# Curriculum vitae

Dr. Ramij Raja Mondal

Date of Birth: 05.07.1989

Qualification: M.Sc., Ph.D.

**Specialization: Organic Chemistry** 

**Designation:** Assistant Professor

E-mail Id: ramiizraja@gmail.com and

ramijrajachem@gmail.com

Mobile No.: 9875383350/8509987038



Service: W.B.E.S.

Date of Joining in in W.B.E.S: 10.12.2019

Date of Joining in GGDC, Tehatta: 10.12.2019

**Teaching Experience:** Assistant Professor of Chemistry at Government General Degree College, Tehatta, since December 10, 2019.

**Research Experience:** My research experience primarily focused on constructing C-C, C-N, and C-O bonds through C-H activation and functionalization using both metallic and non-metallic (i.e., green) approaches. Additionally, I worked on developing new methodologies for photo-redox catalysis using visible light and explored hypervalent iodine chemistry from different perspectives.

**Research Interest:** My future research aims to develop novel catalytic systems utilizing first-row transition metals (Fe/Co/Ni/Cu) in conjunction with photoredox catalysis under visible light. The focus will be on selectively activating various C-C and C-hetero bonds to facilitate direct cross-coupling reactions (C-C and C-N), as well as C-H bond functionalization, to construct valuable organic frameworks.

### **Academic Qualification:**

Ph. D.	2019
University of Calcutta, Kolkata, India	
M.Sc.	2013
Ramakrishna Mission Residential College (University of Calcutta), India	
B.Sc.	2011
Ramakrishna Mission Vivekananda Centenary College, University of Calcutta, India	
Higher Secondary	2007
West Bengal Council of Higher Secondary Education	
Secondary	2005
West Bengal Board of Secondary Education	

#### **Doctoral Research:**

Research work (thesis title): "Development of Robust Coupling Catalysis Using Assembly of Compounds: Direct Synthesis of Functional Molecules"

[Supervisor: Prof. Dilip Kumar Maiti, Organic Chemistry Division, University of Calcutta, Kol-09]

#### **Academic Achievements/Awards received till date:**

- **2013,** qualified Graduate Aptitude Test in Engineering (GATE)
- June 2013, qualified Joint CSIR-UGC Junior Research Fellowship (JRF) and Eligibility for Lectureship-National Eligibility Test (NET) (Rank-80)
- **December 2013,** qualified Joint CSIR-UGC Junior Research Fellowship (JRF) and Eligibility for Lectureship- National Eligibility Test (NET) ( Rank-67)
- **2013-2015:** Junior Research Fellowship (JRF) awarded by University Grants Commission (UGC), India.
- 2015-2018: Senior Research Fellowship (SRF) awarded by University Grants Commission (UGC), India.

#### Poster presentation in Symposium:

- Presented Poster in International Conference on Chemistry for Human Development (ICCHD-2018), Jointly Organized by Professor Asima Chatterjee Foundation (PACF) with the University of Calcutta and Heritage Institute of Technology, Kolkata-700107 in 8-10<sup>th</sup> January 2018.
- 2. Presented Poster in *National symposium facets of chemistry in biology (FOCB)* (2016), February 22-23, **2016** by St. Xavier's College.

#### **Publication:** (Paper published till date)

- 1. CuBr-Znl<sub>2</sub> Combo-Catalysis for Mild Cul-CullI Switching and sp<sup>2</sup> C-H Activated Rapid Cyclization to Quinolines and Their Sugar-Based Chiral Analogues: A UV-Vis and XPS Study
  - Ramij R. Mondal, Saikat Khamarui, and Dilip K. Maiti\*, ACS Omega 2016, 1, 251-263.
- 2. Photocatalytic generation of nitrenes for rapid diaziridination
  - Ramij R. Mondal, Saikat Khamarui and Dilip K. Maiti\*, *Organic Letters* 2017, 19 (21), 5964-5967. (ACS editior's choice)
- 3. Reactant cum solvent water: generation of transient  $\lambda^3$ -hypervalent iodine, its reactivity, mechanism and broad application
  - Saikat Khamarui, Rituparna Maiti, Ramij R. Mondal and Dilip K. Maiti\*, RSC Adv. 2015, 5, 106633106643.
- 4. A new fluorescence turn-on chemosensor for nanomolar detection of Al <sup>3+</sup> constructed from a pyridine–pyrazole system
  - Barnali Naskar, Kinsuk Das, **Ramij R. Mondal**, Dilip K. Maiti, Alberto Requena,c Jose´ Pedro Cero´nCarrasco, Chandraday Prodhan, Keya Chaudhurie and Sanchita Goswami\*, *New J. Chem.* 2018, 42, 2933-2941.

## **Attended Academic Enhancement Programme**

Sl. No.	Name of the Course	Mode	Duration	Sponsoring Agency
1	Faculty Induction Programme		01.02.2023	UGC-HRDC,
	(FIP-10)	Online	to	University of
			28.02.2023	Calcutta
2	Refresher Course on Chemistry			UGC-Malaviya
	(Functional Materials for Energy,		03.10.2023	Mission Teacher
	Environmental and Biomedical	Online	to	Training Centre,
	Applications)		16.10.2023	Madurai Kamaraj
				University

I hereby declare that all the statements made above are correct to the best of my knowledge and belief.

Ramij Raja Mondal)

Date: June 2024

Place: GGDC, Tehatta, West Bengal, India