### Dr. SUMAN SRIVASTAVA

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Researchgate: <a href="https://www.researchgate.net/profile/Dr">https://www.researchgate.net/profile/Dr</a> Suman Srivastava

Orcid ID: <u>0000-0002-7609-5355</u>

Google Scholar Id: 7IFELhYAAAAJ&hl

Vidwan-ID: 340176

### **Research interest:**

• Development of novel synthetic methodology for construction of biologically important scaffolds.

• Contribution towards Green chemistry by introduction of novel green methodology for Ferrocene based heterocycle synthesis.

# **Sponsored Project undertaken:**

1. DST sponsored Project entitle "Design, Synthesis and Application of bio inspired NHC metal complexes in catalysis and bioimaging". Project Grants 35 lakhs. Principal Investigator: Dr. Suman Srivastava From 2014-2020.

2. Dr. D S Kothari postdoctoral project Sponsored from University Grant Commision (2013). Not availed.

#### **Professional Career**

Assistant professor at Veer Kunwar Singh University Ara

29<sup>th</sup> march 2025 onwards

Assistant Professor at K R Mangalam University

1st Feb 2023 to 26<sup>th</sup> March 2025

DST inspire faculty at National Institute of Technology Delhi

Post Doctoral Fellow at School of Basic Sciences, IIT Mandi

September 2013-June 2014

# Academic qualifications

- Ph.D. (Chemistry, 2007-2013): CSIR-Central Drug Research Institute Lucknow (Degree Awarded from Banaras Hindu University) \*Title of Thesis: "Design and Synthesis of Novel Ferrocene substituted Heterocycles as Therapeutic Agents"
- M.Sc. (Inorganic Chemistry, 2004-2006, First division: 8.14 CGPA; 81.4%): Banaras Hindu University, Varanasi India.

• B.Sc. (Chemistry, Botany, Zoology, 1998-2001, First division: 61%): Deen Dayal Upadhyaya Gorakhpur University, Gorakhpur India.

Awards & Fellowship Received:

- 1. DST-INSPIRE Faculty award (2014)
- 2. Postdoctoral fellowship at IIT Mandi (2013)
- 3. Dr D. S. Kothari postdoctoral fellowship (2013).
- 4. **CDRI-Incentive award** for the appreciation of excellent research work resulting in publication of paper "Cascade [4+1] annulation via more environmentally friendly nitrogen ylide in water: Synthesis of bicyclic and tricyclic fused dihydrofuran" in the journal Green Chemistry, 2012, *14*, 3269-3272 at Central Drug Research Institute (2013).
- 5. **CDRI-Incentive award** for the appreciation of excellent research work resulting in publication of paper "Functional ionic liquid mediated synthesis (FILMs) of dihydrothiophene and tacrine derivatives" in the journal Green Chemistry, 13, 2459-2463 at Central Drug Research Institute (2012).
- 6. **CDRI-Incentive award** for the appreciation of excellent research work resulting in publication of paper "synthesis of new class of alkyl azaarene pyridinium zwitterions via iodine mediated sp<sup>3</sup> C-H bond activation" in the journal Organic Letters, 13 (24), 6366-6369 at Central Drug Research Institute (2012).

7.	CSIR-UGC-NET (JRF)	2006
8.	GATE (Chemical Sciences)	2007
9.	GATE (Chemical Sciences)	2006

- 10. **Acharya P. C. Ray** memorial cash prize for securing highest percentage of aggregate marks at the M. Sc. Inorganic chemistry examination, 2006 (Banaras Hindu University).
- 11. **Late Prof. Sanat Kumar Basu** cash prize for securing highest percentage of marks in chemistry at the M.Sc. (Final) examination, 2006 (Banaras Hindu University).

**Thesis Guided**: 01 M. Tech student (Smart Material and Technology) at National Institute of Technology, Delhi

Administrative Assignment: 1. Girls Hostel warden 2018-2020 at NIT Delhi.

- 2. Criterion 1- member at K R Mangalam University, Gurgaon.
- 3. Lab Incharge for Chemistry Lab, K R Mangalam University, Gurgaon.
- 4.SRC Member of SBAS at K R Mangalam University, Gurgaon.
- 5.BoS Member of SBAS at K R Mangalam University, Gurgaon.

## **Publications in International Journal (\*Corresponding Author)**

- Priya, Samiran Hutait, Nitin K. Puri, Bharat Kumar, Nisha Saxena, Ritika Khatri \* and Suman Srivastava\* MoS2-driven visible light photocatalytic oxidation for sustainable synthesis of quinazolin-4(3H)-one in water, New J. Chem., 2025, Advance Article. DOI https://doi.org/10.1039/D5NJ02692J, ISSN: 1369-9261
- Priya, Suman Srivastava,\*and Ritika Khatri\* Recent Advances on Catalysts Based on MoS2: A
  Review on Diverse Applications, ChemistrySelect, 2025, ChemistrySelect, 2025, 10, e202405247.
  doi.org/10.1002/slct.202405247, ISSN no. 2365-6549
- Suman Srivastava, Synergistic Dual Activation Catalysis by Saccharin-Based Ionic Liquids for Diastereoselective Synthesis of Ferrocene-Appended Furopyranones, Furochromenones, and Benzofuranones, Applied Organometallic Chemistry, 2025, 39,(2), e7827.
   <a href="https://doi.org/10.1002/aoc.7827">https://doi.org/10.1002/aoc.7827</a>, Online ISSN: 1099-0739 Print ISSN:0268-2605
- Samiran Hutait, Vipin K. Maikhuri, Avadhesh Kumar Pandey, Poonam Shukla, Suman Srivastava\*
   Versatile Quinazolinone Synthesis: N-Bromosaccharin-Catalyzed Divergence in 2,3-Dihydroquinazolin-4(1H)-one and Quinazolin-4(3H)-one Formation, Chemistryselect, 9(12), e202304087, 2024. <a href="https://doi.org/10.1002/slct.202304087">https://doi.org/10.1002/slct.202304087</a>, ISSN no. 2365-6549
- 5. **Suman Srivastava**\*, Arpna Tamrakar, Sandeep Joshi, Mrituanjay D. Pandey and Rampal Pandey\* Metal-free hydroarylation derived ferrocene-dihydrocoumarin as ultrasensitive

- dual-channel probe selectively for picric acid. Applied Organometallic Chemistry, e7028, 2023, https://doi.org/10.1002/aoc.7028, Online ISSN:1099-0739 Print ISSN:0268-2605
- 6. Suman Srivastava,\* Neha Thakur, Namyashree Nayak, Neha Garg, Rampal Pandey, Development of ferrocene-appended benzimidazopyridine and pyrroloquinoxaline probes for structure regulated distinct signalling of Fe<sup>3+</sup> in aqueous media and HeLa cells *Applied Organometallic Chemistry*, 36(7), e6700, 2022, <a href="https://doi.org/10.1002/aoc.6700">https://doi.org/10.1002/aoc.6700</a>, Online ISSN:1099-0739 Print ISSN:0268-2605
- 7. Kamalpreet Kaur and **Suman Srivastava**\* Artificial Sugar Saccharin and its derivatives:

  Role as catalyst, RSC Advances, 10, 36571–36608, 2020,

  <a href="https://doi.org/10.1039/D0RA05974A">https://doi.org/10.1039/D0RA05974A</a>. ISSN: 2046-2069
- 8. Kamalpreet Kaur and **Suman Srivastava** \* Beckmann rearrangement catalysis: A Review of Recent Advances, *New J. Chem.*, 44, 18530-18572, 2020, <a href="https://doi.org/10.1039/D0NJ02034F">https://doi.org/10.1039/D0NJ02034F</a>, ISSN: 1369-9261
- 9. **Suman Srivastava\*** Knoevenagel condensation and Michael addition in bio-renewable deep eutectic solvent: Facile synthesis of a library of Bis-enol Derivatives, *ChemistrySelect*, 5(2) 799-803, 2020, https://doi.org/10.1002/slct.201904806, ISSN no. 2365-6549
- 10. **Suman Srivastava,**\* Neha Thakur Ashutosh Singh Poonam Shukla Vipin Kumar Maikhuri Neha Garg Ashok Prasad and Rampal Pandey\* Development of a fused imidazo[1,2-a]pyridine based fluorescent probe for Fe<sup>3+</sup> and Hg<sup>2+</sup> in aqueous media and HeLa cells, , RSC Adv., 2019, 9, 29856-29863. DOI <a href="https://doi.org/10.1039/C9RA04743C">https://doi.org/10.1039/C9RA04743C</a>, ISSN: 2046-2069
- 11. Himani Sharma and **Suman Srivastava**,\* Anion Functionalized Ionic liquid From Artificial Sugar: A Sustainable Pathway for Diverse Bis-enol Derivatives, *New J. Chem.*, 43, 12054-12058, 2019, DOI <a href="https://doi.org/10.1039/C9NJ01899A">https://doi.org/10.1039/C9NJ01899A</a>, ISSN: 1369-9261.

- 12. Suman Srivastava,\* Novel Ferrocene-labeled Propargyl amines via CuI Multicomponent Amination/Alkynylation, New J. Chem., 43, 6469-6471, 2019, DOI <a href="https://doi.org/10.1039/C9NJ00538B">https://doi.org/10.1039/C9NJ00538B</a>, ISSN: 1369-9261.
- 13. Himani Sharma and **Suman Srivastava\*** Anion-cation co-operative catalysis by artificial sweetener saccharine-based ionic liquid for sustainable synthesis of 3,4-dihydropyrano[*c*]chromenes, 4,5-dihydropyrano[4,3-*b*]pyran and tetrahydrobenzo[*b*]pyrans in aqueous medium, *RSC advances*., 8, 38974-38979, 2018,10.1039/C8RA06889E, ISSN: 2046-2069.
- 14. Atul Kumar,\* Shivam Maurya, Kemant, and Suman Srivastava, Betaine mediated synthesis of annulated dihydrofurans from oxobis (methylthio) ketene acetals and N-butyl-N'-methyl ethane- 1,2-diamine as precursors via NHC elimination, Chem. Commun., 52, 2795-2798, 2016, <a href="https://doi.org/10.1039/C5CC09509C">https://doi.org/10.1039/C5CC09509C</a>, ISSN: 1364-548X
- 15. Atul Kumar,\* Garima Gupta, **Suman Srivastava**, Ruchi Saxena, Ruchir Kant, Ranjana S. Khanna, Prakas R. Maulik, and Anila Dwivedi, Novel Diastereoselective Synthesis of Spiropyrrolidine-Oxindole Derivatives as Anti-Breast Cancer Agents *RSC advances*, , *3*, 4731-4735, 2013, ISSN: 2046-2069
- 16. Atul Kumar,\* Suman Srivastava, Garima Gupta, Promod Kumar, Jayanta Sarkar, Functional Ionic liquid [bmim][Sac] Mediated Synthesis of Ferrocenyl Thiopropanones via "Dual Activation of Substrate by Ionic liquid" *RSC Advances*, 3, 3548-3552, 2013, https://doi.org/10.1039/C3RA22543G, ISSN: 2046-2069
- 17. Atul Kumar,\* Promod kumar, Vishwa Deepak Tripathi, Suman Srivastava A Novel Access for Indole-3-substituted Dihydrocoumarins in Artificial Sweetener Saccharin based Functional Ionic Liquid, RSC advances, 2, 11641-11644, 2012, DOI https://doi.org/10.1039/C2RA21284F., ISSN: 2046-2069
- 18. Atul Kumar,\* Suman Srivastava and Garima Gupta, Cascade [4+1] annulation via more environmentally friendly nitrogen ylide in water: Synthesis of bicyclic and tricyclic fused

- dihydrofuran, *Green Chemistry*, *14*, 3269-3272, 2012, https://doi.org/10.1039/C2GC36276G, ISSN No. 1463-9270.
- 19. Atul Kumar,\* Garima Gupta, and **Suman Srivastava**, Synthesis of New Class of Alkyl Azarene Pyridinium Zwitterions via Iodine Mediated sp<sup>3</sup> C-H Bond Activation, *Organic letters*, 13, 6366-6369, 2011, <a href="https://doi.org/10.1021/ol202654j">https://doi.org/10.1021/ol202654j</a>, 1523-7052 (online) and 1523-7060 (print)
- 20. Atul Kumar,\* Garima Gupta and Suman Srivastava, Functional ionic liquid mediated synthesis (FILMS) of dihydrothiophenes and tacrine derivatives, Green Chemistry, 13, 2459-2463, 2011, <a href="https://doi.org/10.1039/C1GC15410A">https://doi.org/10.1039/C1GC15410A</a>, ISSN No. 1463-9270
- 21. Atul Kumar, \* Suman Srivastava, Garima Gupta, Vinita Chaturvedi, Sudhir Sinha, and R. Srivastava, Natural Product Inspired Diversity Oriented Synthesis of Tetrahydroquinoline Scaffolds as Antitubercular Agent. ACS. Combinatorial Science, 13, 65-71, 2011, 10.1021/co100022h, (ISSN 2156-8952.
- 22. Atul Kumar,\* Siddharth Sharma, Vishwa Deepak Tripathi, Suman Srivastava, Synthesis of chalcones and flavanones using Juliae Kocienski olefination. Tetrahedron 66, 9445-9449, 2010, 10.1016/j.tet.2010.09.089 ISSN No. 0040-4020
- 23. Atul Kumar,\* Garima Gupta, and Suman Srivastava, Diversity Oriented Synthesis of Pyrrolidines via Natural Carbohydrate Solid Acid Catalyst. *Journal of Combinatorial Chemistry*, 12, 458-462, 2010, DOI: 10.1021/cc100007a, (ISSN 2156-8952)
- 24. Atul Kumar,\* Suman Srivastava, Garima Gupta, Supramolecular carbohydrate scaffold-catalyzed synthesis of tetrahydroquinolines. *Tetrahedron Letters* 51, 517-520, 2010, 10.1016/j.tetlet.2009.11.057, ISSN No. 0040-4039

**Patent:** PORTABLE FOURIER TRANSFORM INFRARED SPECTROPHOTOMETER, Natwar Kumar Jha Dr. Poonam Shukla, Ms. Parul Srivastava, Dr. Suman Srivastava, Dr. Nisha Saxena, Sudha Kumari, Law Kumar, Vishakha Tiwari, Govinda Kumar, Anupama Anjali, Publication date 2024/2/1

Patent office IN

Patent number 402419-001

Application number 155480

Indian Design Patent: PORTABLE DEVICE FOR BONE CANCER DETECTION

Inventors: Dr. Nisha Saxena, Dr. Suman Srivastava, Dr Noopur Srivastava, Dr. Twinkle

Keshari, Dr. Poonam Shukla, Dr. Ashish Srivastava

Design No.: 430640-001

Publication Date: 16/09/2024

Invited Lecture: Invited Lecture on the topic "Greening Up The Lab: Good Laboratory Practices for Sustainable Research "Skill Development Programme-Good Laboratory Practices" on 24th July, 2020 in P. G. Department of Chemistry of Veer Kunwar Singh University, Ara, Bhojpur, Bihar, India.

#### **Conferences attended:**

- ❖ Green Chemistry in Environmental Sustainability & Chemical Education" (ICGC-2016) from Thursday, 17 November to Friday, 18 November 2016 at Daulat Ram College Auditorium, University of Delhi.
- ❖ Medicinal chemistry and drug discovery and development india 2015" at Chennai, Sri Ramachandra University.
- ❖ 4<sup>th</sup> CDRI-NIPER RBL symposium on medicinal chemistry and pharmaceutical sciences, at Central Drug Research Institute Lucknow on 23<sup>rd</sup>-25<sup>th</sup> Feb **2012**.
- ❖ 3<sup>rd</sup> CDRI-NIPER RBL symposium on medicinal chemistry and pharmaceutical sciences, at Central Drug Research Institute Lucknow on 3<sup>rd</sup>-5<sup>th</sup> March 2011
- ❖ 3<sup>rd</sup> International Symposium on Current Trends in Drug Discovery Research 2010 (CTDDR 2010), at Central Drug Research Institute Lucknow on 17<sup>th</sup>-21<sup>th</sup> Feb 2010, published in special issue of Medicinal Chemistry Research, 2010, Vol. 19 (No. 1/6), page S125-S126.
- National symposium on natural product and organic synthesis, at Department of Chemistry, Lucknow University, on 28<sup>th</sup> March 2012.
- ❖ National symposium on recent advances in female reproductive health research at Central Drug Research Institute Lucknow on 11<sup>th</sup>-12<sup>th</sup> Dec **2008**.

❖ National symposium on Design the molecular world through chemistry, at Department of Chemistry, Banaras Hindu University, Varanasi on 24<sup>th</sup>-25<sup>th</sup> March 2006.

# **Membership of Professional Bodies**

- 1. Lifetime membership of Chemical Research Society of India (CRSI), Membership ID: LM1878.
- Lifetime membership of Indian Society of Chemist and Biologist (ISCB) Membership ID: LF-1206/2023

### Personal details

Gender Female
Marital status Married
Nationality Indian

## **Declaration**

I hereby declare that all the information given above is true to the best of my knowledge.

Date & Place
Signature of the applicant
October 28, 2025
Buxar

(Suman Srivastava)