# DR. AMRITA CHAKRABORTY

Assistant Professor

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2006



### **EDUCATION**

**D. S. Kothari Postdoctoral Fellow,** Visva-Bharati (A Central University), Santiniketan, W.B. **Project Title**: *Metal-Free C-H bond functionalization and subsequent C-C/C-heteroatom Bond Formation: Synthesis of Functionalized Heterocycles.* 

2014-15 Research Associate-I, (Indian Association for the Cultivation of Science), Jadavpur, Kolkata.

Project Title: Synthesis and Derivatization of Benzothiazine ring via Transition-Metal

Catalyzed Aerobic Oxidative Coupling Reaction.

**Ph. D.** (Synthetic Organic Chemistry); IACS (Jadavpur University), Jadavpur, Kolkata. **Thesis Title**: Development of New Methodologies towards the Synthesis of Indole Derivatives.

**2008 M.Sc.** (Chemistry); **Organic Chemistry (Spl.)**, Visva-Bharati (A Central University), Santiniketan, W.B.

B. Sc. (Chemistry Honours); Bankura Sammilani College (University of Burdwan), W.B.

## **ACADEMIC AWARDS**

2008	Qualified CSIR-NET in Chemical Sciences for Junior Research Fellowship (JRF, CSIR)
2009	Qualified GATE-2009 in Chemistry: All India Rank: 777, Percentile: 88.25
2014	Postdoctoral Research Fellowship (RA-I, Indian Association for the Cultivation of Science)
2015	UGC-Dr. D. S. Kothari Post Doctoral Fellowship (Dept. of Chemistry, Visya-Bharati).

#### TEACHING EXPERIENCES

2017 Asst. Prof., Dept. of Chemistry, A. N. College, Patna (A constituent college of M. U., Bodhgaya) from November-2017 onwards.

**2015-17 Guest lecturer** in Integrated Science Education & Research Centre, Visva-Bharati (A Central University), Santiniketan, W. B., for 5 years integrated M. Sc. course (both theory and practical).

## **PUBLICATIONS**

1. Synthesis of spiro[cyclopent[3]ene-1,3'-indoles] and tetrahydroyclohepta[*b*]indoles from suitably 2,3-disubstituted indoles through sigmatropic rearrangement.

A. Chakraborty, K. Goswami, A. Adiyala and S. Sinha\*

Eur. J. Org. Chem. 2013, 7117-7127.

Impact Factor: 3.344

Online ISSN: 1099-0690, Print ISSN: 1434-193X

No of Citations: 7

2. Synthesis of 3-[2-(1,3-butadienyl)]-1*H*-indoles en route to murrapanine analogue.

A. Chakraborty and S. Sinha\*

**Tetrahedron Lett.** 2011, 52, 6635-6638.

Impact Factor: 2.397 ISSN No. 0040-4039 No of Citations: 8

3. Palladium catalyzed synthesis of 2-allylindole and 2-allylbenzofuran derivatives from 2-((trimethylsilyl)-ethynyl)arenes.

A. Chakraborty, K. Jyothi and S. Sinha\*

**Tetrahedron Lett.** 2014, 55, 6795-6798.

Impact Factor: 2.397 ISSN No. 0040-4039 No of Citations: 3

4. *tert*-Butyl nitrite mediated azo coupling between anilines and imidazoheterocycles.

A. Chakraborty, S. Jana, G. Kibriya, A. Dey and A. Hajra\*

**RSC** Adv., 2016, 6, 34146-34152.

Impact Factor: 3.840 ISSN No. 2046-2069 No of Citations: 2

5. Synthesis of optically active selenium containing isotryptophan, homoisotryptophan and homotryptophan.

K. Goswami, A. Chakraborty and S. Sinha\*

Eur. J. Org. Chem. 2013, 3645-3647.

Impact Factor: 3.344

Online ISSN: 1099-0690, Print ISSN: 1434-193X

No of Citations: 1

6. Copper(I)-Catalyzed Oxidative Coupling between 2-Aminobenzothiazole and Terminal Alkyne: Formation of Benzothiazine.

S. Mitra, **A. Chakraborty**, S. Mishra, A. Majee and A. Hajra\*

*Organic Letters* 2014, *16*, 5652–5655.

Impact Factor: 6.324 ISSN No. 1523-7060

No of Citations: 11

7. Catalyst-free selenylation of imidazoheterocycles.

S. Jana, **A. Chakraborty**, S. Mondal and A. Hajra\*

**RSC** Adv., 2015, 5, 77534–77537.

Impact Factor: 3.840 ISSN No. 2046-2069 No of Citations: 8

8. Metal-Free Synthesis of Indoles from Arylhydrazines and Nitroalkenes at Room Temperature.

M. Singsardar, A. Chakraborty, S. Jana, and A. Hajra\*

**ChemistrySelect,** 2017, 2, 8893 – 8897. **Online ISSN: 2365-6549** 

9. Cu-Catalyzed synthesis of benzo[4,5]imidazo[2,1-*b*]thiazoles from nitroalkenes and 1*H*-benzo[*d*]imidazole-2-thiol. (*Communicated*) S. Jana, **A. Chakraborty**, and A. Hajra\*

#### POSTER PRESENTATION ON SYMPOSIA

- "Synthesis of Indoleazepine Compounds as Potent GSK-3β Kinase Inhibitors." <u>Amrita Chakraborty</u> and Surajit Sinha; National Seminar on Current Trends in Chemistry-V (NSCTC-V): University of Kalyani, Kalyani, West Bengal, India; February 25, 2011.
- "Palladium-catalyzed syntheses of 2-allylindole and 2-allylbenzofuran derivatives from 2-((trimethylsilyl)ethynyl)arenes." <u>Amrita Chakraborty</u> and Surajit Sinha; National Organic Symposium Trust-XII (NOST-XII): CSIR-CDRI, LUCKNOW, India; February 24-27, 2016.
- 3. "Synthesis of spiroindoles and cyclohepta[b]indoles from Suitably 2,3-Disubstituted Indoles through Sigmatropic Rearrangement." <u>Amrita Chakraborty</u> and Surajit Sinha; National Seminar on Recent Trends in Chemistry Research: Dept. of Chemistry, Visva-Bharati (A Central University), Santiniketan, W. B.; March 25-16, 2017.
- 4. "tert-Butyl nitrite mediated azo coupling between anilines and imidazoheterocycles." Amrita Chakraborty and Alakananda Hajra; International Science Seminar: Burdwan Raj College, Burdwan, W. B.; 10 th October, 2017.
- 5. International Symposium on Current Trends in Organic Chemistry (ISOC): Department of Organic Chemistry, IACS, Kolkata, India; December 10-12, **2009**.
- 6. Chemical Research in the First Decade of 21st" Century (CRSI Kolkata Chapter, Symposium-IX): Department of Chemistry, Visva-Bharati, Santiniketan, West Bengal, India; August 6, **2011**.
- 7. International Conference on Chemistry and Complexcity: IACS, Kolkata, India; December 6-8, 2011.
- 8. ACS on Campus: IACS, Kolkata, India; October 12, 2012.
- 9. RSC-INDIA Roadshow: IACS, Kolkata; February 5, 2013.
- 10. National Symposium on Perspective and Challenges in Organic Chemistry: Department of Organic Chemistry, IACS, Kolkata, India; October 18, **2014**.