

Curriculum Vitae

Name and full correspondence address:

Dr. Dinesh Maity
Department of Chemistry
Katwa College
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Date of Birth:

February 02, 1986

Academic Qualifications:

Degree	University/Institute	Year
Ph.D. (Science)	Jadavpur University, Kolkata, India	2009-2014
M.Sc.(Inorganic Chemistry)	Vidyasagar University, West Bengal, India	2006-2008
B.Sc.(Chemistry Hons)	Vidyasagar University, West Bengal, India	2003-2006

Awards and Certifications:

- ❖ Qualified National Eligibility Test in Chemical Sciences (CSIR-JRF/SRF) in 2008 (A national level examination for eligibility of lectureship in Indian Universities).
- ❖ Awarded UGC-Dr. D. S. Kothari Postdoctoral Fellow, 2015.
- ❖ Three year ACS membership award, 2014-2017.

Research Experience:

Postdoctoral Research:

UGC-Dr. D. S. Kothari Post Doctoral Fellow, India (February, 2015-Nonember 2017)

Supervisor:

Prof. Sasankasekhar Mohanta,
Department of Chemistry, University of Calcutta, India.

Doctorate Research:

Junior (2 years) and Senior (3 years) Research Fellow (January, 2009-December 2014)

Jadavpur University, Kolkata-700032, India.

Thesis Title (Chemistry): *Synthesis, Characterization and pH-Induced Modulation of Photophysical, Electrochemical and Intercomponent Electron and Energy Transfer in Multimetallic Platinum Metal Complexes*

Supervisor: Prof. Sujoy Baithalik,
Department of Chemistry, Jadavpur University
Kolkata -700032, India

Publications at a glance:

Name of Journal	No. of Articles
Chemistry-A European Journal (Wiley)	1
Inorganic Chemistry (ACS)	6
The Journal of Physical Chemistry A (ACS)	1
The Journal of Physical Chemistry C (ACS)	1
Dalton Transaction (RSC)	6
RSC Advances (RSC)	1
Sensors and Actuators B: Chemical (Elsevier)	2
Polyhedron (Elsevier)	1
Indian Journal of Chemistry, Sec A	1
ChemistrySelect(Wiley)	1
Total	21

List of Publications:

1. **Maity, D.;** * Hari, N.; Mohanta, S. * “A Bis(Boronic Ester)-Based Fluorogenic and Chromogenic Sensor for F⁻ and Cu²⁺” *ChemistrySelect*, **2017**, 2, 9037-9045.
2. Bar, M.; **Maity, D.;** K. Das.; Baitalik, S. * “Asymmetric Bimetallic Ruthenium(II) Complexes Selectively Sense Cyanide in Water Through Significant Modulation of Their Ground and Excited state Properties” *Sensor and Actuators B*, **2017**, 251, 208-

223.

3. Bar, M.; **Maity, D.**; Das, S.; Baitalik, S.* “Demonstration of Intramolecular Energy Transfer in Asymmetric Bimetallic Ruthenium(II) Complexes” *Dalton Trans.* **2016**, *45*, 17241-1725.
4. Karmakar, S.; Mardanya, S.; **Maity, D.**; Baitalik, S.* “Polypyridyl-imidazole Based Os(II) Complex as Optical Chemosensor for Anions and Cations and Multi-readout Molecular Logic Gates and Memory Device: Experimental and DFT/TDDFT Study” *Sensor and Actuators B*, **2016**, *226*, 388-402.
5. Mondal, D.; Bar, M.; **Maity, D.**; Baitalik, S.* “Anthraimidazoledione-Terpyridine-Based Optical Chemosensor for Anions and Cations That Works As Molecular Half-Subtractor, Key-Pad Lock, and Memory Device” *J. Phys. Chem. C*, **2015**, *119*, 25429-25441.
6. Karmakar, S.; **Maity, D.**; Mardanya, S.; Baitalik, S.* “Pyrene and Imidazole Functionalized Luminescent Bimetallic Ru(II) terpyridine Complexes as Efficient Optical Chemosensors for Cyanide in Aqueous, Organic and Solid Media” *Dalton Trans.* **2015**, *44*, 18607-18623.
7. **Maity, D.**; Mardanya, S.; Karmakar, S.; Baitalik, S.* “pH-Induced Processes in Wire-like Multichromophoric Homo- and Heterotrimetallic Complexes of Fe(II), Ru(II), and Os(II)” *Dalton Trans.* **2015**, *44*, 10048-10059.
8. Mardanya, S.; Karmakar, S.; **Maity, D.**; Baitalik, S.* “Ru(II) and Os(II) Mixed-Chelates Based on Pyrenyl-Pyridylimidazole and 2, 2' Bipyridine Ligands as Efficient DNA Intercalators and Anion Sensors” *Inorg. Chem.* **2015**, *54*, 513-526 (Most Read Article, 1 month).
9. Karmakar, S.; **Maity, D.**; Mardanya, S.; Baitalik, S.* “Multichromophoric Bimetallic Ru(II) Terpyridine Complexes Based on Pyrenyl-Bis-Phenylimidazole Spacer: Synthesis, Photophysics, Spectroelectro-chemistry and TD-DFT Calculations” *Inorg. Chem.* **2014**, *53*, 12036-12049 (Most Read Article, 1 month).
10. Karmakar, S.; **Maity, D.**; Mardanya, S.; Baitalik, S.* “Demonstration of Multiple Logic Operations in a Heteroditopic Pyrene-Phenylimidazole-Terpyridine Conjugate

Based on Optical Responses by Selective Anions and Cations: An Experimental and Theoretical Investigation” *J. Phys. Chem. A*, **2014**, *118*, 9397-9410 (Most Read Article, 12 months).

11. **Maity, D.**; Bhaumik, C.; Mardanya, S.; Karmakar, S.; Baitalik, S^{*}. “Light Harvesting and Directional Energy Transfer in Long-Lived Homo- and Heterotrimetallic Complexes of Fe(II), Ru(II) and Os(II)” *Chem. Eur.J*, **2014**, *20*, 13242-13252.
12. **Maity, D.**; Bhaumik, C.; Mondal, D.; Baitalik, S^{*}. “Photoinduced Intra- molecular Energy Transfer and Anion Sensing Studies of Isomeric Ru^{II}Os^{II} Complexes Derived from an Asymmetric Phenanthroline-Terpyridine Bridge” *Dalton Trans.* **2014**, *43*, 1829-1845.
13. **Maity, D.**; Bhaumik, C.; Mondal, D.; Baitalik, S^{*}. “Ru(II) and Os(II) Complexes Based on Terpyridyl-Imidazole Ligand Rigidly Linked to Pyrene: Synthesis, Structure, Photophysics, Electrochemistry, and Anion-Sensing Studies” *Inorg. Chem.* **2013**, *52*, 13941-13955.
14. **Maity, D.**; Bhaumik, C.; Karmakar, S.; Baitalik, S^{*}. “Photoinduced Electron and Energy Transfer and pH-Induced Modulation of Photophysical Properties in Homo- and Heterobimetallic Complexes of Ru(II) and Rh(III) Based on a Heteroditopic Phenanthroline-Terpyridine Bridge” *Inorg. Chem.* **2013**, *52*, 7933-7946.
15. **Maity, D.**; Das, S.; Mardanya, S.; Baitalik, S^{*}. “Synthesis, Structural Characterization, and Photophysical, Spectroelectrochemical, and Anion-Sensing Studies of Heteroleptic Ru(II) Complexes Derived from 4'-Polyaromatic Substituted Terpyridine Derivatives and 2,6- Bis(Benzimidazole-2-yl)Pyridine” *Inorg. Chem.* **2013**, *52*, 6820-6838 (Most Read Article, 12 months).
16. Bhaumik, C.; **Maity, D.**; Das, S.; Baitalik, S^{*}. “Anion Sensing Studies of Luminescent Bis-tridentate Ruthenium(II) and Osmium(II) Complexes Based on Terpyridyl-Imidazole Ligand Through Different Channels” *Polyhedron* **2013**, *52*, 890-899 (*Invited Article on the occasion of 100th Anniversary of the 1913 Nobel Prize in Chemistry to Alfred Werner*).

17. Bhaumik, C.; **Maity, D.**; Das, S.; Baitalik, S.* “Synthesis, Structural Characterization, Solvatochromism, and Ion-Binding Studies of a Ditopic Receptor Based on 2-(4-[2,2':6',2'']Terpyridin-4'-yl-phenyl)-1H-Phenanthro[9,10-d]imidazole (tpy-HImzphen) Unit” *RSC Advances* **2012**, 2, 2581-2594.
18. Bhaumik, C.; Das, S.; **Maity, D.**; Baitalik, S.* “Luminescent Bis-Tridentate Ruthenium(II) and Osmium(II) Complexes Based on Terpyridyl-Imidazole Ligand: Synthesis, Structural Characterization, Photophysical, Electrochemical, and Solvent Dependence Studies” *Dalton Trans.* **2012**, 41, 2427-2438.
19. Saha, D.; Das, S.; **Maity, D.**; Baitalik, S.* “Osmium(II) Mixed-Chelate Derived from Imidazole 4,5-Bis(benzimidazole) and 2,2'-Bipyridine as Multichannel Sensor for Anions: Synthesis, Structural Characterization and Binding Studies” *Indian J. Chem. SecA*, **2011**, 50A, 1418–1428. (*Invited article dedicated to 150th birth anniversary of Acharya P C Ray*).
20. Bhaumik, C.; Das, S.; **Maity, D.**; Baitalik, S.* “A Terpyridyl-Imidazole (tpy-HImzPh₃) Based Bifunctional Receptor for Multichannel Detection of Fe²⁺ and F⁻ Ions” *Dalton Trans.* **2011**, 40, 11795–11808.
21. Saha, D.; Das, S.; **Maity, D.**; Dutta S.; Baitalik, S.* “Synthesis, Structural Characterization, Photophysical, Electrochemical, Intercomponent Energy Transfer, and Anion Sensing Studies of Imidazole 4,5-Bis (benzimidazole)-Bridged Os^{II}Os^{II} and Ru^{II}Os^{II}-Bipyridine Complexes” *Inorg. Chem.* **2011**, 50, 46–61.

Conferences/Workshops Attended:

- Participated and presented an invited poster in the International Conference on Structural Chemistry of Molecular and Materials held in nano science and nanotechnology, University of Calcutta, India on November 30th- December 2nd 2014.
- Participated and Presented a poster in the National Conference on Photosciences: Contemporary Challenges and Future Perspective Organized by Indian Photobiological Society in collaboration with Department of Chemistry, Jadavpur

University, Kolkata- 70002 during December 12-14, 2013.

- Attended the National Seminar on Recent Advances in Chemistry organized by the Department of Chemistry, Jadavpur University, Kolkata-700032 during February 10-11, 2012.
- Participated and presented a poster in the UGC sponsored National Seminar Recent Trends in Research and Teaching in Chemical Science on 17th – 18th January, 2012 Department of Chemistry Panskura Banamali College, West Bengal, India.

Research Interest:

- Design and Synthesis of Light Harvesting Compounds.
- Characterization, Photophysical and Electrochemical Properties of Synthesized Coordination Compounds.
- Anion and Cation Sensing.
- Intercomponent Energy and Electron Transfer Process.
- DNA Interaction with Metal Complexes.

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