

FacultyProfile

1. Name: Dr. Dipankar Mishra



2. Designation: Asst. Professor

3. Name of the Department: Chemistry

4.E-mail ID: dmishra.ic@gmail.com / dmishra@tmv.ac.in

5.WEB Page, if any:

6. Educational Qualifications (Graduation onwards):

Examination	Name of the University/Institution	Year of Passing	Subject
B. Sc.(Hons)	Vidyasagar University	1998	Chem(H) , Phys, Math
M. Sc.	Vidyasagar University	2000	Chemistry

7. Research Degree(s):

Degree	Name of the Degree Awarding Institution	Date of Award	Title
Ph. D	Bengal Engineering and Science University, Shibpur(Presently- IIEST, Shibpur)	10.02.2006	Chemistry of ruthenium with nitrogen, oxygen and sulfur donor ligands.

8. Teaching Experience(in Years): 15 yrs

9. Specialization/Expertise/Teaching Area: Inorganic Chemistry

10. Courses Taught: Under Graduate Chemistry

11. Present Research Activities, if any:

12. Major/Minor Research Project(s) Undertaken/Completed(during last 5 years): One UGC minor Research project undertaken (F.PSW-232/15-16(ERO), 02.01.2017)

13. Publications and Others:

A] Books Published: NIL

B]Research Papers in International/National Journals:

List of Publications:

- Studies on the relative stabilities of Mn(II) and Mn(III) in Complexes with N₄O₂ Donor Environments: Crystal Structures of [Mn(pybzhz)₂] and [Mn(Ophsal)(imzH)₂] ClO₄ (pybzhz = N-(benzoyl)-N' - (picolinylidene) hydrazine, Ophsal = N, N' -o-phenylenebis(salicylideneimine), imzH = imidazole). S. Naskar, S. Biswas, **D. Mishra**, B. Adhikary, L. R. Falvello, T. Soler, C.H. Schwalbe , S. K. Chattopadhyay, *Inorg. Chim. Acta.* 357, 2004, 4257-4264.

2. Reaction of *cis*- Ru(bpy)₂Cl₂ with 1-phenyl 5-(aminophenyl) 9-(2-pyridyl) benzimidazole derivatives : Crystal structures of N-(4-chlorophenyl) imidazo [1,5a] pyridine and *cis*-[Ru (bpy)₂ (MeCN)₂] (ClO₄)₂. Shyamal Kumar Chattopadhyay, Kamala Mitra, Subhendu Biswas, Subhendu Naskar, **Dipankar Mishra**, Bibhutosh Adhikary, Roger G. Harrison, John F. Cannon, *Transition Met. Chem.*, 29, **2004**, 1-6.
3. Synthesis, spectroscopic and electrochemical properties of some heteroleptic tris-chelates of ruthenium(II) involving 2,2'-bipyridine(bpy) and N-(aryl) pyridine-2-aldimine(L) : X-ray crystal structures of [Ru(bpy)(L₂)₂](ClO₄)₂.H₂O and 3-N (4-tolyl) imidazo [1,5a] pyridinium perchlorate. **Dipankar Mishra**, Subhendu Naskar, Bibhutosh Adhikary, Raymond J. Butcher, Shyamal Kumar Chattopadhyay, *Polyhedron*, 24, **2005**, 201-208.
4. Ruthenium(II/III) mediated transformation of 1,2-bis(2'-pyridylmethyleneimino) benzene (L) to 2-(2'-benzimidazolyl) pyridine (L'H) and its *in situ* formed complexes with Ru(II) : X-ray structure of *trans*-[Ru(PPh₃)₂(L'H)₂](ClO₄)₂. **Dipankar Mishra**, Subhendu Naskar, Raymond J. Butcher, Shyamal Kumar Chattopadhyay, *Inorg. Chim. Acta*, 358, **2005**, 3115-3121.
5. Synthesis, crystal structure determination, spectroscopic and electrochemical studies of *trans*-[Ru(PPh₃)₂(bbpH₂)Cl]Cl.CHCl₃.H₂O (bbpH₂ = 2,6-bis(benzimidazolyl) pyridine) – an infinite double columnar supramolecule in the solid state, **Dipankar Mishra**, Subhendu Naskar, Shyamal K. Chattopadhyay, Milan Maji, Parbati Sengupta, Rupam Dinda, Saktiprasad Ghosh and Thomas C. W. Mak , *Transition Met. Chem.* 30, **2005**, 352-356.
6. Mononuclear and binuclear ruthenium (II) complexes with 4-(phenyl) thiosemicarbazone of benzaldehyde: A discussion on the relative stabilities of the four membered and five membered chelate rings formed by the ligand. **Dipankar Mishra**, Subhendu Naskar, Mike G. B. Drew, Shyamal Kumar Chattopadhyay, *Polyhedron*, 24, **2005**, 1861-1868.
7. Versatility of 2,6-diacetylpyridine (dap) hydrazones in stabilizing uncommon coordination geometry of Mn(II): Synthesis, spectroscopic, structural characterization and magnetic properties of several seven and eight coordinated Mn^{II} complexes, Subhendu Naskar, **Dipankar Mishra**, Shyamal Kumar Chattopadhyay, Montse Corbella, Alexander. J. Blake, *Dalton Trans.*, **2005**, 2428-2435.
8. Synthesis, spectroscopic and redox properties of some ruthenium(II) thiosemicarbazone complexes: Structural description of four of these complexes, **Dipankar Mishra**, Subhendu Naskar, Michael G. B. Drew and Shyamal Kumar Chattopadhyay, *Inorg. Chim. Acta*, 359, **2006**, 585-592.
9. Binuclear manganese(III) complexes with carboxylate bridges: synthesis, structure, electrochemistry and magnetic properties, Kamala Mitra, **Dipankar Mishra**, Subhendu Biswas , C. Robert Lucas, Bibhutosh Adhikari, *Polyhedron*, 25, **2006**, 1681-1688.
10. Tuning of redox potential and visible absorption band of ruthenium (II) complexes of (benzimidazolyl) derivatives: synthesis, characterization, spectroscopic and redox properties, X-ray structures and DFT calculations. **Dipankar Mishra**, Shyamal Kumar Chattopadhyay, Andrea Barbieri, Cristiana Sabatini, Michael G. B. Drew, Hake M. Figgie, William S. Sheldrick, *Inorg. Chim. Acta*, 360, **2007**, 2231–2244.
11. Synthesis, characterization and crystal structure of [Ni(dap(A)₂)₂] (dap = 2,6-diacetylpyridine bis(antrhaniloyl hydrazone) a molecule possessing an infinite double helical chain in the solid state, Subhendu Naskar, **Dipankar Mishra**, Alexander. J. Blake and Shyamal. K. Chattopadhyay, *Structural Chemistry*, (**Structural Science in India**) 18, **2007**, 217–222.
12. Synthesis, characterization, spectroscopic and electrochemical properties of trans,trans,trans-bis(triphenyl phosphine) bis(aroyl hydrazone)ruthenium(II)complexes, **Dipankar Mishra**, Subhendu Naskar a, Alexander J. Blake, Shyamal Kumar Chattopadhyay, *Inorganica Chimica Acta*, 360, **2007**, 2291–2297.
13. Synthesis, X-ray crystal structure and DFT calculations of bis(*N*-(2-picollyl)picolinamido)Mn(III) hexafluorophosphate,Sumita Hazra, Subhendu Naskar, **Dipankar Mishra**, Serge I. Gorelsky, Heike M. Figgie,William S. Sheldrick and Shyamal Kumar Chattopadhyay *Dalton Trans.*, **2007**, 4143–4148.

14. Crystal engineering with aroyl hydrazones of diacetyl monooxime – Molecular and supramolecular structures of two Ni(II) and two Zn(II) complexes, Subhendu Naskar, **Dipankar Mishra**, Ray J. Butcher, Shyamal Kumar Chattopadhyay. *Polyhedron*, 26, **2007**, 3703–3714.
15. Structural and spectroscopic properties of Ru(II) complexes of 4-(aryl)thiosemicarbazones of thiophen-2-carbaldehyde. Sumita Naskar , Subhendu Naskar, Mike G.B. Drew, Serge I. Gorelsky, Benedikt Lassalle-Kaiser, Ally Aukauloo, **Dipankar Mishra**, Shyamal Kumar Chattopadhyay, *Polyhedron*, 28, **2009**, 4101–4109.
16. Synthesis, Characterization and theoretical studies of the heteroleptic Ruthenium(II) complexes of 2,6 bis(benzimidazolyl)pyridine. Sumita Naskar, Bholanath Pakhira, **Dipankar Mishra**, Partha Mitra, Shyamal Kumar Chattopadhyay, Subhendu Naskar, *Polyhedron*, 100, **2015**, 170-179.
17. Study of Thermal Behavior of two Schiff Base Cd(II) pseudohalide linked (SCN-//Cl-) Complexes. **Dipankar Mishra**, *Journal of Chemistry and Chemical Sciences*, .8(4), **2018**, 733-736, ISSN 2229-760X (Print) ISSN 2319-7625 (Online).
18. Antimicrobial and Fungus Activities of Cu(II)/Zn(II)/Cd(II) Metal complexes with 1,3-Diimine Spacer Group Ligand. **Dipankar Mishra**, *IJRAR- International Journal of Research and Analytical Reviews*, 5(3) **2018**, 392-395, E ISSN 2348 –1269, PRINT ISSN 2349-5138.
19. An Overview: Computational TD-DFT Level of Calculations of Schiff Base Ligand (H₂L). **Dipankar Mishra**, *IJRAR- International Journal of Research and Analytical Reviews*, 5(3) **2018**, 842-845. E ISSN 2348 –1269, PRINT ISSN 2349-5138.
20. Cd(II) Pseudohalide Complexes with N, N'-Bis(3-ethoxysalicylideneimino) 1,3-Diaminopropane: Crystal Structures, Hirshfeld Surface, Antibacterial and Anti-Biofilm Properties. Dhrubajyoti Majumdar, Jayanta Kumar Biswas, Monojit Mondal, Manabolu Surya Surendra Babu, Sourav Das, Ramesh K. Metre, Sreejith S. SreeKumar, Kalipada Bankura, and **Dipankar Mishra**, *ChemistrySelect* , 3, **2018**, 2912–2925.
21. Nitrate, Pseudohalo-Linked Zn(II)/Cd(II) Schiff-Base Complexes with 1,3-Diimine Spacer Group: Syntheses, Crystal Structures, DFT, TD-DFT and Fluorescence Studies. Dhrubajyoti Majumdar, Swapan Dey, Sreejith S. Sreekumar, Sourav Das, Dhiraj Das, Ramesh K. Metre, Kalipada Bankura, and **Dipankar Mishra**, *ChemistrySelect*, 3, **2018**, 12371 – 12382.
22. Coordination of N,O-donor appended Schiff base ligand (H₂L1) towards Zinc(II) in presence of pseudohalides: Syntheses, crystal structures, photoluminescence, antimicrobial activities and Hirshfeld surfaces. Dhrubajyoti Majumdar, Jayanta Kumar Biswas, Monojit Mondal, M.S. Surendra Babu , Ramesh K. Metre, Sourav Das, Kalipada Bankura, **Dipankar Mishra**, *Journal of Molecular Structure*, 1155, **2018**, 745-757.
23. Dicyanamide-interlaced assembly of Zn(II)-schiff-base complexes derived from salicylaldimino type compartmental ligands: Syntheses, crystal structures, FMO, ESP, TD-DFT, fluorescence lifetime, *in vitro* antibacterial and anti-biofilm properties, Dhrubajyoti Majumdar, Dhiraj Das, S.S. Sreejith, Sourav Das, Jayanta Kumar Biswas, Monojit Mondal, Debarati Ghosh, Kalipada Bankura, **Dipankar Mishra**, *Inorg. Chim. Acta*, 489, **2019**, 244-254.
24. Syntheses, crystal structures and photo physical aspects of azido-bridged tetranuclear cadmium (II) complexes: DFT/TD-DFT, thermal, antibacterial and anti-biofilm properties Dhrubajyoti Majumdar, Swapan Dey, S.S. Sreejith, Jayanta Kumar Biswas, Monojit Mondal, Pooja Shukla, Sourav Das, Tapan Pal, Dhiraj Das, Kalipada Bankura, **Dipankar Mishra**, *Journal of Molecular Structure*, 1179, **2019**, 694-708.

25. Heterometallic Zn(II)-K(I) complex with salen-type Schiff-base ligand: Synthesis, crystal structure, solid-state photoluminescent property and theoretical study, Dhrubajyoti Majumdar, Swapan Dey, Dhiraj Das, Dheeraj Kumar Singh, Sourav Das, **Dipankar Mishra**, *Journal of Molecular Structure*, 1185, **2019**, 112-120
26. DFT investigations of linear Zn3-type complex with compartmental N/O-donor Schiff base: Synthesis, characterizations, crystal structure, fluorescence and molecular docking, Dhrubajyoti Majumdar, Tapan Kumar Pal, Dheeraj Kumar Singh, Deepak K. Pandey, Debaprasad Parai, Kalipada Bankura, **Dipankar Mishra**, *Journal of Molecular Structure*, 1209, **2020**, 127936.
27. A rare hetero-bimetallic Zn(II)/Ca(II) Schiff base complex: Synthesis, crystal structure, DFT, molecular docking and unveiling antimicrobial activity, **Dhrubajyoti Majumdar**, Dhiraj Das, Sudip Nag, Maitree Bhattacharyya, Dheeraj K. Singh, Debaprasad Parai, Kalipada Bankura, and **Dipankar Mishra**, *J. Mol. Struct.* 1222, **2020**, 128951.
28. Experimental and theoretical corroboration of antimicrobial and anticancer activities of two pseudohalides induced structurally diverse Cd(II)-Salen complexes, **Dhrubajyoti Majumdar**, Jessica Elizabeth Philip, Sourav Das, Bidyut Kumar Kundu, Reena V. Saini, Gourav Chandan, Kalipada Bankura, and **Dipankar Mishra**, *J. Mol. Struct.* 1225, **2020**, 129189.
29. Syntheses, characterizations, crystal structures, DFT/TD-DFT, luminescence behaviours and cytotoxic effect of bicompartimental Zn(II)-dicyanamide Schiff base coordination polymers: An approach to apoptosis, autophagy and necrosis type classical cell death, Dhrubajyoti Majumdar, Yashika Agrawal, Renjith Thomas, Zakir Ullah, Manas Kumar Santra, Sourav Das, Tapan Kumar Pal, Kalipada Bankura and **Dipankar Mishra**, *Appl. Organomet. Chem.* 34, **2020**, e5269.
30. Dicyanamide-intertwined assembly of two new Zn complexes based on N₂O₄-type pro-ligand: Synthesis, crystal networks, spectroscopic insights, and selective nitroaromatic turn-off fluorescence sensing: Dhrubajyoti Majumdar, Swapan Dey, Annu Kumari, Tapan Kumar Pal, Kalipada Bankura, **Dipankar Mishra**, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 254, **2021**, 119612.
31. Synthesis, spectroscopic characterization, and SC-XRD study of one privileged heteronuclear Ni(II)/Hg(II)-Salen complex: An exclusive DFT outlook, Dhrubajyoti Majumdar, Tapan Kumar Pal, Shahenur Alam Sakib, Sourav Das, Kalipada Bankura, **Dipankar Mishra**, *Inorganic Chemistry Communications*, 128, **2021**, 108609.

C] Conference Papers: NIL

a) International Conference:

b) National Conference

- 1.
- 2.
- 3.

D] Conference/Symposium Attended (during last 5 years) NIL

- **International Level: NIL**

Name of The Conference	Organizer, Date, Venue	Financially Supported by

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- **National Level**

Name of The Conference	Organizer, Date, Venue	Financially Supported by

E] Invited Lectures Delivered/ Paper Presented in Seminars/Webinars: (Title, Name of Seminar, Organizer Date and Venue):

1.

Name of The Conference	Organizer, Date, Venue	Financially Supported by
The Importance of Intermolecular Interactions in Solid-state X-ray Crystal Structurees'	Dept. of Physics, Mugberia Gangadhar Mahavidyalaya, 7 th -8 th September , 2015	UGC
Environment Friendly Biodegradable Polymers: Present and Future	Dept. of Chemistry & Nutrition, Mugberia Gangadhar Mahavidyalaya, 9 th &10 th Sept. 2015	UGC
Wetland Bio-Resource Management: Problems and Prospects	Dept. of Zoology, Tamralipta Mahavidyalaya, 26 th &27 th Feb. 2016)	UGC
Recent Trends in Research in Chemical Sciences	Dept. of Chemistry, Ghatal Rabindra Satabarsiki Mahavidyalaya, 30 th August 2016	UGC
Fluorosis and Arsenicosis: A Global Problem	Dept. of Chemistry & Nutrition, Prabhat Kumar College, Contai, 13 th &14 th Sept. 2016	UGC
The Basics of Fluorescence with its Present Day Application	Dept. of Chemistry, Bajkul Milani Mahavidyalaya, 4 th &5 th Oct. 2016	UGC

F] Orientation Programme/Refresher Course/Short Term Course Completed:

1. UGC sponsored **Orientation Programme**, 01.02.2010 -27.02.2010, organised by UGC- Academic Staff College, Jadavpur University.
2. UGC sponsored **Refreshers Course** (in Chemistry), 22.11.2010 – 11.12.2010, UGC - Academic Staff College, University of Calcutta.
3. UGC sponsored **Refreshers Course** (in Chemistry), 30.03.2015 – 22.04.2015, UGC - Academic Staff College, University of Calcutta
4. UGC sponsored **Short Term Course** (in Research Methodology), 21.11.2017 – 27.11.2017, UGC - Academic Staff College, University of Calcutta

5. Participated in Faculty Development Programme a 'DST-NIMAT PROJECT' on 18th -30th August,2017, at Tamralipta Mahavidyalaya, Tamluk, Purba Medinipur.

G] Articles Published in Magazines: NIL

- 1.
- 2.
- 3.

14. Awards and Recognitions, if any:

Reviewer:

1. Journal Of Molecular Structure, **Elsevier**.
2. Journal of Inorganic and Organometallic Polymers and Materials, **Springer**

15. Membership of Reputed Bodies/Organizations including Professional Associations: NIL

16. Significant Information, if any: