

CURRICULUM VITAE

Dr. Hari Pada Nayek

Associate Professor

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Professional Position

Associate Professor: (2019- present): Department of Chemistry, Indian Institute of Technology (Indian School of Mines) Dhanbad.

Assistant Professor: (2011- 2019): Department of Chemistry, Indian Institute of Technology (Indian School of Mines) Dhanbad.

Postdoctoral Research: (2009-2011): Institute of Inorganic Chemistry, Karlsruhe Institute of Technology, Germany.

Supervisor: Prof. Dr. Peter W. Roesky

Postdoctoral Research: (2009): Department of Chemistry, Philipps Universität Marburg, Germany.

Supervisor: Prof. Dr. Stefanie Dehnen

Education

Ph.D. in Chemistry: (2006-2009): Department of Chemistry, Philipps Universität Marburg, Germany.

Thesis Supervisor: Prof. Dr. Stefanie Dehnen

Master of Science: (2004-2006) Department of Chemistry, Indian Institute of Technology Kanpur, India.

Bachelor of Science: (2001-2004) Chemistry (Honors), University of Calcutta, Kolkata, India.

Additional Qualification

1. CSIR-NET-JRF in Chemistry, December, 2006).
2. GATE in Chemistry, 2006
3. JAM in Chemistry: (2004) Joint Admission Test to Master of Science conducted by Indian Institute of Technology.

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Award and Fellowship

1. DAAD fellowship, University of Duisburg-Essen, Germany, 2014
2. Postdoctoral scholarship, Karlsruhe Institute of Technology, Germany, 2009-2011.
3. Doctoral scholarship at University of Marburg, Germany, 2006-2009.

Membership

1. Life member (F/8093), Indian Chemical Society, Kolkata.

Invited talks/Conference/Workshop attended

1. 30th International Conference on Organometallic Chemistry, July 14-18, 2024, Agra, India.
2. One-Day International Workshop on CO₂ and Biomass as Feedstock for the Production of Fuels and Chemical Intermediates, 2023, IIT(ISM) Dhanbad
3. International Conference on Recent Trends in Chemical Sciences (RTCS), 16-18th December, 2022, IIT(ISM) Dhanbad.
4. International Conference on Net Zero Emission Technologies (N0ET), 2022, IIT(ISM) Dhanbad
5. 2nd International Conference on CrystalEngineering: From Molecule to Crystal, 2020.
6. New Trends and Future Directions in Catalysis, 2020
7. Delivered a talk in the “Eastern Regional Workshop for Pandiat Madan Mohon Malviya National Mission on Teachers and Training organized by MHRD, IIT Kharagpur, 20th April, 2018.
8. National Conference on Recent Advances in Science and Engineering (RASE), 2016, IIT(ISM) Dhanbad
9. Annual Workshop on Catalysis, 2017, IIT(ISM) Dhanbad
10. Invited talk at 33rd Annual National conference organized by Indian Council of Chemists, 15-17th December, 2014.
11. 150th Anniversary Weltkongress Chemie Karlsruhe, September 2010.
12. Hemdsärmelkolloquium (HÄKO) March 2009, Philipps-Universität Marburg.
13. Poster presentation in Materialforschungstag Mittelhessen in Universität Marburg in June 2008.
14. Poster presentation in 14. Vortragstagung der Wöhler-Vereinigung für Anorganische Chemie in München in September 2008.

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Conference/Workshops/Outreach Activities Conducted

1. A Workshop on Single Crystal X-Ray Diffraction, 26-28th January, 2024.
Role: Coordinator
2. International Conference on Recent Trends in Chemical Sciences (RTCS), 16-18th December, 2022, IIT(ISM) Dhanbad.
Role: Treasurer
3. Refresher Programme in Chemistry, 01-21st June, 2017.
Role: Coordinator
4. National Conference on Recent Advances in Science and Engineering, 28-29th March, 2016. Role: Organizing Secretary

Institutional Responsibilities

1. Convener, DPGC, 2022-2024
2. Standing IPDF selection committee member, 2023-present
3. Standing DPAC member of the Department, 2021-present
4. Coordinator, Continuing Education Programs (CEP), 2021-present
5. Coordinator, AERB, eLORA (2021-present)
6. JRF Coordinator, Chemistry, 2019-2022
7. Faculty-in-charge, Single Crystal X-ray Diffraction Laboratory, CRF, IIT(ISM), 2017-present.
8. Faculty-in-charge, CHNSO analyser, CRF, IIT(ISM), 2021-present.
9. Member, Equal Opportunity Cell, 2021-present
10. Secretary, Departmental Academic Committee (DAC), 2020-2021
11. Senate member, 2018-2021.
12. Warden, Emerald hostel, 2018-2020.
13. Chief Warden, 2000 bed boy's hostel, 2020-2022.
14. Time Table in charge, Department of Chemistry, 2016-2021.
15. Deputy coordinator, Faculty Development Centre, IIT(ISM), 2015-2021.

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Details of R & D Projects

Details of the project		
1.	Title	Design, Syntheses and Applications of Bifunctional Compounds of Tetravalent Group 14 Elements
	Sanctioning authority	SERB
	Duration	2023-2026
	Amount	29.58 Lakh
	Status	Ongoing
	Role	Principal Investigator
2.	Title	Organogermanium Supported Polynuclear Metal Complexes as Cooperative Catalysts for Organic Reaction
	Sanctioning authority	CSIR
	Duration	2023-2026
	Amount	9.00 Lakh
	Status	Ongoing
	Role	Principal Investigator
3.	Title	Synthesis and Application of Air-Stable Lewis Acid Catalysts of Main Group Elements
	Sanctioning authority	SERB
	Duration	2019-2022
	Amount	19.62 Lakh
	Status	Completed
	Role	Principal Investigator
4.	Title	Syntheses of Polynuclear Metal Complexes from Metalloligands of Group 14 Elements and Their Catalytic Activities
	Sanctioning authority	SERB
	Duration	2014-2018
	Amount	52.8 Lakh
	Status	Completed
	Role	Principal Investigator
5.	Title	Synthesis of Triplesalen-Based Metal-organic Frameworks (MOFs) and Investigation on Their Functional Applicability
	Sanctioning authority	SERB
	Duration	2012-2015
	Amount	25.4 Lakhs
	Status	Completed
	Role	Principal Investigator
6.	Title	Synthesis and Catalytic Applications of Lanthanide-based Metal Organic Frameworks (Ln-MOFs)
	Sanctioning authority	IIT-ISM (TEQIP-III)
	Duration	2018-2020

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	Amount	2.0 Lakhs
	Status	Completed
	Role	Principal Investigator
7.	Title	Synthesis of Heterometallic Chiral Metal-Organic Frameworks (Cmofs) and Their Applications in Asymmetric Catalysis
	Sanctioning authority	IIT-ISM
	Duration	2013-2016
	Amount	9.7 Lakhs
	Status	Completed
8.	Title	Salen-Based Metal Organic Frameworks of Transition metals and Main group elements and its catalytic applications
	Sanctioning authority	IIT-ISM
	Duration	2011-2013
	Amount	1.0 Lakh
	Status	Completed

Details of Consultancy/Other Projects

Details of the project		
1.	Title	Faculty Development Centre (FDC)
	Sanctioning authority	MHRD
	Duration	2015-2021
	Amount	5.57 Crores
	Status	Completed
	Role	Deputy coordinator

Research Guidance

Ph. D. Student –awarded

	Name	Year	Title of the Project
1.	Arijit Sarkar	2021	Homo or heterometallic polynuclear complexes: syntheses, properties and applications
2.	Shankhamala Ghosh	2021	Synthesis And Application Of Carboxylate Ligand-Based Metal Organic Frameworks (Mofs) And Metal Complexes
3.	Richa Vinayak	2020	Synthesis of Metal Complexes from Organometallic Metalloligands and its Catalytic Applications
4.	Souvik Pal	2018	Synthesis and Applications of Inorganic-Organic Hybrid Frameworks based on

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			Polycarboxylate and Organo-Phosphorus Ligands
5.	Mamata Mahato	2018	Metal complexes of Schiff base and dithiocarbamate ligands: Syntheses and applications
6.	Sudeshna Saha	2016	Syntheses of mononuclear, polynuclear metal complexes and boronates of Schiff base ligands

Ph. D. Student –Ongoing

	Present Student	Title of the Project
1.	Debayan Basu	Synthesis Of Complexes Of Main Group Elements For Organic Transformations
2.	Manish Kumar	Organotin Complexes For Organic Transformations
3.	Kajal	Lanthanide Coordination Clusters For Organic Reactions
4.	Sudipta Chakraborty	Bifunctional Catalysts Of Main Group Elements
5.	Pallabi Mondal	Metal-Ligand Cooperatively

Post Graduate (M.Sc.) Student–Ongoing

	Present Student	Title of the Project
1.	Riddhi Bansal	Organotin compounds
2.	Shreya Chowdhury	Lanthanide clusters
3.	Trisha Putatunda	Organogermanium compounds

Post Graduate (M.Sc.) Student –Completed

	Student	Year	Title of the Project
1.	Saptarshi Bhattacharya	2024	Syntheses, Structures, and Catalytic Activity of Mononuclear Organotin(IV) Compounds of 3,5-Dichlorosalicylidene-4-methyl-aminophenol
2.	Suman Pradhan	2024	Synthesis and Characterization of Schiff-Base Derived Cobalt(III) and Cadmium(II) Complexes
3.	Soubhik Khata	2024	Synthesis and Characterization of Hexacoordinated Organotin(IV) Complexes
4.	Barshali Ghosh	2023	Syntheses, Structures and Catalytic

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			Activity of Mononuclear Organotin(IV) Complexes of 3,5-Dichloro-Salicylidene-4-Nitro-O-Aminophenol
5.	Priti Roy	2023	Synthesis and Characterisation of A Schiff-Base Derived Mononuclear Cobalt(III) Complex
6.	Sushanta Gorain	2023	Synthesis and characterization of organotin(IV) Complexes of -2-((2-hydroxy-3-methoxybenzylidene)amino)pyridin-3-ol
7.	Prithaj Ghosh	2022	Syntheses and Characterization of Four New Organotin(IV) Carboxylates WITH electron-donating groups.
8.	Anasuya Maji	2022	Syntheses And Characterisation Of Four New Organotin(Iv) Carboxylates With Electron-Withdrawing Groups.
9.	Pankaj Pareek	2022	Synthesis, Characterization And Optical Properties of Organotin(Iv) Complexes Of Schiff Base Ligands
10.	Niva Ghosh	2021	Heteronuclear Coordination Clusters as Catalyst in Organic Synthesis
11.	Subhajit Kar	2021	Organotin Compounds for Selective Sensing of Metal Ions
12.	Shiv Shankar	2021	Synthesis of organometallic compounds of Ln^{2+} ions
13.	Pinku Prasad Mondal	2020	Mononuclear Dy(III) complex catalyzed domino reactions
14.	Souvick Maji	2020	Synthesis of amino acid based organogermanium(iv) complexes
15.	Souvik Debnath	2020	Catalytic Activity of a Cu(II) Coordination Compound towards Chan-lam coupling reaction
16.	Sourav Jana	2019	Selective organic reactions catalysed by Metal salt and coordination cluster
17.	Abhishek Sarkar	2019	Synthesis and Catalytic Activity of a Cu(II) Coordination Compound
18.	Kartick Dey	2018	Synthesis and application of Pd-doped covalent organic frameworks
19.	Jyotishka Nath	2018	Synthesis and Characterization of Cd(II) Metal Organic Frameworks
20.	Asmita Dey	2018	Synthesis and Structure of Organotin(IV) complex.
21.	Priyanka Ghar	2017	Synthesis and Characterization of Mononuclear Schiff Base-Cobalt (III) Complex
22.	Sandeep Kumar	2017	Synthesis, Structure and Characterization of Dinuclear Nickel(II) Schiff Base Complex

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23.	Sudip Maiti	2017	Mn-MOF, an Efficient Catalyst for Henry Reaction
24.	Tania Sheikh	2017	Synthesis and Characterization of Mononuclear Co(III) Complex: Studies on Catecholase Activity
25.	Soumyadip Patra	2016	Synthesis and characterization of transition metal complexes of Schiff-base ligand
26.	Dipanjana Bhattacharya	2016	Syntheses and characterisation of heteronuclear 3d/s complexes of Schiff base
27.	Ashok K. Mondal	2016	Synthesis and characterization of various metal complexes of a Schiff-base ligand using different co-ligands
28.	Prama Bhattacharjee	2016	Synthesis of coordination polymers of copper
29.	Manish Kumar	2015	Water soluble lanthanide complexes
30.	Subhayan Jana	2015	Synthesis, structure and properties of transition metal complexes of a Schiff base ligand
31.	Lipi Midya	2015	Synthesis and Characterization of $[\text{Fe}(\text{CN})_6]^{3-}$ based Coordination Polymer
32.	Anirban Chakrabarti	2014	Syntheses and characterization of Magnetic Chains
33.	Paromita Karfa	2014	Syntheses of Schiff-base Metal complexes
34.	Sanddep Rai	2014	Hirshfield surface analysis of H-bonded compounds
35.	Neetu Balmuchu	2013	Synthesis, Characterization of N-(2-hydroxyphenyl)-3-methoxysalicylideneamine and its Reactivity toward Transition metals
36.	Debashish Maji	2013	Synthesis, Characterization and Reactivity of Tris(2-pyridylamino)phosphate
37.	Arup K. Dey	2013	Synthesis, characterisation & reactivity of 2-[(E)-[2-bromoethyl] imino] methyl}-6-methoxy phenol
38.	Sudeshna Saha	2012	Synthesis of Trinuclear Metal Complexes of 1, 3, 5-Triacetyl-2, 4, 6-trihydroxybenzene Derived Ligands
39.	Souvik Pal	2012	Synthesis and Reactivity of Schiff base and Phosphorous based ligands