# Naveen Gupta MSc, Ph. D

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Address: CBMN, UMR 5248 Univ. Bordeaux - CNRS IECB, Bordeaux, France, 33607, Pessac,

Team G. Guichard

**Research Interests**: • Organometallic Chemistry • Foldamers and Supramolecular catalysis • Asymmetric synthesis, Organocatalysis • Heterogeneous and homogeneous catalysis • Green Chemistry

## **RESEARCH POSITIONS**

### University of Bordeaux, CBMN, Bordeaux, France | (UPV/EHU)

Marie Curie ADAGIO Fellow | 10-2023 - present

Project: Asymmetric Catalysis with Bioinspired helical Foldamer

### CNRS-Institut Européen de Chimie et Biologie, Bordeaux, France

Post-Doctoral Fellow | 10/2022 - 09/2023

Project: Oligourea Foldamers to catalyse molecular transformations (formation of C-C bonds).

### University of Warsaw | Faculty of Chemistry, Poland

Post-Doctoral Fellow- (pol. Adiunkt) | 11/2019 – 01/2021

Post-Doctoral Fellow- (pol. Adiunkt) | 07/2021 – 10/2022

Project: Alpha-helicomimetic foldamers - synthesis, self-assembly and molecular recognition

### CSIR-Central Salt and Marine Chemicals Research Institute | IMCD Division, India

Research Associate | 04/2018 - 02/2019

Project: Industrial project- Fine chemicals for industrial application

#### **Nanjing University (China)**

Post-Doctoral Fellow | 03/2019 - 09/2019

Project: Synthesis of Novel Radicals and related Species

# **EDUCATION**

# AcSIR | Central Salt and Marine Chemicals Research Institute, India | Inorganic Materials and Catalysis Division Doctor of Philosophy (PhD) in Chemical Sciences | 2013 – 2018 | Supervisor: Dr. N. H. Khan, Dr. S. H. R. Abdi Thesis: Homogeneous and Heterogeneous catalysts for organic transformations

### University of Lucknow India | Department of Chemistry

Masters (M.Sc), Pharmaceutical Chemistry | 2010 – 2012 | CSIR-Central Drug Research Institute Thesis: Synthesis of spermicidal Compounds viz. Dithiocarbamates as Dual Acting Contraceptives

### University of Lucknow India | BSNV PG College | Department of Chemistry

Bachelor of Science (B.Sc.) Chemistry | 2004 – 2007

St. Thomas College | Lucknow Public School, India | 2001 – 2004 | High School and Intermediate

### **HONOURS AND AWARDS**

 $\textbf{Marie Skłodowska-Curie Actions COFUND} \ Postdoctoral \ Fellowship \ (ADAGIO) \ | \ University \ Bordeaux \ (UBx) \ | \ Basque \ Country \ UPV/EHU$ 

INSPIRE Fellowship Award [IF120764] | **Department of science and Technology, India** [ 01/10/2012]

Merit Certificate Award | University of Lucknow, India

- 1. **Naveen Gupta**, Tamal Roy, Debashis Ghosh, Sayed H. R. Abdi, Rukhsana I. Kureshy, Noor-ul H. Khan, and Hari C. Bajaj, Ordered Short Channel Mesoporous Silica modified with 1,3,5-Triazine-Piperazine as Versatile Recyclable Base Catalyst for Cross-Aldol, Knoevenagel and conjugate addition reactions with Isatins, *RSC* Adv., 2015, 5, 17843-1785
- 2. **Naveen Gupta**, Gopal Bhojani, Rajkumar Tak, Ajay Jakhar, Noor-ul H. Khan, Shruti Chatterjee, and Rukhsana I. Kureshy, Highly Diastereoselective Syntheses of SpiroOxindole Dihydrofuran Derivatives in Aqueous Media and Their Antibacterial Activity, *ChemistrySelect* 2017, 2, 10902 –10907
- 3. **Naveen Gupta**, Rajkumar Tak, Ajay Jakhar, Noor-ul H. Khan, and Rukhsana I. Kureshy, Copper(II) triflate catalyzed regioselective and enantioselective propargylation of Isatin derivatives using Allenylboronic acid pinacol ester, *Eur. J. Org. Chem.* 2018, 11, 1384-1392
- 4. Rajkumar Tak, **Naveen Gupta**, Manish Kumar, Rukhsana I. Kureshy and Noor-ul H. Khan, Regioselective Alcoholysis and Chlorination reaction of Spiro-epoxyoxindole at the Spiro-Centre: Efficient Synthesis of 3,3-di substituted-oxindole *Eur. J. Org. Chem.* 2018, 41, 5678-5687
- 5. Debashis Ghosh, **Naveen Gupta**, Sayed H. R. Abdi, Sekhar Nandi, Noor-ul H. Khan, Rukhsana I. Kureshy and Hari C. Bajaj, Organocatalyzed enantioselective allylation of isatins using chiral amino alcohol derived squaramide as catalyst, *Eur. J. Org. Chem.*, 2015, 13, 2801-2806
- 6. Prasanta Kumar Bera, **Naveen Gupta**, Sayed H. R. Abdi, Noor-ul H. Khan, Rukhsana I. Kureshy, and Hari C. Bajaj, Bimetallic titanium complex catalyzed enantioselective oxidation of thioethers using aqueous H<sub>2</sub>O<sub>2</sub> as terminal oxidant, *RSC Adv.*, 2015, 5, 47732-47739
- 7. Rajkumar Tak, Manish Kumar, Tusharkumar Menapara, **Naveen Gupta**, Rukhsana I. Kureshy, Noor-ul H. Khan, and E. Suresh, Asymmetric Hydrolytic and Aminolytic Kinetic Resolution of Racemic Epoxides using Recyclable Macrocyclic Chiral Cobalt(III) Salen Complexes, *Adv. Synth. Catal.* 2017, 359, 3990 4001
- 8. Ajay Jakhar, Amamudin Ansari, Sekhar Nandi, **Naveen Gupta**, Noor-ul H. Khan, and Rukhsana I. Kureshy, Bronsted Basic Ionic Liquid as Catalytic and Reusable Media for Conjugate Cyanation of CF<sub>3</sub>-Substituted Alkylidenemalonates Using Acetone Cyanohydrin, *ChemistrySelect* 2017, 2, 11346 –11351
- 9. Amamudin Ansari, **Naveen Gupta**, Ajay Jakhar, Noor-ul H. Khan, and Rukhsana I. Kureshy, Quinine Thiourea Immobilized on SBA-15 as an Efficient Recyclable Catalyst for Asymmetric Strecker Reaction of Isatin N-protected Ketimines, *ChemistrySelect*, 2017, 2, 11912 –11917
- 10. Debashis Ghosh, S. Saravanan, **Naveen Gupta**, Sayed H. R. Abdi, Noor-ul H. Khan, Rukhsana I. Kureshy and Hari C. Bajaj, Phosphotungstic acid as an efficient catalyst for allylation of isatins and N-tert-Butyloxycarbonylamido sulfones under solvent free condition, *Asian J. Org. Chem.* 2014, 3, 1173–1181
- 11. Ajay Jakhar, Mohd Nazish, **Naveen Gupta**, Noor-ul H. Khan and Rukhsana I Kureshy, Enantioselective addition of cyanide to CF<sub>3</sub> substituted alkylidenemalonates: construction of trifluoromethylated all-carbon quaternary stereocenters. *ChemistrySelect*, 2018, 3, 4838-4843
- 12. Mohd Nazish, Ajay Jakhar, **Naveen Gupta**, Noor-ul H. Khan and Rukhsana I Kureshy, Enantioselective synthesis of β nitrophosphonates catalysed by secondary amine bisthiourea. *Synlett*, 2018, 29, 1385-1389.
- 13. **N. Gupta**, M. Wilczek, L. Dobrzycki, K. Pulka-Ziach, Structural Consequences of *N*-Methylation of *N*-Terminus in Oligourea Foldamers, ChemPlusChem **2022**, 87, e202200199

### **CONFERENCES AND SEMINARS**

### **National and International**

- 1. Symposium on Foldamers, Ludwig-Maximilians-University, (Faculty of Chemistry and Pharmacy), Munich, 4-6 Sep-2023 (presented poster)
- 16th National Symposium on chemistry, Chemical Research Society of India, IIT Powai Mumbai, Feb-7-9'2014
  Poster presentation at 21st International Conference (ISCBC-2015) Current Trends in Drug Discovery and
  Developments, CDRI, Lucknow, Feb 25-28' 2015
- 3. Poster presentation at CAT-SYMP 22 National symposium on catalysis, Catalysis Society of India, 7-9 Jan'2015, CSIR-CSMCRI Bhavnagar, Gujarat, India
- 4. Poster presentation at ICOS 21 21st International Conference on organic synthesis December 11-16, 2016 –IIT Bombay, Mumbai, India
- 5. Poster presentation at XXXII Gujarat Science Congress-2018: Science and Technology for Capacity Building & Inclusive Growth: The Role of Academies and Academia, 4 -5 February 2018, Bhavnagar, Gujarat India
- 6. National Seminar on Hyphenated Mass Spectrometry Techniques Enabled Developments in Chemical and Biological Sciences, organized by SAIF, Central Drug Research Institute (CSIR) Lucknow.
- 7. National Seminar on Supramolecular and Organometallic Chemistry, organized by SAP UGC & Department of Chemistry, Lucknow University.
- 8. International Conference & Humbolt Kolleg" on recent aspects of organometallic compounds and their Usefulness organized by Chemistry Department, University of Lucknow & Alexander von Humbolt Foundation Germany.
- 9. National Seminar on Natural Products & Organic Synthesis" and presented Poster entitled "Green chemistry: New advances in drug synthesis & intermediates, organized by Chemistry department, University of Lucknow (SAP-UGC & PURSE (DST).

### **DIGITAL SKILLS**

Microsoft Word / ChemDraw Professional / OriginPro 85 / Bruker Data Analysis / Good command of Chemistry software (ChemDraw, MestreNova, Mendeley)

## LANGUAGE SKILLS

Mother tongue: Hindi

Other language: English (fluent and advanced)