

# **CURRICULUM VITAE**

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Siddharth Sharma, PhD

Assistant Professor

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## **Professional career:**

- ❖ Assistant Professor, Mohanlal Sukhadia University, Udaipur  
**June 2018- Till date**
- ❖ DST-INSPIRE Faculty,  
Mohanlal Sukhadia University, Udaipur, Rajasthan  
**June 2016- June 2018**
- ❖ DST-INSPIRE Faculty,  
Guru Nanak Dev University, Amritsar, Punjab:  
**May 2014- May 2016**
- ❖ Postdoctoral Research Fellow at Pohang,  
University of Science and Technology (POSTECH):  
**March 2012- March 2014**

## **Research Career:**

- ❖ Senior Research Fellow (CSIR-CDRI):  
**July 2009-Feb 2012**
- ❖ Junior Research Fellow (CSIR-CDRI):  
**July 2007-Jun 2009**

## **Academic qualifications:**

- Ph.D. (Medicinal Chemistry, 2007-2012): Jawaharlal Nehru University, New Delhi, India.
- M.Sc. (Organic Chemistry, 2005-2007, First division: **74%**): Mohanlal Sukhadia University, Udaipur, Rajasthan, India.
- B.Sc. (Chemistry, Mathematics, Physics, 2002-2005, First division: **64%**): University of Kota, Kota, Rajasthan, India.

## **Teaching experience:**

- Teaching organic chemistry in UG and PG classes since 2014.

## **Awards:**

- FAST Track Scheme for Young Scientists Start-Up Research Grant **2016-2019**
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- DST-INSPIRE Faculty Award for Independent Research work in India: **2014-2019**
- Two CSIR-CDRI incentive awards: **2011-2012**
- National Eligibility Test (NET) for the eligibility of lectureship in India: **2007**
- Senior Research Fellowship (CSIR, India): **2009-2012**
- Junior Research Fellowship (CSIR, India): **2007- 2009**
- GATE-IIT Kanpur (Chemical Sciences): **2007 (All India Rank-314)**

### Research Interests:

Development and utilization of new multi-component reactions, continuous flow synthesis, metal catalyzed transformation, synthesis of new bioactive molecules.

### Major Research Projects:

- Multi-disciplinary research in medicinal and organic chemistry (35 Lakh; INSPIRE Project, ongoing since May 2014-May 2019)
- Young scientist award from DST (23 Lakh; INSPIRE Project, May 2015-May 2017)

### Publication Statistics:

<b>Total publications:</b>	<b>28</b>
<b>Total Impact Factor</b>	<b>168</b>
<b>Average Impact Factor</b>	<b>5.9</b>
<b>Sum of the Times Cited*</b>	<b>800+</b>
<b>h-index*</b>	<b>14</b>

\*Source: <https://scholar.google.co.in/citations?user=c-oFx5UAAAAJ&hl=en>

### Complete List of Publications:

#### Independent Career

1. Karandeep Singh, Bhanwar Kumar Malviya, Tapta Kanchan Roy, Venus Singh Mithu, Vimal K. Bhardwaj, Ved Prakash Verma, Swapandeep Singh Chimni, and **Siddharth Sharma**\* Catalyst-Controlled Structural Divergence: Selective Intramolecular *7-endo-dig* and *6-exo-dig* Post-Ugi Cyclization for the Synthesis of Benzoxazepinones and Benzoxazinones *J. Org. Chem.*, **2018**, 83, 57-68 (**Impact Factor = 4.8**).
2. Karandeep Singh, Amanpreet Kaur, Venus Singh Mithu, and **Siddharth Sharma**\* Metal-Free Organocatalytic Oxidative Ugi Reaction Promoted by Hypervalent Iodine, **J. Org. Chem.** (ACS publications), 2017, 82, 5285-5293 (**Impact Factor = 4.8**).

3. Karandeep Singh, and **Siddharth Sharma**,\* An isocyanide based multi-component reaction under catalyst- and solvent-free conditions for the synthesis of unsymmetrical thioureas, *Tetrahedron Letters* (Elsevier publications), 2017, 58, 197-201 (**Impact Factor = 2.5**).
4. Karandeep Singh, Ajay K. Singh, Devendra Singh, Rakhi Singh, and **Siddharth Sharma**\* Pd/Fe<sub>3</sub>O<sub>4</sub> supported on nitrogen doped reduced graphene oxide for room temperature isocyanide insertion reactions, *Catalysis Science and Technology* (Royal Society of Chemistry Publications), 2016, 6, 3723 - 3726 (**Impact Factor = 5.6**).
5. **Siddharth Sharma**,\* and Abhilasha Jain. Ligand free palladium-assisted insertion of isocyanides to urea derivatives for cascade synthesis of phenylamino-substituted quinazolinones. *Tetrahedron letters* (Elsevier publications), 2014, 55, 6051, (**Impact Factor = 2.5**).

### As Post-doctoral Fellow

6. **Siddharth Sharma**, Ram Awatar Maurya, Kyoung Ik Min, Guan-Young Jeong and Dong-Pyo Kim.\* Odorless Isocyanide Chemistry: Integrated Microfluidic System for Multistep Reaction Sequence, *Angewandte Chemie International Edition* (Wiley publications) 2013, 52, 7564-7568, **Selected as cover image article**, (**Impact Factor = 11.6**).
7. **Siddharth Sharma**, K. C. Basavaraju, Ajay K. Singh, and Dong-Pyo Kim.\* Continuous Recycling of Homogeneous Pd/Cu Catalysts for Cross-Coupling Reactions. *Organic Letters* (American Chemical Society) 2014, 16, 33974, (**Impact Factor = 6.3**).
8. **Siddharth Sharma**, Ajay K. Singh, Devendra K. Singh and Dong-Pyo Kim.\* Chemical fixation of carbon dioxide by copper catalyzed multicomponent reactions for oxazolidinedione syntheses. *Green Chemistry* (Royal Society of Chemistry Publications), 2015, 17, 1404, (**Impact Factor = 8.0**).
9. K.C Basavaraju, **Siddharth Sharma**, Ram Awatar Maurya, and Dong-Pyo Kim.\* A Safe Approach for Toxic OsO<sub>4</sub> Heterogeneous Catalytic Process in a Nanobrush Polymer Microreactor, *Angewandte Chemie International Edition* (Wiley publications), 2013, 52, 6735-6738, **Selected as cover image article**, (**Impact Factor = 11.6**).
10. Guanyoung Jeong, Ajay K. Singh, **Siddharth Sharma**, Ki Won Gyak, Ram Awatar Maurya and Dong-Pyo kim,\* One-flow Syntheses of Diverse Heterocyclic Furan Chemicals Directly from Fructose via Tandem Transformation Platform. *Nature Asia Material* (Nature Publishing Group), 2015, 7, e173 (**Impact Factor = 9.9**).
11. Ajay K. Singh, Seungwook Jang, Jae Yul Kim, **Siddharth Sharma**, K.C Basavaraju, Min-Gyu Kim, Kyung-Rok Kim, Jae Sung Lee, Hong H. Lee, and Dong-Pyo Kim,\* One-Pot

- Defunctionalization of Lignin-Derived Compounds by Dual-Functional Pd<sub>50</sub>Ag<sub>50</sub>/Fe<sub>3</sub>O<sub>4</sub>/N-rGO Catalyst. **ACS Catal.** (American Chemical Society), 2015, 5, 6964 (**Impact Factor = 9.9**).
12. Dong-Hyeon Ko, Wurong Ren, Jin-Ho Kim, Jun Wang, Hao Wang, **Siddharth Sharma**, Marco Faustini, Dong-Pyo Kim, Superamphiphobic silicon nano wire embedded micro system and in contact flow performance of gas and liquid streams. **ACS Nano** (American Chemical Society), 2016, 1156-1162 (**Impact Factor = 13.9**).
  13. K.C Basavaraju, **Siddharth Sharma**, Ajay K. Singh, and Dong-Pyo Kim.\* Chitosan-Microreactor: A Versatile Platform for Heterogeneous Organic Synthesis in Microfluidics. **Chem. Sus. Chem.** (Willey publications), 2014, 7, 1864, **Selected as cover image article**, (**Impact Factor = 7.6**).
  14. Ajay K. Singh, K.C Basavaraju, **Siddharth Sharma**, Seungwook Jang, Chan Pil Park and Dong-Pyo Kim.\* Eco-efficient preparation of N-doped graphene equivalent and its application to metal free selective oxidation reaction **Green Chemistry**, (Royal Society of Chemistry Publications), 2014, 16, 3024-3030, **Selected as cover image article**, (**Impact Factor = 8.0**).
  15. Wurong Ren, Jayakumar Perumal, Jun Wang, Hao Wang, **Siddharth Sharma** and Dong-Pyo Kim,\* Whole ceramic-like microreactors from inorganic polymers for high temperature or/and high pressure chemical syntheses, **Lab on a Chip** (Royal Society of Chemistry Publications), 2014, 14, 779-786, (**Impact Factor = 5.7**).

#### **As Ph. D. Scholar**

16. Atul Kumar,\* **Siddharth Sharma**. A grinding-induced catalyst- and solvent-free synthesis of highly functionalized 1,4-dihydropyridines via a domino multicomponent reaction. **Green Chemistry** (Royal Society of Chemistry Publications), 2011, 13, 2017, (**Impact Factor = 8.0**).
17. Atul Kumar,\* **Siddharth Sharma**, Lalit P. Gupta, Pervez Ahmad, Swayam Prakash Srivastava, Neha Rahuja, A.K. Tamrakar, Arvind Kumar Srivastava. Synthesis of propiophenone derivatives as new class of antidiabetic agents reducing body weight in db/db mice, **Bioorganic & Medicinal Chemistry** (Elsevier publications), 2012, 20, 2172, (**Impact Factor = 3.0**).
18. Atul Kumar,\* **Siddharth Sharma**, Ram Awatar Maurya. Single nucleotide catalyzed biomimetic reductive amination. **Advanced synthesis and catalysis** (Willey publications),

- 2010, 352, 2227, **Reproduced by the "Nature India" as a Research highlight, (Impact Factor = 5.5).**
19. Atul Kumar,\* **Siddharth Sharma**, Vishwa Deepak Tripathi, Ram Awatar Maurya, Swayam Prakash Srivastava, Gitika Bhatia, A.K. Tamrakar, Arvind Kumar Srivastava. Design and synthesis of 2,4-disubstituted polyhydroquinolines as prospective antihyperglycemic and lipid modulating agents. **Bioorganic and Medicinal Chemistry** (Elsevier publications), 2010, 18, 4138, **Reproduced by the "Nature India" as a Research highlight, (Impact Factor = 3.0).**
  20. Atul Kumar,\* **Siddharth Sharma**, Ram Awatar Maurya and Jayant Sarkar. Diversity Oriented Synthesis of Benzoxanthene and Benzochromene Libraries via One-Pot, Three-Component Reactions and Their Anti-proliferative Activity. **Journal of Combinatorial Chemistry** (American Chemical Society), 12, 2010, 20, **(Impact Factor = 3.4).**
  21. Atul Kumar,\* **Siddharth Sharma**, Vishwadeepak Tripathi, Suman Srivastava. Synthesis of chalcones and flavanone from Julia-Kocienski olefination. **Tetrahedron** (Elsevier publications), 2010, 66, 9445, **(Impact Factor = 2.9).**
  22. Atul Kumar,\* **Siddharth Sharma**, Ram Awatar Maurya. A novel multi-component reaction of indole, formaldehyde, and tertiary aromatic amines. **Tetrahedron letters**, 2009, 50, 5937, **(Impact Factor = 2.4).**
  23. Vikas Verma, Vikas Sharma, Vishal Singh, **Siddharth Sharma**, Ajay Kumar Bishnoi, Vishal Chandra, J.P. Maikhuri, Anila Dwivedi, Atul Kumar, Gopal Gupta.\* Designed modulation of sex steroid signaling inhibits telomerase activity and proliferation of human prostate cancer cells. **Toxicology and Applied Pharmacology** (Elsevier publications), 2014, 280 (2), 323-334, **(Impact Factor = 4.1).**
  24. Atul Kumar,\* **Siddharth Sharma**, Ram Awatar Maurya. Biocatalytic synthesis of benzothia/(oxa)zole in aqueous medium. **Tetrahedron Letters** (Elsevier publications), 2010, 48, 6224, **(Impact Factor = 2.4).**
  25. Atul Kumar,\* Ram Awatar Maurya, **Siddharth Sharma**, A. B Singh, Akhilesh Tamarkar, Arvind Kumar Srivastava. Design and synthesis of 3,5-diarylisoaxazole derivatives as novel class of anti-hyperglycemic and lipid lowering agents. **Bioorganic and Medicinal Chemistry**, 2009, 17, 5285, **(Impact Factor = 3.0).**
  26. Atul Kumar,\* Ram Awatar Maurya, **Siddharth Sharma**, Mukesh Kumar, Gitika Bhatia. Synthesis and biological evaluation of N-aryl-1,4-dihydropyridines as novel antidyslipidemic and antioxidant agents. **European Journal of Medicinal Chemistry** (Elsevier publications), 2010, 45, 501, **(Impact Factor = 3.1).**

27. Atul Kumar,\* Ram Awatar Maurya, Siddharth Sharma. Oxidative aromatization of 1,4-dihydropyridines and pyrazolines using HbA-H<sub>2</sub>O<sub>2</sub>: an efficient biomimetic catalyst system providing metabolites of drug candidates. **Bioorganic and Medicinal Chemistry Letters**, 2009, 19, 4432, (Impact Factor = 2.6).
28. Atul Kumar,\* Ram Awatar Maurya, Siddharth Sharma, Pervez Ahmad, A.B. Singh, Gitika Bhatia, Arvind K. Srivastava. Pyranocoumarins: A new class of anti-hyperglycemic and anti-dyslipidemic agents. **Bioorganic and Medicinal Chemistry Letters**, 2009, 19, 6447, (Impact Factor = 2.6).

### Invited Talks:

1. Isocyanide Insertion Chemistry: From Flask to Flow, **FCASI-2017**, at Rajasthan University, Jaipur, Rajasthan, India
2. Continuous Flow Chemistry: A New Paradigm in Drug Discovery Process, "**An international Seminar on latest Developments in Drug Discovery and Development and their economic utilization as per global perspective**" on 25-27 Sept 2014 at B. R. Nahata College of Pharmacy, Mandsaur, MP.
3. Isocyanide Insertion Chemistry, "Contemporary Facets in Organic Synthesis (CFOS 2017)", during 22-24 December, 2017 at Department of Chemistry, Indian Institute of Technology Roorkee.

### Symposium and Conferences:

1. Atul Kumar and Siddharth Sharma. Design and synthesis of 3,5-diarylisoazole derivatives as novel class of anti-hyperglycemic and lipid lowering agents. **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 (Poster presenter). Abstract published in special issue of **Medicinal Chemistry Research, 2010, Vol. 15** (No. 1/6), page 202-203. (Poster presenter)
2. Atul Kumar and Siddharth Sharma. 2-(Benzo[d]thiazol-2-ylsulfonyl)-1-phenylethanones: New Reagents for Julia-Kocienski Olefination. **VI<sup>th</sup> JNOST International Conference for Research Scholars** at University of Hyderabad, Hyderabad on 8<sup>th</sup>-13<sup>th</sup> February 2011. (Poster presenter)
3. Atul Kumar and Siddharth Sharma. Pentamidine-Quinazolinone Hybrids as Potent Antileishmanial Agents. **3<sup>rd</sup> CDRI-NIPER Raebareli National Conference on Recent Trends in Medicinal Chemistry** at Central Drug Research Institute Lucknow on 13<sup>th</sup>-15<sup>th</sup> March 2011. (Poster presenter)

4. **Siddharth Sharma**. Continuous Flow Synthesis, Separation & Utilization of Foul Isocyanides for Multi-component reaction in Microreactor. (WCCE9 & APCChe 2013) **9<sup>th</sup> World Congress of Chemical Engineers**. Coex, Seoul South Korea on 18<sup>th</sup>-23<sup>rd</sup> August 2013. (**Oral Presenter**)
5. **Siddharth Sharma**. Flow Chemistry of Isocyanides: An Approach Towards Better Process. **67<sup>th</sup> Annual session of Indian Institute of Chemical engineers (IChE) (CHEMCON 2014)** on December 27-30, 2014 at Panjab University Chandigarh. (**Oral Presenter**)
6. **Siddharth Sharma**. Homogeneous catalyst recycling: a continuous flow approach for metal catalyzed reaction. 21<sup>st</sup> ISCB International Conference (ISCBC-2015), Current Trends in Drug Discovery and Developments 25-28<sup>th</sup> February, 2015 at Central Drug Research Institute, Lucknow. (**Oral Presenter**)
7. 21st Conference of National Magnetic Resonance Society, India from 6-9<sup>th</sup> Mar 2015 at Guru Nanak Dev University (GNDU), Amritsar. (**Attended**)

### **Reviewer:**

Organic Letters, The Journal of Organic Chemistry (ACS Publications), Chemical Communications (RSC Publications), Research on Chemical Intermediates (Springer Publications).

### **Personal details:**

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Gender	Male
Marital status	Married
Nationality	Indian
Date of birth	March 19, 1985

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Siddharth Sharma, PhD