#### Academic Appointments:

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

July 2014 – August 2018: DST-INSPIRE Faculty, Division of Molecular Synthesis and Drug Discovery, Centre of Biomedical Research, Lucknow, India;

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

January 2011 – December 2012: Wenner Gren Post-Doctoral Researcher, Deptment of Chemistry and Bio-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:**

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

## Present Research Group (as on February, 2023):

Mr. Surajit Duari (CSIR PhD Fellow), Mr. Subrata Biswas (CSIR PhD Fellow), Ms. Srabani Maity (DST-INSPIRE PhD Fellow), Mr. Arnab Roy (CSIR Fellow), Dr. Srijit Biswas (Principal Investigator and Research Guide).

### List of Achievements and Awards:

- Best Young Scientist Award (Male) (Below 40 Years) by 2<sup>nd</sup> International Academic and Research Excellence Awards (IARE – 2020);
- (2) 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);
- (3) 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;

- (4) DST-INSPIRE Faculty Award from the Department of Science and Technology, Govt. of India: 2014;
- (5) Wenner Gren Post Doctoral Scholarship and Research Grants from the Wenner Gren Foundation, Stockholm, Sweden for Post-doc research: 2011;
- (6) Tetrahedron Letters Most Cited Article Award from Elsevier, Netherlands; 2006–2009;
- (7) CSIR/UGC NET JRF and GATE: 2005.

## Participation in Seminar/Workshop/Conference etc. (from DOJ at the University of Calcutta):

Туре	Level	Title	Date & Place	Role
Conference	International	International Conference on Chemistry for Human Development (ICCHD- 2020) jointly organized by Prof. Ashima Chatterjee Foundation and University of Calcutta	9 <sup>th</sup> to 11 <sup>th</sup> January, 2020, The Heritage Institute of Technology, Kolkata	Invited Lecture
Conference	International	99th Foundation Day Celebration of the Indian Chemical Society & International Research Scholars' Meet	9 <sup>th</sup> May, 2022 (Online Mode)	Invited Judge for International Research Scholars' Meet
Refreshers' Course	National	Catalytic Nucleophilic Substitution of Hydroxy Group; a New Perspective to Address Hard Challenges Softly	30 <sup>th</sup> November to 20 <sup>th</sup> December, 2018, University of Calcutta	Invited Resourced Person
Webinar	International	One Day International Webinar on "Recent Trends in Scientific, Engineering and Industrial Research and Environmental Concern"	30 <sup>th</sup> September, 2020, Department of Chemistry, Bolpur College, University of Burdwan	Invited Lecture

## Dept. of Chemistry University of Calcutta 92, A. P. C. Road, Kolkata 700009 West Bengal, India

Refreshers'	National	Recent Advances in	16 <sup>th</sup> March to 31st	Invited
Course		Chemistry	March, 2021,	Resourced
			University of	Person
			Calcutta	
Online	National	Four-week Online Faculty	3 <sup>rd</sup> August, 2020 to	Participant
Faculty		Induction Program I	09 <sup>th</sup> September,	
Induction			2020, UGC-HRDC,	
Program (FIP)			Jawahar Nehru	
			Technological	
			University,	
			Hyderabad	
Refresher	National	Managing Online Classes &	13 <sup>th</sup> December,	Participant
Course		Co- creating MOOCS 10.0	2021 to 27 <sup>th</sup>	
		Teaching Learning Centre,	December, 2021	
		Ramanujan College,		
		University of Delhi in		
		collaboration with Sree		
		Narayana Guru College of		
		Commerce, Mumbai under		
		the aegis of Ministry of		
		Education, Pandit Madan		
		Mohan Malaviya National		
		Mission on Teachers and		
		Teaching		

# Curriculum Vitae of Dr. Srijit Biswas

## List of Publications in International Peer-Reviewed Journals:

- 1. "Regioselective N-Functionalization of Tautomerizable Heterocycles through Methyl Trifluoromethanesulfonate-Catalyzed Substitution of Alcohols and Alkyl Group Migrations" S Duari, S Biswas, A Roy, S Maity, AK Mishra, ARD Souza, AM Elsharif, NH Morgon,\* **S Biswas,**\* *Adv. Synth. Catal.* **2022**, *364*, 865;
- "(3+ 2) Cycloaddition of 2-alkoxynaphthalenes with azaoxyallyl cations: access to benzo [e] indolones" S Biswas, S Duari, S Maity, A Roy, AM Elsharif, S Biswas,\* Org. Biomol. Chem. 2022, 20, 8400–8404
- "Brønsted Acid Mediated Nucleophilic Functionalization of Amides through Stable Amide C-N Bond Cleavage; One-Step Synthesis of 2-Substituted Benzothiazoles" S Maity, A. Roy, S. Duari, S. Biswas, AM Elsharif, S. Biswas,\* Eur. J. Org. Chem. 2021, 2021, 3569;

- "Potential activity of Linezolid against SARS-CoV-2 using electronic and molecular docking study" NH Morgon,\* GS Grandini, MI Yoguim, CM Porto, LC Santana, S Biswas, ARD Souza, J. Mol. Model. 2021, 27, 222;
- "H<sub>3</sub>PO<sub>2</sub>-Catalyzed Intramolecular Stereospecific Substitution of the Hydroxyl Group in Enantioenriched Secondary Alcohols by N-, O-, and S-Centered Nucleophiles to Generate Heterocycles" A Bunrit, P Srifa, T Rukkijakan, C Dahlstrand, G Huang, <u>S Biswas</u>, RA Watile,\* JSM Samec,\* ACS Catalysis, 2020, 10, 1344;
- 6. "Intramolecular substitutions of secondary and tertiary alcohols with chirality transfer by an iron(III) catalyst" RA Watile, A Bunrit, J Margalef, S Akkarasamiyo, R Ayub, E. Lagerspets, <u>S</u>
  <u>Biswas</u>, T Repo,\* JSM Samec,\* Nature Communications 10, 2019, Article number: 3826 (2019);
- "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);
- "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;
- 9. "Brønsted Acid Catalyzed Functionalization of Aromatic Alcohols through Nucleophilic Substitution of Hydroxyl Group" AK Mishra, **S Biswas**,\* *J. Org. Chem.* **2016**, *81*, 2355;
- "Brønsted Acid Catalyzed Intramolecular Nucleophilic Substitution of the Hydroxy Group in Stereogenic Alcohols with Chirality Transfer" A Bunrit, C Dahlstrand, SK Olsson, P Srifa, G Huang, A Orthaber, P Sjörberg, S Biswas,\* F Himo,\* JSM Samec,\* J. Am. Chem. Soc. 2015, 137, 4646.
- "Nucleophilic Substitution of the Hydroxyl Group in Stereogenic Alcohols with Chirality Transfer" A Bunrit, C Dahlstrand, SK Olsson, P Srifa, G Huang, A Orthaber, P Sjörberg, S Biswas, F Himo, JSM Samec,\* Synlett, 2016, 27, 173 (Synpacts Article with Author's Profile);
- "One-Pot Synthesis of Keto Thioethers by Palladium/GoldCatalyzed Click and Pinacol Reaction" A Cadu, RA Watile, S Biswas, A Orthaber, P Sjoberg, JSM Samec,\* Org. Lett. 2014, 16, 5556;
- "Tandem Pd/Au Catalyzed Route to α-Sulfenylated Carbonyl Compounds from Terminal Propargylic Alcohols and Thiols" S Biswas, RA Watile, JSM Samec,\* Chemistry – A European Journal, 2014, 20, 2159;
- "Atom Efficient Gold(I) ChlorideCatalyzed Synthesis of αSulfenylated 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;

- 15. "An Aqueous and Recyclable Copper(I)-Catalyzed Route to αSulfenylated Carbonyl Compounds from Propargylic Alcohols and Aryl Thiols" RA Watile, **S Biswas**, JSM Samec,\* *Green Chem.* **2013**, *15*, 3176;
- "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;
- "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;
- 18. "A Gold(I)-Catalyzed Route to αSulfenylated Carbonyl Compounds from Propargylic Alcohols and Aryl Thiols" **S Biswas**, JSM Samec,\* *Chem. Commun.* **2012**, *48*, 6586;
- 19. "Iron(III)-Catalyzed Nucleophilic Substitution of the Hydroxy Group in Benzoin by Alcohols" A Mirzaei, **S Biswas**, JSM Samec,\* *Synthesis*, **2012**, *44*, 1213;
- "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;
- 21. "Inexpensive and Efficient Synthesis of Propargylic Substituted Active Methylene Compounds Catalyzed by FeCl3" S Maiti, S Biswas, U Jana,\* *Synth. Commun.* **2011**, *41*, 243;
- 22. "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;
- "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;
- 24. "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;
- 25. "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;
- "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;
- 27. "An FeCl3-Catalyzed Highly C3- Selective Friedel–Crafts Alkylation of Indoles with Alcohols" U Jana,\* S Maiti, **S Biswas**, *Tetrahedron Lett.* **2007**, *48*, 7160;
- 28. "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  $\alpha$ -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**.

# Total No. of Citations: 1400; h-index: 19; i10 index: 24 (till 6<sup>th</sup> February, 2023)

# Placed within top 50 Scientist in the University of Calcutta by adscientific index.