

## CURRICULUM VITAE

**Name:** Dr. MOUMITA MONDAL

**Present Position:** Assistant Professor in Department of Chemistry, NIT Jamshedpur

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### EDUCATIONAL QUALIFICATION:

S. No.	Degree	Board/University	Year	Class/Division
1.	Ph.D	IISER Bhopal	2017	NA
2.	M.Sc	IIT Kanpur	2011	NA
3.	B.Sc	Presidency College, University of Calcutta	2009	1 <sup>st</sup>

**Ph. D Thesis Title:** Palladium(II)-NHC Complexes for Aromatic C-H Functionalization Catalysis: From Homogeneous to Heterogeneous Regime

**M.Sc Thesis Title:** Synthesis of nano cuprous oxide and its optical properties

### RESEARCH INTERESTS:

- Chemistry of organometallic complexes
- C-H functionalization through homogeneous as well as heterogeneous catalysis

### RESEARCH AWARDS/FELLOWSHIPS RECEIVED:

Awarded CSIR-JRF Fellowship in December, 2010

Awarded Seema Jain Memorial Scholarship for second highest CPI among the girl students in M.Sc., from IIT KANPUR

Won Best Poster Award for poster titled 'Stimuli-controlled switching of electronic property in Ru(II) and Ir(III) complexes within N-Heterocyclic Carbene(NHC)-pyridyl dynamic platform' in National Conference on Material Science and Technology organized by Department of Chemistry, IIST Thiruvananthapuram on July 30, 2014

## RESEARCH PUBLICATIONS:

### INTERNATIONAL REFREED SCI/SCOUPUS JOURNALS:

1. Designing a heterogeneous Pd(II)–NHC-based C–H activation catalyst on a self-supported coordination polymer platform, **M. Mondal**, J. Joji, J. Choudhury, *Chem. Commun.*, 2017, **53**, 3185. ISSN 1359-7345.
2. Labile coordination approach for the modulation of the electronic properties of ruthenium(II) and iridium(III) complexes within an “N-heterocyclic carbene (NHC)–pyridyl” dynamic platform, . **M. Mondal**, R. Thenarukandiyil, S. K. Gupta, J. Choudhury, *Dalton Trans.* 2014, **43**, 9356. ISSN 1477-9226.
3. Structure–activity comparison in palladium–N–heterocyclic carbene(NHC) catalyzed arene C H activation-functionalization, **M. Mondal**, *J. Choudhury, J. Mol.Catal. A*, 2017, **426**, 451. ISSN: 1381-1169
4. Chelating Bis-N-heterocyclic Carbene–Palladium(II) Complexes for Oxidative Arene C–H functionalization, S. P. Desai, **M. Mondal**, J. Choudhury, *Organometallics*, 2015, **34**, 2731. ISSN: 0276-7333.
5. Coordination-polymer Anchored Single-site ‘Pd-NHC’ Catalyst for Suzuki-Miyaura Coupling in Water, **M. Mondal**, J. Joji, J. Choudhury, *J. Chem. Sci.*, 2018, **130**, 83. ISSN 0973-7103.

### NATIONAL CONFERENCES:

**M. Mondal**, R. Thenarukandiyil, S. K. Gupta, J. Choudhury, poster entitled “*Stimuli-Controlled Switching of Electronic Property in Ru(II) and Ir(III) Complexes within NHC-Pyridyl Dynamic Platform*” presented in the National Conference on Materials Science and Technology organized by Department of Chemistry, IIST, Thiruvananthapuram during July 28 – 30, 2014.

### INTERNATIONAL CONFERENCES:

**M. Mondal**, J. Choudhury, poster entitled “*N-Heterocyclic Carbene–Palladium(II) Complexes for Oxidative Arene C–H Functionalization*” presented in the International Symposium on Modern Trends in Inorganic Chemistry-XVI organized by Department of Chemistry, Jadavpur University during December 3-5, 2015.

**RESEARCH PROJECTS:**

Sr. No.	Title of project	Sponsor	Duration	Approved fund (in Lacs, INR)	Investigator
1	Field Detection of Arsenic, Lead and Mercury in Water by Visible Colour Change with Single Surface Modified Gold Nanoparticle Sensor	National Initiative for design innovation Project, NIT Jamshedpur	December 2018 to March 2021	5	Dr. Moumita Mondal
2	Ni-Catalyzed C-H activation	Minor seed research grant, TEQIP III	October 2019 to September 2020	3	Dr. Moumita Mondal

**TEACHING EXPERIENCE:**

Institute/Organization : NIT Jamshedpur			
Courses Taught			
Course Title	Level (UG/PG)	Branch	No. of times
Retrosynthetic Analysis	PG	M.Sc Chemistry	1
Surface Science and Engineering	PG	M.TECH Surface Science and Engineering	2
Organometallic Chemistry	PG	M.Sc Chemistry	2
Supramolecular Chemistry	PG	M.Sc Chemistry	1
Transition and Inner Transition Elements	PG	M.Sc Chemistry	2
Solid state chemistry	PG	M.Sc Chemistry	1
Inorganic Chemistry Laboratory	PG	M.Sc Chemistry	2
Engineering Chemistry Laboratory	UG	B. Tech	2

**M. SC. PROJECT MENTORED:**

<b>Institute/Organization : NIT Jamshedpur</b>	
<b>Thesis Title</b>	<b>Year</b>
Organometallic Ni- Catalyzed Remote meta-C-H Functionalization of Arene	January' 2018
Ni Catalyzed Suzuki- Miyaura Coupling Reaction of Aryl Chloride with Aryl Boronic Acid	January' 2018
Field Detection of Hg (II) in Water by Visible Colour Change with Surface Modified Gold Nanoparticles Sensor	January' 2019
Field Detection of Arsenic in Water by Visible Colour Change with Surface Modified Gold Nanoparticle Sensor	January' 2019
Ni-catalyzed C-H Functionalization	January' 2020
Nanoparticles and its Applications	January 2020