

Curriculum Vitae

Dr. Debarati Das

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Date of Birth: 27-11-1988

Sex: Female

Nationality: Indian

Marital Status: Married

Mob. No: +91-8370968503, +91-9477270244

E-mail: debarati.das136@gmail.com

Language Proficiency: English, Hindi, Bengali.



Communication Address:

D-301, Shah Complex 3 Chs Ltd., Plot No.-02, Sector -13, Sanpada, Navi Mumbai, Maharashtra,
PIN- 400705


Permanent Address:

8, Kalibari Road, P.O.- Santoshpur, Kolkata, West Bengal, PIN- 700075


Current Position and Experience

 **Post Doctorate (2019-present):** D. S. Kothari fellowship Awardee, ICT Mumbai, India.

(Supervisor: Prof. B.M. Bhanage)


 **Content Writer (2019):** Content Writer in Chemistry, Genius Learning Lab Pvt. Ltd., Mumbai.

Academic Achievements

 **Doctorate (2012-2018):** Ph. D. programme in Chemistry, Indian Institute of Technology, Kharagpur (IITKgp), India.

Title of the thesis: Crystal Engineering Studies on Coordination and Hydrogen Bonded Solids: Exploration of Magnetic, Luminescence and Sensing Properties

(Supervisor: Prof. Kumar Biradha)




 **M.Sc. (2009-2012):** Masters in Chemistry from University of Calcutta, India. (1st Class with **79.8%**).

Title of the Project: Synthesis, Characterisation & Spectral Studies of Mo(V) Complexes.

(Supervisor: Prof. S S Mandal)

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


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-  **B.Sc. (2006-2009):** Chemistry Honours, from Lady Braboune College, University of Calcutta, India. (1st Class with **68.13%**). Pass courses: Physics and Mathematics.
-  **Higher Secondary:** W.B.C.H.S.E Board, with **84.2%**.
(10+2 Equivalent) Passing year: 2006. Science stream.
-  **Madhyamik Examination:** W.B.B.S.E Board, with **85.9%**.
(10 Equivalent) Passing year: 2004.










Awards and Achievements

Fellowship	Year	Rank
DSKPDF	November, 2019	Awarded
CSIR-UGC NET	June, 2012	UGC-82
CSIR-UGC NET	June, 2011	UGC-88
CSIR-UGC NET	December, 2010	LS-124




Specialized Skills

-  **Research skills** The choice of metal and linker has significant effects on the structure and properties of the functional materials. My expertise is proper understanding of designing synthetic strategies to prepare ligands and to tune their structures to develop interesting properties.
-  **Technical skills** 1) Synthesis of ligands through multi-steps organic reactions.
2) Practical understanding on various techniques such as ¹H-NMR, ¹³C-NMR, IR, UV-vis, single-crystal X-ray crystallography, XRPD, Fluorescence spectroscopy, Morphological study of compounds by FESEM, TEM, POM analysis, Thermogravimetric Analysis (TGA).
-  **Teaching skills** Teaching assistant (TA) and laboratory mentor (both inorganic and organic) for B.Tech and M.Sc students during the Ph.D. program at IIT Kharagpur.

Publication list

-  **D. Das** and B. M. Bhanage, Double Carbonylation Reactions: Overview and Recent Advances, *Adv. Synth. Catal.*, 2020, 362 (15), 3022-3058.
-  **D. Das** and Kumar Biradha, Cocrystals and Salts of 3,5-Bis(pyridinylmethylene)piperidin-4-one with Aromatic Poly-Carboxylates and Resorcinols: Influence of Stacking Interactions on Solid-State Luminescence Properties, *Aust. J. Chem.*, 2019, 72(10) 742-750.
-  **D. Das**, S. Roy and K. Biradha, Crystal Engineering with Isosteric Triamine and Triether linked Aromatic Tri-carboxylic Acids: Iso-structurality and Synthons interplay in their Co-crystals and Salts with Bis(pyridyl) Derivatives, *New J. Chem.*, 2018, 42, 19953-19962.
-  **D. Das** and K. Biradha, Luminescent Coordination Polymers of Naphthalene Based Diamide with Rigid and Flexible Dicarboxylates: Sensing of Nitro Explosives, Fe(III) Ion, and Dyes. *Cryst. Growth Des.*, 2018, 18 (6), 3683–3692.
-  **D. Das** and K. Biradha, Metal-Organic Gels of Silver Salts with an α,β -Unsaturated Ketone: Influence of Anions and Solvents on Gelation, *Inorg. Chem. Front.*, 2017, 4, 1365-1373.
-  **D. Das**, G. Mahata, A. Adhikary, S. Konar, and K. Biradha, Structural Adaptation of Ni_4O_4 Units to Form Cubane, Open Dicubane, Dimeric Cubane, and One-dimensional Polymeric Cubanes: Magnetostructural Correlation of Ni_4 Clusters, *Cryst. Growth Des.*, 2015, 15, 4132-4141.
-  **D. Das**, K. Biradha, Supramolecular Metallogelator: The Pivotal Role of Aromatic Solvents and anions, *Acta Cryst.*, 2017, A73, C528. (Conference paper).
- Book Chapters.*
-  **D. Das** and B. M. Bhanage, Nickel-catalyzed Carbonylations, (eds. Bartolo Gabriele), Wiley-VCH.
-  **D. Das**, N. Patil, and B. M. Bhanage, Organic Transformations with Nitromethane, (eds. Xiao-Feng Wu), Wiley-VCH.




Conferences attended

-  **13th - 14th October, 2012** Symposium on “Inorganic Chemistry at Interface (SICI)”, Department of Chemistry, IITKgp, Kharagpur, India.
-  **5th December, 2013** Meeting on “ACS on campus”, Indian Institute of Technology, Kharagpur, India.
-  **30th - 2nd December 2014** International Conference on “Structural Chemistry of Molecules and Materials (SCOMM-2014)”, Center for Research in Nanoscience and Nanotechnology (CRNN),



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University of Calcutta, India.

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|  | 13th January, 2015 | Conference on " Current Trends in Synthetic Organic Chemistry ", Department of Chemistry, IIT Kgp. |
|  | 5th - 8th December 2015 | International Conference on "The 13 th Conference of the Asian Crystallographic Association (AsCA-2015)", Science City, Kolkata. |
|  | 17th - 18th February, 2017 | Symposium on "Organic Molecules: Syntheses and Applications (OMSA)", IIT Kharagpur. |
|  | 21st -28th August 2017 | 24th Congress & General Assembly of the International Union of Crystallography (IUCr, 2017), Hyderabad, India. |

Poster Presentations

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|---|--|---|
|  | 30th -2nd December 2014 | International Conference on "Structural Chemistry of Molecules and Materials (SCOMM-2014)", Center for Research in Nanoscience and Nanotechnology (CRNN), University of Calcutta, India. |
|  | 21st -28th August 2017 | 24th Congress & General Assembly of the International Union of Crystallography (IUCr, 2017), Hyderabad, India. |

Oral Presentation

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| 5th - 8th December 2015 | International Conference on "The 13 th Conference of the Asian Crystallographic Association (AsCA-2015)", Science City, Kolkata, India; Topic: "Structural Adaptation of Ni ₄ O ₄ Units to Form Cubane, Open Dicubane, Dimeric Cubane, and One-Dimensional Polymeric Cubanes: Magnetostructural Correlation of Ni ₄ Clusters" |
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My objective is to work in a challenging and competitive environment where I would be able to explore my abilities and hence contribute to the best of myself.

I declare that the foregoing information is correct and complete to the best of my knowledge and belief.

Debarati Das

