic Investigations, **2018**
- 19. **Shiv Shyam**, Design and Synthesis of N,O & S containing Heterocyclic Molecular Hybrids as Biodynamic Agents, **2018**
- 20. **S. Kulangara Kandi**, STRATEGIC DESIGN, SYNTHESIS, AND BIO-EVALUATION OF MOLECULAR HYBRIDS AS POSSIBLE THERAPEUTICS, **2019**
- 21. **Gunjan Purohit**, Target Oriented Synthesis of Nanomaterials: Application in Organic Transformations and Photosensitization, **2020**
- 22. **Aparna Bahuguna**, Computational Approach for the Development of Antitubercular and Antimalarial Agents, **2020**
- 23. **Upasana Gulati**, Design and development of coinage metal (Cu AND Ag) nanocatalysts for green and sustainable synthesis of heteroatom containing value added molecules, **2020**
- 24. **Srishti Rawat**, Design, Synthesis and Characterization of Biologically Active Heterocyclic Compounds, **2020**
- 25. **Manish Rawat**, Design and assembly of metal based catalytic system for green and sustainable synthesis of biologically active heterocycles, **2021**.
- 26. **Gagandeep**, Structural optimization of heterocyclic compounds for their therapeutic applications, **2021**.
- 27. **Shashikan Tiwari,** Metal free approach for the functionalization of alkynes via cycloaddition and difunctionalization strategy, **2024.**

S. No	Name	Period of stay	Present position/address
1.	Dr. Mukesh C Joshi	November 2003 -	Assistant Professor, Kirori Mal College,
		November 2007	University of Delhi
2.	Dr. Gopal S Bisht	November 2003 –	Associate Professor
		November 2007	Jaypee University, Solan
3.	Dr. Penny Joshi	<b>October 2003 –</b>	Assistant Professor, Kumaun University,
		March 2008	Nainital
4.	Dr. Himanshu Aethaya	June 2004 –	Quality Control Officer
		April 2009	Indian Oil Corporation, Panipat
5.	Dr. Ritu Mamgain	June 2004 –	VIT, Vellore
		January 2009	
6.	Dr. Mukul Sharma	February 2005 –	Scientist, Ifca Labs, Varodara

Wednesday, April 24, 2024

		September 2009	
7.	Dr. Nitin Kumar	December 2007 – June 2011	Scientist, Fresenius Cabi, Gurgaon
8.	Dr. Beena Negi	July 2008 – June 2012	Assistant Professor, Gargi College, DU
9.	Dr. Sunny Manohar	February 2009 – October 2012	Assistant Professor, DDU, University of Delhi
10.	Dr. Seema Joshi	March 2007-October 2012	DS Kothari Fellow, JNU, Delhi
11.	Dr. Rini Joshi	January 2010- November 2012	PDF, Thomas Jefferson University, USA
12.	Dr. Deepak Gupta	June 2009-June 2013	Ad hoc Assistant Professor Shradhanand College, University of Delhi
13.	Dr. Anuj Thakur	January 2011- January 2016	Manager, HCL Ltd
14.	Dr U Chinna Rajesh	August 2011 – April 2016	Scientist, Millipore Sigma, Ohio, USA
15.	Dr Satya V Pavan	February 2013 – July 2016	Group Leader, Chromachemie Laboratory Private Limited, Banglore
16.	Dr Mohit Tripathi	November 2011 – March 2017	Manager, BASF Chemical, Mumbai
17.	Dr P. Linga Reddy	February 2012-Till Date	RA, IIT Mumbai
18.	Dr Rohit Kholia	April 2013-Oct 2018	Assistant Professor, Dayal Singh College, University of Delhi
19.	Dr Shiv Shyam	Feb 2014-Oct 2018	Lubiliant Organosys Ltd
20.	S. Kulangara Kandi	June 2014 – Dec 2019	Evalueserve Pvt Ltd
21.	Gunjan Purohit	August 2014 – July 2020	IIT Mumbai
22.	Aparna Bahuguna	March 2015 - July 2020	Elsevier Publisher
23.	Upasana Gulati	March 2015 - August 2020	USA
24.	Srishti Rawat	March 2015 - August 2020	Jubiliant Chemsys Ltd, Noida
25.	Manish Rawat	March 2016 - August 2021	Assistant Professor, Sharda University
26.	Gagandeep	March 2017 - August 2021	Assistant Professor, Hindu College, University of Delhi
27.	Shashikant Tiwari	June 2018 – August 2023	PDF, University of Delhi

### Academic Tree:

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# **SUPERVISION OF DOCTORAL THESIS (Under Progress):**

• **Registered PhD students:**, Sakeer Mohamad, Shiva Pandey, Mohit Kumar, Sukriti Santra

### **RESEARCH ASSOCIATE/RESEARCH SCIENTIST:**

- Dr Ritika Sharma (DS Kothari Fellow, 2022 Till date).
- Kemant Pratap (DS Kothari Fellow, 2019 2023), Assistant Professor-NCERT Mysuru
- Dr. Prija Poonan (DS Kothari Fellow, 2014 2018)
- Dr. Archana Gupta (DST Women Scientist, 2014 Till Date)
- Dr Praveen K Verma (DS Kothari Fellow 2015 2016)
- Dr Girijesh K Verma (DS Kothari Fellow 2015 Till Date), Assistant Professor-Gorakhpur University
- Dr Anita Kharakwal (NPDF-DST, June 2017 Till Date), Assistant Professor-Berinag, UK
- Dr. K. Kranthi Raj (2012 2013),
- Dr Ram Singh (DST Young Scientist, 2004 2007), (Current Address: Assistant Professor, Delhi Technological University, Delhi).

# **SUPERVISION OF AWARDED M. Phil DESSERTATIONS:**

• Nisha Agarwal; Sunny Manohar

# **SUPERVISION OF M. Pharm/ M. Tech DESSERTATIONS:**

Monika (NIPER 2002-2003); Shamsheer K Kandi (M. Tech 2011-2012)



ISCB Excellence Award in Drug Research 2022.



VASVIK RESEARCH AWARD (2021)



Special Appreciation Award for Exemplary Services, University of Delhi (2021).



Gold Badge and Hon. Diploma, International Scientific Partnership Foundation, Russaia (2015).



Professor RS Shah Memorial Award, India Science Congress (2016).



Professor SP Heramath Memorial Award, India Council of Chemist (2017).



ISCB Young Scientist Award (2010)

Research Group with Robert H. Grubbs (Noble Laureate)



**CRSI Young Scientist Award (2007)** 

NMR Training Certificate (Jeol Japan)



**Receiving Memento from Dr DS Bhakuni (2012)** 

Rajesh Receiving Best Poster Award (ISCB, 2103)



Group Photograph (January 2020)