



Murshidabad University

FACULTY ACADEMIC PROFILE / CV



Full name of the faculty member: **Dr. Jahar Lal Pratihar**

Designation: **Associate Professor**

Contact information: **+919475744754, jlpchem@gmail.com**

Academic qualifications:

College/University from which the degree was obtained	Abbreviation of the degree
Vidyasagar University	M.Sc.
University Of Kalyani	Ph.D.

Positions held/ holding: **Associate Professor & PG-Coordinator, Department of Chemistry**

Research interests:

Coordination Chemistry: *Synthesis of metal complexes, their characterization, redox properties and catalytic applications*

Organometallic Chemistry: *Synthesis of M-C bonded species via C-H bond activation, catalytic application of the organometallic complexes*

Research guidance: **01** (Degree awarded from University of Kalyani)

Projects: **02**

- Title:** Studies on new bi- and poly nuclear transition metal complexes incorporating newly synthesized suitably designed delocalized ligands
Funding Agency: UGC
Period: 2011- 2013
Amount: Rs. 1,99,000/-
- Title:** Mono and polynuclear complexes of heavier transition metals incorporating azo-imine ligands. Search for compounds that are potential to mediate organic transformations.
Funding Agency: UGC
Period: 2017- 2019
Amount: Rs. 4,50,000/-

Select list of publications (Only number):

- a) Journals: **41**
- b) Books/ book chapters: 0
- c) Conference/ seminar volumes: 0

Membership of Learned Societies: NA

Invited lectures delivered: NA

Awards:

2009-2010, Postdoctoral Fellow, The University of New Brunswick, Canada.

2008-2009, Research Associate, Council of Scientific and Industrial Research, New Delhi, India.

2007-2008, Postdoctoral Fellow, National Science Council, National Changhua University of Education, Taiwan.

2006-2007, Postdoctoral Fellow, National Science Council, National Cheng Kung University, Taiwan.

2001, National Eligibility Test (NET-2001, Chemistry)

2001, Graduate Aptitude Test in Engineering (GATE-2001, Chemistry)

Other notable activities:

Journal Review Work: Inorganic Chemistry, ACS Omega, Journal of Coordination Chemistry, Comments on Inorganic Chemistry, Indian Chemical Society, etc.

List of Journal Publication/ Conference Papers: (Last ten years)

1. Chemistry of 2,2'-(diamino)azobenzene ligand: a brief review
P. Mandal, **J. L. Pratihar**
Rev. Inorg. Chem., 2024, 44, 73-89.
2. A review of the photochromic behavior of metal complexes embedded in conjugated ($-N=N-C=N-$) and non-conjugated azo-imine-based ligands
P. Mandal, **J. L. Pratihar**, Rev. Inorg. Chem., 2023, 43, 583-625
3. A review on the chemistry of novel platinum chelates based on azo-azomethine ligands
P. Mandal, **J. L. Pratihar**
Rev. Inorg. Chem., 2023, 43, 495-521.
4. Chemistry of azo-imine based palladium complexes: a brief review
P. Mandal, **J. L. Pratihar**
Rev. Inorg. Chem., 2022, 3, 415-436
5. Aerobic epoxidation of olefins by carboxylate ligand-based cobalt (II) compound: synthesis, X-ray crystallography, and catalytic exploration
B. N. Patra, P. Ghosh, N. Sepay, S. Gayen, S. Koner, P. Brandao, Z. Lin, R. Debnath, **J. L. Pratihar**, T. Maity, D. Mal
Appl. Organomet. Chem., 2021, 36,1-13
6. Spectroscopic characterization, structural investigation, DFT study, and Hirshfeld surface analysis of Rhodium and Ruthenium amido azo complexes
J. L. Pratihar*, P. Mandal, N. Sepay, D. Mal, T. Maity, C. K. Lai, P. Brandão
J. Mol. Struct., 2021,1241,130671

7. Synthesis, characterization, crystal structure and catalytic activity of amido azo palladium(II) complex
J. L. Pratihar*, P. Mandal, D. Mal, C.-H. Lin
Trans. Met. Chem., 2020, 45, 553–559.
8. Synthesis, characterization, structure and redox property of azo-amido and orthometallated azo-imine platinum(II) complexes
J. L. Pratihar*, P. Mandal, C.-H. Lin
Polyhedron, 2019, 173, 114102.
9. Tetradentate amido azo Schiff base Cu(II), Ni(II) and Pd(II) complexes: Synthesis, characterization, spectral properties, and applications to catalysis in C–C coupling and oxidation reaction
J. L. Pratihar*, P. Mandal, C. K. Lai, S. Chattopadhyay
Polyhedron, 2019, 161, 317–324.
10. Synthesis, characterization, spectral and catalytic activity of tetradentate (NNNO) azo-imine Schiff base copper(II) complexes
J. L. Pratihar*, P. Mandal, P. Brandão, D. Mal, V. Felix
Inorganica Chimica Acta, 2018, 479, 221-228.
11. Azo-amide palladium(II) complexes: Synthesis, characterization and application in C-C cross-coupling reactions
J. L. Pratihar*, P. Mandal, C.-H. Lin, C-K. Lai, D. Mal
Polyhedron, 2017, 135, 224-230.
12. Synthesis, characterization, structure and catalytic activity of (NNN) tridentate azo-imine nickel(II), palladium(II) and platinum(II) complexes
P. Mandal, C.-H. Lin, P. Brandão, D. Mal, V. Felix, **J. L. Pratihar***
Polyhedron, 2016, 106, 171-177.
13. Synthesis, crystal structure, spectral properties and catalytic activity of binuclear copper(II), mononuclear nickel(II) and cobalt(III) complexes containing Schiff base ligand
P. Pattanayak, **J. L. Pratihar**, D. Patra, P. Brandão, V. Felix
Inorg. Chim. Acta, 2014, 418, 171-179.
14. Synthesis, characterization, structure and properties of copper and palladium complexes incorporating azo-amide ligands
P. Pattanayak, **J. L. Pratihar**, D. Patra, P. Brandão, V. Felix, S. Chattopadhyay
Polyhedron, 2014, 79, 43-51.
15. Synthesis, characterizations and structure of orthometallated Pt(II) and Pt(IV) complexes: Oxidative addition to C,N,N,O coordinated Pt(II) complexes
P. Pattanayak, S. P. Parua, D. Patra, **J. L. Pratihar**, P. Brandão, V. Felix, S. Chattopadhyay
Polyhedron, 2014 70, 1–5
16. Synthesis, crystal structures, spectral studies and reactivity of square planar copper(II) complexes containing Schiff base ligand
P. Pattanayak, **J. L. Pratihar***, D. Patra, C.-H. Lin, P. Brandão, D. Mal, V. Felix
J. Coord. Chem., 2013, 66, 568-579
17. Osmium and cobalt complexes incorporating facially coordinated N,N,O donor azo-imine ligands: Redox and catalytic properties
P. Pattanayak, D. Patra, **J. L. Pratihar**, A. Burrows, M. F. Mahon, S. Chattopadhyay
J. Chem. Sci., 2013, 125, 51–62

18. Tetranuclear assembly of palladium(II): Catalyst for C–C coupling reactions
P. Pattanayak, **J. L. Pratihari**, D. Patra, C.-H. Lin, S. Chattopadhyay
Polyhedron, 2013, 63, 133-138
19. Synthesis, crystal structure, spectral properties and catalytic activity of a binuclear copper(II) complex containing a Schiff base ligand
P. Pattanayak, **J. L. Pratihari***, D. Patra, P. Brandão, D. Mal, V. Felix
Polyhedron, 2013, 59, 23-28
20. Synthesis, characterization, structure, redox property, antibacterial and catalytic activity of tridentate Schiff base cobalt(III), nickel(II) and palladium(II) complexes
P. Pattanayak, **J. L. Pratihari***, D. Patra, C.-H. Lin, S. Paul, K. Chakraborty
Polyhedron, 2013, 51, 275-282
21. Activation of ortho C–H bond by nickel(II) acetate or sodium tetrachloropalladate(II) in naphthyl imino derivatives of azobenzene
D. Patra, P. Pattanayak, **J. L. Pratihari**, S. Chattopadhyay
Polyhedron, 2013, 51, 46-53