

CV of Dr. Srijit Biswas

Academic Appointments:

August 2018 – present: UGC-Assistant Professor (UGC-MHRD), University of Calcutta, Kolkata, India;

July 2014 – August 2018: DST-INSPIRE Faculty, Centre of Biomedical Research, Lucknow, India;

January 2013 – June 2014: Senior Post-doctoral Scientist, Dept. of Chemistry, Uppsala University, Sweden; (Advisor – Prof. Joseph S. M. Samec);

January 2011 – December 2012: Wenner Gren Post-doctoral Researcher, Dept. of Chemistry, Uppsala University, Sweden; (Advisor – Prof. Joseph S. M. Samec).

Educational details:

Ph.D. (Organic Chemistry, 2011): Dept. of Chemistry, Jadavpur University, Kolkata, India; (Advisor – Prof. Umasish Jana);

M.Sc. (Organic Chemistry, 2005): Dept. of Chemistry, Visva-Bharati, Santiniketan, India;

B.Sc. (Chemistry, 2003): Bolpur College (The University of Burdwan), Bolpur, India.

Research Interests:

Sustainable Chemistry, Metal-free Catalysis, Small Drug Candidates and New Antibiotics, Unnatural Amino Acids, Biomass to Value Added Chemicals and Fuels, Bio-degradable Polymeric Materials.

Research Group:

Mr. Surajit Duari (1st Year CSIR-JRF), Mr. Subrata Biswas (1st Year CSIR-JRF), Ms. Srabani Maity (1st Year INSPIRE-JRF; provisionally selected), Mr. Arnab Roy (1st Year CSIR-JRF), Mr. Abhishek Kumar Mishre (4th Year Research Scholar, yet to submit PhD Thesis); Dr. Srijit Biswas (PI).

External Research Grant Available:

DST-INSPIRE Faculty Award (Rs. 35 Lakh; July, 2014 to July, 2020) as PI;

UGC-FRP Start-up Grant (Rs, 10 Lakh; To be Implemented by MHRD) as PI.

List of Achievements and Awards:

Selected Faculty under the UGC-Faculty Recharge Programme (FRP) as Assistant Professor with **All India Rank 1** in Chemical Sciences, 2017 (UGC-MHRD, Govt. of India);

International Travel Support (ITS) from SERB, Govt. of India to deliver invited lecture in the “International Conference on Stereochemistry – 2016” held in Sao Paulo, Brazil on 18–19 August, 2016;

DST-INSPIRE Faculty Award from the Department of Science and Technology, Govt. of India: 2014;

Wenner Gren Post Doctoral Scholarship and Research Grants from the Wenner Gren Foundation, Stockholm, Sweden for Post-doc research: 2011;

Tetrahedron Letters Most Cited Article Award from Elsevier, Netherlands; 2006–2009;

CSIR/UGC NET JRF and GATE: 2005.

Selected Publications as Corresponding Author:

1. "Catalytic O- to N-Alkyl Migratory Rearrangement: Transition Metal-Free Direct and Tandem Routes to N-Alkylated Pyridones and Benzothiazolones" AK Mishra, NH Morgon, S Sanyal, AR de Souza,* **S Biswas**,* *Adv. Synth. Catal.* **2018**, *360*, 3930; designated as Very Important Publication (VIP);
2. "Nucleophilic *ipso*-Substitution of Aryl Methyl Ethers through Aryl C–OMe bond Cleavage; Access to Functionalized Bisthiophenes" AK Mishra, A Verma, **S Biswas**,* *J. Org. Chem.* **2017**, *82*, 3403;
3. "Brønsted Acid Catalyzed Functionalization of Aromatic Alcohols through Nucleophilic Substitution of Hydroxyl Group" AK Mishra, **S Biswas**,* *J. Org. Chem.* **2016**, *81*, 2355;
4. "Brønsted AcidCatalyzed Intramolecular Nucleophilic Substitution of the Hydroxy Group in Stereogenic Alcohols with Chirality Transfer" A Bunrit, C Dahlstrand, SK Olsson, P Srif, G Huang, A Orthaber, P Sjöberg, **S Biswas**,* F Himo,* JSM Samec,* *J. Am. Chem. Soc.* **2015**, *137*, 4646.

List of Other Publications (Full):

1. "Nucleophilic Substitution of the Hydroxyl Group in Stereogenic Alcohols with Chirality Transfer" A Bunrit, C Dahlstrand, SK Olsson, P Srif, G Huang, A Orthaber, P Sjöberg, **S Biswas**, F Himo, JSM Samec,* *Synlett*, **2016**, *27*, 173 (Synfacts Article with Author's Profile);
2. "One-Pot Synthesis of Keto Thioethers by Palladium/GoldCatalyzed Click and Pinacol Reaction" A Cadu, RA Watile, **S Biswas**, A Orthaber, P Sjöberg, JSM Samec,* *Org. Lett.* **2014**, *16*, 5556;
3. "Tandem Pd/Au Catalyzed Route to α -Sulfonylated Carbonyl Compounds from Terminal Propargylic Alcohols and Thiols" **S Biswas**, RA Watile, JSM Samec,* *Chemistry – A European Journal*, **2014**, *20*, 2159;
4. "Atom Efficient Gold(I) ChlorideCatalyzed Synthesis of α Sulfonylated Carbonyl Compounds from Propargyl Alcohols and Aryl Thiols: Substrate Scope and Combined Experimental and Computational Mechanistic Investigation" **S Biswas**, C Dahlstrand, RA Watile, M Kalek, F Himo,* JSM Samec,* *Chemistry – A European Journal*, **2013**, *19*, 17939;
5. "An Aqueous and Recyclable Copper(I)-Catalyzed Route to α Sulfonylated Carbonyl Compounds from Propargylic Alcohols and Aryl Thiols" RA Watile, **S Biswas**, JSM Samec,* *Green Chem.* **2013**, *15*, 3176;

6. "The Efficiency of the Metal Catalysts in the Nucleophilic Substitution of Alcohols is Dependent on the Nucleophile and Not on the Electrophile" **S Biswas**, JSM Samec,* *Chemistry – An Asian Journal*, **2013**, *8*, 974;
7. "Three-Component Coupling Synthesis of Diversely Substituted N-Aryl Pyrroles Catalyzed by Iron(III) Chloride" S Sarkar, K Bera, S Maiti, **S Biswas**, U Jana,* *Synth. Commun.* **2013**, *43*, 1563;
8. "A Gold(I)-Catalyzed Route to α Sulfenylated Carbonyl Compounds from Propargylic Alcohols and Aryl Thiols" **S Biswas**, JSM Samec,* *Chem. Commun.* **2012**, *48*, 6586;
9. "Iron(III)-Catalyzed Nucleophilic Substitution of the Hydroxy Group in Benzoin by Alcohols" A Mirzaei, **S Biswas**, JSM Samec,* *Synthesis*, **2012**, *44*, 1213;
10. "Iron-Catalyzed Synthesis of Functionalized 2H-Chromenes via Intramolecular Alkyne-Carbonyl Metathesis" K Bera, S Sarkar, **S Biswas**, S Maiti, U Jana,* *J. Org. Chem.* **2011**, *76*, 3539;
11. "Inexpensive and Efficient Synthesis of Propargylic Substituted Active Methylene Compounds Catalyzed by FeCl₃" S Maiti, S Biswas, U Jana,* *Synth. Commun.* **2011**, *41*, 243;
12. "Iron(III)-Catalyzed Four Component Coupling Reaction of 1,3-Dicarbonyl Compounds, Amines, Aldehydes, and Nitroalkanes: A Simple and Direct Synthesis of Functionalized Pyrroles" S Maiti, **S Biswas**, U Jana,* *J. Org. Chem.* **2010**, *75*, 1674;
13. "An Efficient Iron-catalyzed Carbon-Carbon Single Bond Cleavage via Retro-Claisen Condensation: A Mild and Convenient Approach to Synthesize Varieties of Esters or Ketones" **S Biswas**, S Maiti, U Jana,* *Eur. J. Org. Chem.* **2010**, 2861;
14. "New and Efficient Iron Halide Mediated Synthesis of Alkenyl Halides through Coupling of Alkynes and Alcohols" **S Biswas**, S Maiti, U Jana,* *Eur. J. Org. Chem.* **2009**, 2354;
15. "Iron (III)-Catalyzed Addition of Benzylic Alcohols to Aryl Alkynes – A New Synthesis of Substituted Aryl Ketones" U Jana,* S Biswas, S Maiti, *Eur. J. of Org.Chem.* **2008**, 5798;
16. "An Efficient FeCl₃-Catalyzed Amidation Reaction of Secondary Benzylic and Allylic Alcohols with Carboxamides or pToluenesulfonamide" U Jana,* S Maiti, S Biswas, *Tetrahedron Lett.* **2008**, *49*, 858;
17. "An FeCl₃-Catalyzed Highly C₃- Selective Friedel–Crafts Alkylation of Indoles with Alcohols" U Jana,* S Maiti, **S Biswas**, *Tetrahedron Lett.* **2007**, *48*, 7160;
18. "A Simple and Efficient FeCl₃- Catalyzed Direct Alkylation of Active Methylene Compounds with Benzylic and Allylic Alcohols Under Mild Conditions" *Tetrahedron Lett.* **2007**, *48*, 4065.

International Patent:

"Preparation of α -sulfenylated carbonyl compounds from propargylic alcohols in one step." JSM Samec, **S Biswas**, From U.S. Pat. Appl. Publ. (2015), US 20150011796 A1 Jan 08, **2015**.