

Curriculum Vitae
Dr. Shivam Maurya

Assistant Professor

Maharana Pratap Government P.G. College.
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Personal Details

Gender	Male
Date of joining	06-Aug-2021
Father's Name	Raj Kumar Maurya
Mother's Name	Pushpa Maurya
Marital Status	Unmarried
Nationality	Indian
Place of birth	Lucknow

Academic Qualification

Ph.D.	Academy of Scientific & Innovative Research (AcSIR) (Awarded in 2018)	Organic Chemistry	8.55 (CGPA) in course work
M.Sc.	Lucknow University, Lucknow	Chemistry	73.43 %
B.Sc.	Lucknow University, Lucknow	Chemistry, Zoology, Botany	72.22%
Intermediate	UP Board Allahabad	General Hindi, English, Physics, Chemistry, Biology	74 %

High School	UP Board Allahabad	Hindi, English, Mathematics, Science, Social Science, Drawing	59.33%
<p>Thesis Title: “Green Catalytic Synthesis of Novel aza/oxa Heterocyclic Based Privileged Structures as Potential Anti-tubercular Agents”</p>			
<p>Ph.D. Supervisor:</p> <p>Dr. Atul Kumar, Chief Scientist (MPC Division CSIR-CDRI), & Professor (AcSIR), CSIR-Central Drug Research Institute, Sector 10, Jankipuram Extension, Sitapur Road, Lucknow, Uttar Pradesh, India, Pin code: 226031.</p>			
<p>My thesis work can be briefly described as follows:</p> <ol style="list-style-type: none"> The first chapter presents a concise review on “Former, current and imminent drug entities: An anticipated feat for Tuberculosis”. The second chapter of the thesis entitled as “Amphiphile catalysed selective synthesis of 4-amino alkylated-1H-pyrazol-5-ol via Mannich aromatization preferred to the Knoevenagel-Michael type reaction in water as potential anti-tubercular agents”. The third chapter of the thesis entitled as “Regio/enantio selective synergic catalytic C-H activation: Unprecedented formation of sporadic 4-substituted (oxo-diaryl alkyl) isoquinolinium salts using Silica-Alumina supported 3-(diethyl amino)propyl functional group (SA-NEt₂) as potential anti-tubercular agents”. The fourth chapter of the thesis entitled as “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 as potential anti-tubercular agents”. 			
<p><u>Research Skills & Technical Aspects</u></p>			
<p><u>Skills in Organic Synthesis</u></p> <ol style="list-style-type: none"> Synthesis and characterization of novel heterocyclic compounds. 			

- ii. Structure based design of biologically active novel compounds.
- iii. Systematic planning, execution of feasibility & optimization of multi-step organic synthetic routes.
- iv. Well-versed with planning and handling of small/large scale organic reactions including structural elucidation by spectroscopic techniques.
- v. Well versed in all modern synthetic techniques and transformations like reductions, oxidations, Grignard reaction, Hydrogenation reaction, Oppenauer oxidation, Fisher indole reaction, Aldol condensation reaction, Mannich reaction, protections & de protections, substitution, addition reactions, Knoevenagel reaction, Knoevenagel/Michael domino reaction, C-H bond activation and Hydroarylation reaction, coupling reactions (Suzuki, Sonogashira, Heck, carbonylation) etc.

Skills in techniques used in the purifications and characterization of organic compounds

- i. Column Chromatography, Flash Chromatography, Gas Chromatography, TLC, HPLC and Crystallization.
- ii. 1D and 2D NMR, IR, UV-visible, Mass spectroscopy (HRMS), micro-analysis, X-ray analysis and Polarimetry.

Other Skills

Familiar with Common hardware, General Softwares (MS Office, ChemOffice, Windows Operating System), Discovery Gate, Patent and Internet searching & expertise to deal with SciFinder & Reaxys for research exploration; Good communication, writing and interpersonal skills; A regular member of seminar committee for organizing and delivering weekly seminars at Medicinal and Process Chemistry (MPC) division, CSIR-CDRI 2012-2018; Skillful in Paper writing, also familiar with operating Gaussian09 software for DFT calculations and the knowledge about various NMR software operating system like Topspin, MestReNova & ACD labs.

Major Awards and Achievements

- i. Awarded Grade “A” certificate, in the participation in Faculty Induction Programme from 04-July-2022 to 06-Aug-2022 organized by UGC-HRDC, Aligarh Muslim University, Aligarh.
- ii. UGC Senior Research Fellowship (SRF) July-2014.
- iii. UGC Junior Research Fellowship (JRF) July-2012.
- iv. CSIR-UGC NET with JRF 2011 Qualified held on 18th Dec 2011 (**85th rank**).
- v. University 4th rank (M.Sc. from Lucknow University, Lucknow)

Research & Teaching Experience

- i. **Assistant Professor** in Maharana Pratap Govt. P.G. College, from 6-Aug-2021 to till date.
- ii. **Senior Research Fellow** (CSIR-UGC) at CSIR-Central Drug Research Institute Lucknow: Joining date : 24 July 2014
- iii. **Junior Research Fellow** (CSIR-UGC) at CSIR-Central Drug Research Institute Lucknow: Joining date : 24 July 2012

Publications

- i. Efficient atom and step economic (EASE) synthesis of the “smart drug” Modafinil; **Shivam Maurya**, Dhiraj Yadav, Kemant Pratap and Atul Kumar, *Green Chem.* **2017**, 19, 629.
- ii. 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; Atul Kumar, **Shivam Maurya**, Kemant Pratap and Suman Srivastava, *Chem. Commun.* **2016**, 52, 2795.

- iii. Amphiphile catalysed selective synthesis of 4- amino alkylated-1H-pyrazol-5- ol via Mannich aromatization preferred to the Knoevenagel– Michael typereaction in water; Atul Kumar, **Shivam Maurya**, Maneesh Kumar Gupta and Ratnakar Dutt Shukla. *RSC Adv.* **2014**, 4, 57953.
- iv. Regioselective Synthesis of Fused Imidazo[1,2-a]pyrimidines via Intramolecular C–N Bond Formation/6-Endo-Dig Cycloisomerization; Atul Kumar, Mukesh Kumar, **Shivam Maurya** and Ranjana S. KhannaKhanna,*J. Org. Chem.* **2014**, 79, 6905.
- v. Regio/enantio selective synergic catalytic C-H activation: Unprecedented formation of sporadic 4-substituted (oxo-diaryl alkyl) isoquinolinium salts using Silica-Alumina supported 3- (diethyl amino)propyl functional group (SA-NEt₂). **Shivam Maurya** & Atul Kumar* (Communicated).

Symposium, Conferences & Workshops

- i. **Shivam Maurya** & Atul Kumar, Poster presentation on Synthesis of annulated dihydrofurans from oxobis(methyl thio)ketene acetals and N-butyl-N'-methyl ethane-1,2-diamine as precursors via NHC elimination via betaine intermediate; **International Conference on Updates in Cancer Prevention and Research (ICUCPR-2017), 14th - 16th February 2017.**
- ii. **Shivam Maurya** & Atul Kumar, Poster presentation on Betaine intermediated synthesis of annulated dihydrofurans from oxobis(methyl thio)ketene acetals & N-butyl-N'-methyl ethane-1,2-diamine as precursors via NHC elimination; **XIIth J-NOST Conference for Research Scholars; (J-NOST 2016); 24th-27th November 2016.**
- iii. **Shivam Maurya**, Mukesh Kumar & Atul Kumar, Poster presentation on Regioselective Synthesis of Fused Imidazo[1,2-a]pyrimidines via Intramolecular C–N Bond Formation/6-Endo-Dig Cycloisomerization, 6th International Symposium on “**Current trends in Drug discovery & Research**” **25th-28th February 2016.**
- iv. **Shivam Maurya**, L. P.Gupta, A. Shrivastava, G. Bhatia and Atul Kumar; Poster presentation on Natural product inspired synthesis of spirocyclic oxindole-dihydropyridine as potential antidyslipidemic and antioxidant agents; 6th NIPER (RBL)-CSIR-CDRI Symposium on “**Current Scenario in Drug Discovery & Development**” **20th -22th February 2014.**

- v. Workshop cum Hands on training on FT-NMR Spectroscopy, **10th -11th September 2015; CSIR-CDRI.**
- vi. Workshop on the applications of MS & LC-MS instruments for identification & characterization of small molecules; **29th September 2015 to 1st October 2015; CSIR-CDRI.**
- vii. Workshop on Intellectual property rights: Issues & Challenges; **21st July 2015; organized by University of Lucknow, Lucknow & IGNOU.**

Declaration

I hereby declare that the information furnished above is correct to the best of my knowledge.

Place: Hardoi

Date: 06-Aug-2022

Dr. Shivam Maurya