Name: **Dr. Asish Mitra**

Designation: Visiting Faculty, M.B.B. University

Retd. Associate Professor, M.B.B. College

Address for Communication: Mahashakti Road, Jogendranagar, P.O. Jogendranagar,

Agartala, West Tripura, Pin: 799 004

Mobile No.: 9436125541, 8787419474

Email: amitra1963@gmail.com

Area of Specialisation: Physical Chemistry

Research Area: Polymer Chemistry, Surface Chemistry and Quantum Chemistry

Courses Taught: Chemistry (Honours and General), IMD Chemistry

Publication Details:

Sl. No	**Title of the publications with details**	**Journal ISSN /ISBN No**	**Impact Factor (IF)**	**Publisher and Indexing**
01	Chromotropic character of bacterial acidic polysaccharides: Part III induction of cationic dye pinacyanol chloride with *Klebsiella K15.* **A. Mitra,** A. Chakraborty, R. K. Nath and A. K. Chakraborty. *Ind. J. Biochem. & Biophys., **27**(1990), 291 - 294.*	0301 - 1208	0.357	CSIR Scopus SCI
02	Studies on interaction of cationic dye with bacterial acidic polysaccharide. **A. Mitra,** A. K. Chakraborty. *Ind. J. Chem., **31 A** (1992)] 77-82.*	0376-4710	0.483	CSIR Scopus SCI
03	Absorption and fluoresence studies on interaction between cationic dye and *Klebsiella K7 capsular polysaccharide.*	*0301 - 1208*	0.357	CSIR Scopus SCI

	A. Mitra and A. K. Chakraborty. *Ind. J. Biochem. & Biophys., **29** (1992) 291 - 295.*			
04	Studies on induction of metachromasy in cationic dye pinacyanol chloride by Klebsiella K7 capsular polysaccharide. **A. Mitra,** R. K. Nath and A. K. Chakraborty. *Ind. J. Biochem. & Biophys., **29** (1992) 411 - 414*.	0301 - 1208	0.357	CSIR Scopus SCI
05	Interaction of bacterial acidic polysaccharides with cationic dyes. **A. Mitra,** R. K. Nath and A. K. Chakraborty. *Colloid and Polymer Science,* **271** (1993) 1042 - 1048.	0303 - 402X	1.906	Spinger Science Scopus SCI
06	Open - shell coupled - cluster theory for a general incomplete model space using eigenvalue - indipendent partitioning. **A. Mitra,** D. Sinha and U. S. Mahapatra. *Chem. Phys. Lett.,* **261** (1996) 363 - 368.	0009 - 2614	1.920	Elsevier, ACS Scopus SCI
07	Interaction of biopolymers with cationic dyes: Spectral and thermodynamic studies. **A. Mitra,** A. K. Chakraborty. *Ind. J. of Chem.,* **37 A** (1998) 418 - 422.	0376 - 4710	0.483	CSIR Scopus SCI
08	Multiple solutions of coupled cluster equations: An application to molecular auger spectra. **A. Mitra**, U. S. Mahapatra, D. Majumder and D. Sinha. *J. Phys. Chem. A,* **102** (1998) 7277 - 7285.	1089 - 5639	2.836	ACS Scopus SCI

09	Spectrophotometric and spectroflurometric studies on interaction of cationic dyes with bacterial capsular polysaccharides **A. Mitra,** A. K. Chakraborty. *Ind. J. Biochem. & Biophys. ,* **35** (1998) 241 - 246.	0301 - 1208	0.357	CSIR Scopus SCI
10	Full effect of triples in a vaience universal multi-reference coupled cluster calculation. S. Chattopadhyay, **A. Mitra,** D. Jana, P. Ghosh and D. Sinha. *Chem. Phys Lett. ,* **361** (2002) 298 - 306.	009 - 2614	1.920	Elsevier, ACS Scopus SCI
11	A comparative study on the physico - chemical properties of bacterial capsular polysaccharides from different serotypes of *Klebsiella.* **A. Mitra,** R. K. Nath, S. Biswas, A. K. Chakraborty, A. K. Panda. *J. Photochem. and Photobiol. A: Chemistry,* **178** (2006) 98 - 105.	1010 - 6030	3.261	Elsevier, ACS Scopus SCI
12	Explicity intruder-free valence - universal multireference coupled cluster theoryas applied to ionization spectroscopy. S. Chattopadhyay, **A. Mitra** and D. Sinha. *J. Chem. Phys.,* **125** (2006) 244111	0021 - 9606	3.33	American Institute of Physics Scopus SCI
13	Spectral studies on the interaction of cationic dye / surfactants with Klebsiella K28 capsular polysaccharide. S. Dasgupta, R. K. Nath, S. Biswas, J. Hassain, **A. Mitra** and A. K. Panda. *Colloids and Surfaces A: Physicochem. Eng. Aspects,* **302** (2007) 17 - 23	0927 - 7757	3.131	Elsevier, ACS Scopus SCI

14	Studies on the interaction of Klebsiella K34 capsular polysaccharide with oppositely charged dyes and surfactants. Th. C. Singh, R. K. Nath, S. Biswas, S. Dasgupta, **A. Mitra** and A. K. Panda. *J. Surface Sci. Technol.,* **24** (2008) 1 - 13.	0257 - 8972	0.380	CSIR-NISCAIR Scopus SCI
15	Interactions of bacterial polysaccharides with cationic dyes: physicochemical studies. S. Dasgupta, R. K. Nath, S. Biswas, **A. Mitra** and A. K. Panda. *Ind. J. Biochem. & Biophys.,* **46** (2009) 192 - 197.	0301 - 1208	0.357	CSIR Scopus SCI
16	Interaction of cationic dye/surfactants with Klebsiella K18 capsular polysccharides: physico-chemical studies. R. K. Nath, Th. C. Singh, S. Dasgupta, **A. Mitra** and A. K. Panda. *Material science and engineering C,* **30** (2010) 549 - 554.	0928 - 4931	5.090	Elsevier, ACS Scopus SCI
17	Spectral studies on the binding behavior of cationic dyes and surfactants with bacterial polysccharides of *Klebsiella K43*. R. K. Nath, S. Dasgupta, S. Ghosh, **A. Mitra** and A. K. Panda. *Journal of Dispersion Science and Technology,* **31** (2010) 1 - 9.	0193 - 2691	1.613	Taylor & Francis Scopus SCI
18	Physico-Chemical Studies on the Interaction of Bacterial Polysaccharide-Surfactant Aggregates with Special Reference to their Hydrodynamic Behavior. S. Dasgupta, R.K. Nath, K. Manna**, A. Mitra,** and A.K. Panda. *Journal*	1345-8957/ 1347-3352	1.37	JOC, Japan Scopus SCI

	of Oleo Science, **63,** (10) 1063-1075 (2014).			
19	Fabric dyeing with natural dye extracted from Basella alba fruit and spectroscopic analysis of the extract at different conditions. **A.Mitra** and S.K. Das, *Journal of Chemical and Pharmaceutical Research*, **7(12)** 1117-1124 (2015)	0975-7384	0.39	Online (www.jocpr.com)
20	Characterization and formulation of herbal hair dye from *Tectona Grandis.Linn* leaf extract **A.Mitra** and S.K. Das, *International Journal of Innovative Pharmaceutical Sciences and Research*, **4(6)** 618-629 (2016)	2347-2154	2.609	Online (www.ijipsr.com)

Project Details:

Sl. No.	**Title of the project**	**Sponsoring Agency**	**Period**	**Amount Granted**
1	Studies on the interaction of dye molecules and surfactants with the Biopolymers using different techniques	UGC (NERO) Ref. No.F.5-19/2005-06 (MRP/NERO)/1538, dt. 19 Oct. 2005	Two years	Rs 0.87 lakh
2.	Studies of the aggregates formed by some Selective Synthetic & Naturally occurring polymers with surfactants	UGC (NERO) Ref. No.F.5-305/2008-09 (MRP/NERO)/2688, dt. 31 March, 2009	18 Months	Rs Two lakhs

Seminar/Conference/Workshops Participated:

1. XV th International Carbohydrate Symposium,Yokohama,Japan, (1990) .
2. International Workshop on Frontiers in Plant and Microbial Glycans,Kyoto, Japan,(1990)
3. 25th Annual Convention of Chemists , organized by Calcutta University (December 23- 27, 1988.
4. 4th Carbohydrate Conference, organized by IACS, Jadavpur, (1988) .
5. Indian Photobiology Society Silver Jubilee Symposium on 'Light and Life'. (February 20-23, 1989).
6. 77th Indian Science Congress, organized by Cochin University, Kerala (February 4-9, 1990).
7. National conference on Chemical and Physical Aspects of Organised Biologica Assemblies, organized by Jadavpur University (February 14-15 ,1991).
8. National Conference on surfactants, Emulsions and Biocolloids(October 28-30,1991).
9. 28 th Annual Convention of Chemists (December 17-21,1991) .
10. National Conference on Colloids and Emulsions of Natural and Synthetic Systems, organized by Tripura University (February 2-4, 1996) .
11. National Seminar on Preventive Strategies against Chemical Hazards, Organized by Department of Chemistry, M.B.B. College (December 12-14, 1998)
12. National symposium on recent challenges in chemistry , organized by Department of Chemistry,Tripura University (March29-31,2001) .
13. Seminar on Role of Information Technology in the development of Higher education in Tripura, IGNOU, Regional Centre, Agartala, and Department of Information Technology, Govt. of Tripura (January 26, 2002).
14. National Symposium on Impact of Chemistry on life and Society, organized by Department of Chemistry, Tripura University (October 1-3, 2004).
15. 13 th National Conference on Surfactants, Emulsions and Biocolloids with Special Focus on Biomimetic Systems (NATCOSEB XIII-BIMS) BITS, Pilani (2007) .

16. National Seminar on Management of Environment : North East India Perspective, organized by Iswarchandra Vidyasagar College, Belonia (September 11-12, 2010).
17. National Seminar on Scope and Recent Development of Natural Products, Organized by Iswarchandra Vidyasagar College, Belonia (November 12-13, 2010).
18. National Seminar on Capacity Building of Students in Higher Education with Special Reference to Tribal Students in Tripura, organized by M.B.B. College ,Nov 16-17,2010.
19. International Conference on Emerging Areas of Chemistry, organized by Department of Chemistry, Tripura University (January 12-14, 2011).
21. One Day Awareness Programme on Chemical Weapons Convention, organized by Department of Chemistry, Tripura University and Indian Chemical Council, Mumbai (March 13, 2011).
22. One Day Seminar on Recent Developments in Computer Aided Drug Design, organized by Department of Chemistry, M.B.B. College (June 13, 2011).
23. Fifteenth National Conference on Surfactants, Emulsions and Biocolloids, Organized by Department of Chemistry, Tripura University and ISSST, Kolkata.
24. National Seminar on Green Chemistry and Nanoscience : Theory and Applications, organized by Department of Chemistry, M.B.B. College (July 20-21, 2012).
25. Workshop on Material and Green Chemistry, organized by Department of Chemistry, NIT, Agartala (November 29-30, 2013).
26. National Seminar on Recent Advances in Natural Products Chemistry for Drug Discovery, organized by Netaji Subhas Mahavidyalaya, Udaipur, Gomati Tripura. November 28-29, 2015).

Webinar Participated :

1. National Webinar on “Covid 19 : Therapeutics & Awarness”, organized by IQAC, M.B.B.College, Agartala, 16-17 July, 2020.

2. International Webinar on " Pedagogical Approaches to Combat Covid-19 Pandemic : Issues & Challenges" , organinised by Dept. of Chemistry, Dharmanagar, 24-25 July,2020.

3. National Webinar on "Impact of Physical Education on Students' Well-being and Academic Success in Higher Education", organized by Dept. of Physical Education, M.B.B.College, Agartala, 29-30 July, 2020.

4. International Webinar on "Thinking Otherwise: The Contemporary Indian Writing in English" , organized by Dept. of English, M.B.B. College, Agartala, 11 August, 2020.

5. National Webinar on "Mental Health & Emotional Well-being of Students during Covid-19 Pandemic, organized by Dept. of Psychology ,M.B.B. College, Agartala, 7 August, 2020.

6. Webinar on "National Education Policy-2020", organized by B.B.M. College, Agartala, 20-21 August, 2020.

7. International Webinar on "Environmental Pollution Prevention Measures and their Relevance in Today's Times", organized by R.K. Mahavidyalaya, Kailashahar, 28 August, 2020.

8. Webinar on "Impact of Covid-19 on Indian Financial Sectors & Economy", organized by Dept. of Commerce & Economics , Budge Budge College, Kolkata, 28 August, 2020.

Seminar/Conference/Workshops Conducted:

Title of the Seminar	**Duration**	**Organizers**	**Funding Agencies**	**Organising Secretary**
National Seminar on **Green Chemistry & Nanoscience : Theory and Applications**	20-21 July, 2012	Department of Chemistry, M.B.B. College and Department of Chemistry, NIT, Agartala	i)UGC (NERO) ii)DST, Govt. of India, New Delhi iii)Tripura State Council for Science and Technology, Govt. of Tripura	Dr. Asish Mitra
Workshop on "Scope of **Entrepreneurship Develop- ment"**	28 July, 2021	Department of Chemistry	Department itself	Dr. Asish Mitra

for UG students				

Membership in Academic Bodies:

- Life Member of Indian Chemical Society
- Life Member of Tripura Chemical Society
- Member of the Indian Science Congress
- Member of Vidhyasagar Play Society, Jogendranagar ,Agartala.
- Former member of the State Level Expert Appraisal Committee **(SEAC)**, for the State of Tripura, constituted by Ministry of Environment and Forests, Govt. of India (for two consecutive terms).

Involvement Beyond Academic Activities:

- Holding the charge of Principal in-charge and Head of Office of M.B.B. College, Agartala from 30.06.2022 to 03.11.2022.
- Acted as the Head of the department for 14 years in three Degree Colleges (R.K.M, Kailasahar , N.S. Mahavidyalaya, Udaipur & M.B.B. College, Agartala) and also acted as a Principal -in-Charge for several times for short period in the mentioned colleges .
- Being the Head of the Department Chemistry laboratories were set up at the new premises in N.S. Mahavidyalaya and also improved the laboratory facilities in R.K. Mahavidyalaya during my tenure.
- Worked as Co-ordinator of the Internal Quality Assurance Cell (IQAC) , M.B.B. College for three years .
- Worked as a member of the NAAC Steering committee, M.B.B. College
- Member of State Level Expert Appraisal Committee (SEAC), Govt. of Tripura, constituted by the Ministry of Environment, Forest and Climate change, Government of India .
- Acted as a Chairman of the syllabus committee of the Newly adopted CBCS system under M.B.B. University (Session : 2017-2018).
- Acted as a Member of the syllabus committee of the Newly introduced IMD Course in Chemistry under M.B.B. University (2020-2021).

- Member of the college Core committee and taken necessary steps for the development of the college.
- Expert in the Interview Board for different recruitments .
- Chief speaker in the Science Exhibition .
- Acted as Superintendent of TBJEE for MBB College venue .
- Convener of the Admission Committee (Chemistry Honours & Physical Science Pass) in different colleges.
- Organizing secretary and Member of the Organizing committee of different National Seminars .
- Member of the Academic Committee, MBB College.
- Member of the Planning Board, MBB College .
- Member of Board of Studies (PG and UG) of TU and MBBU .
- Member of the Academic Council, M.B.B.University .
- Guest Lecturer in Tripura University for PG studies in Chemistry for more than 20 (twenty) years .
- Publication of college Magazine 'Dakshini' and 'Souvenir' and conduction of 'Seminar' at the time of celebration of Silver Jubilee of NSM, Udaipur .
- Being the life member of the Tripura Chemical Society participated in several awareness programs and society related works as and when organized.
- A small Contribution with necessary items for the Orphanages in the Ashram Hostel of the Bharat Sevashram Sangha, Agartala (Near Railway Bridge, Badharghat, Dukli) and accompanying with them for some time and sharing with their difficulties (6^{th} October, 2021 along with the students of our Department.
- Being the member of Vidyasagar Play society participated in several blood donation camps, health awareness programs and other community services. Besides, during pandemic time actively helped the distress persons physically and economically. Donated an amount of rupees ten thousand to the Honouable Chief Minister's Fund.
- As a life member of Indian Chemical society participated in different programs, seminars, etc. organized by the society.
- Successfully conducted the Platinum Jubilee celebration programs of M.B.B. College for six days (from 5^{th} September to 10^{th} September, 2022) as a Convener of the Celebration Committee & Principal (i/c) as well as Head of Office of the College.

- Made all sorts of efforts & initiatives during the visit of Honorable Vice-President of India at M.B.B. College on 29.11.2022 as a convener of the concerned Committee & acomplished it very successfully .

- Worked for improvement of quality of question paper of UG level as a member of the committee for Science Faculty. As per Memorandum No.F.2(389)-DHE/UDCA/2018/3873, dated 7th November,2020, issued by Hon'ble Director of Higher Education , Govt. of Tripura, an Analytical Report and proposal for upgradation of the present standard of Science Question papers of UG programme under MBBU and TU was made by the committee.

- Sumitted a Proposal on 29th October, 2022 to DHE for transforming Maharaja Bir Bikram College as an Art (College) of Excellence during my tenure of Principalship (i/c).

Name: **Dr. Abhijit Bhattacharya**

Designation: Associate Professor, BBM College

Address for Communication: BBM College, Agartala

Mobile No.: 9436541538

Email: bhattacharyaa1967@gmail.com

Area of Specialisation: Organic Chemistry

Research Area: Medicinal Chemistry

Courses Taught: Chemistry (Hons. and general) , IMD Chemistry Course

Publication Details: About 20 research papers are published in different journals and book chapters

1. Anti-biofilm potentiality of alternanthera philoxeroides: a study with methanolic plant extract, european journal of pharmaceutical and medical research, 2016
2. Cheminform abstract: chemical constituents of plumbago indica roots and reactions of plumbagin: part 2, indian journal of chemistry, 1999
3. Chemical constituents of diospyros nigra, journal of indian chemical society, 2003
4. Chemical constituents of argyreia argentea, millingtonia hortensis and pyrostegia venusta, journal of indian chemical society, 2002
5. Cytology and biochemical estimation of neptunia prostrate (lamk.) baillon: an ethnomedicinal aquatic legume of tripura, north east india, annals of plant sciences, 2016
6. Cd(ii) and zn(ii) complexes with 2-mercaptopyridine: synthesis, crystal structure, hirshfeld surface analysis, luminescent properties, aggregation behaviours, (i–v) characteristic and antibacterial assay, polyhedron, 2023
7. Mixed ligand complexes of cobalt(ii): synthesis, reactivity, physico-chemical and spectroscopic studies, asian journal of chemistry, 2023
8. Antimicrobial c-glucoside from aerial parts of diospyros nigra, chemistry and pharmaceutical bulletin, 2006
9. Ichnocarpus frutescens (l.) r. br. root derived phyto-steroids defends inflammation and algesia by pulling down the pro-inflammatory and nociceptive pain mediators, steroids, 2018

10. Cd(ii) and zn(ii) complexes with 2-mercaptopyridine: synthesis, crystal structure, hirshfeld surface analysis, luminescent properties, aggregation behaviours, current-voltage characteristic and antibacterial assay, polyhedron, 2024
11. A brief review on aquatic plant having medicinal property in tripura, book chapter, isbn : 978-93-81631-36-2, 2015
12. Chemical constituents of mimosa pudica flower, book chapter, isbn : 978-93-86283-54-2, 2017
13. Phytochemistry and pharmacology of naturally occuring c-glycosides - an update review, isbn : 978-93-86283-54-2, 2017
14. Isolation and characterisation of bioactive flavone from stem bark of gomphrena globosa, book chapter, isbn : 978-81-19492-68-8, 2024
15. Regional environmental management a theoritical aspect of a new model to sustain pleasant developement, book chapter, isbn : 81-86792-36-6, 2011
16. Detection of lorazepam from human viscera by a new hplc technique, then indian police journal, bprd, 2010
17. Examination and characterization of some heroin exhibits: a case study, xvi - all india forensic science conference, 2005
18. Examination of a post explosive scene - a case report, xv - all india forensic science conference, 2004

Project Details: Nill

Seminar⁄Conference⁄Workshops Participated: 15

Seminar⁄Conference⁄Workshops Conducted: 02

Membership in Academic Bodies: Life member of ISCA and Tripura Chemical Society

Involvement Beyond Academic Activities: Attending TV programme as a resource person, publishing poetry, and write ups in different newspapers.Edited one book

Name: **Dr. Kartick Lal Bhowmik**

Designation: Associate Professor, BBM College

Address for Communication: Department of Chemistry, BBM College, Agartala, Pin-799004

Mobile No.: 9863585412

Email: karticklalb@gmail.com

Area of Specialisation: Physical Chemistry

Research Area: Conducting polymer, Nanomaterials, Metal oxide based nanocomposite,

Courses Taught: Chemistry (Hons. and general) & IMD Chemistry Course

Publication Details: A. **Conference Proceedings Publication:**

Sl. No.	**Name of the Paper**	**Name of the Conference/Conference Proceedings**	**Year**	**ISBN/ISSN**
1.	Studies on transport properties of CdO-CuO thin film hetero junction	Advanced Nanomaterials and Emerging Engineering Technologies (ICANMEET), 2013 International Conference on. IEEE, 2013	24 July, 2013	978-1-4799-1377-0 **IEEE Explore Digital Library-2013** pp. 499-501
2.	Optical and Electrical Property of Polyaniline Thinfilm Synthesized by Aniline Vapour Polymerisation	International Conference On Nanomaterials And Nanotechnology (Nano-15) **Nanoelectrinics and sensors**	December 2015	Optical and Electrical Property of Polyaniline Thinfilm Synthesized by Aniline Vapour Polymerisation
3.	Temperature dependent electrical properties of polyaniline film	DAE Solid State Physics Symposium 2015	25 May, 2016	978-0-7354-1378-8

	grown on paper through aniline vapor polymerization	**AIP Conference Proceedings**		**AIP Conference Proceedings - 1731** pp 1100301-1100303
4.	Ohmic Contact of n-Type CdO film with FTO Coated Glass for Photonic Device Applications	International Conference on Fibre Optics and Photonics, 2016	2016/12/4	© 2016 Optical Society of America

B. **Published Papers in Journals:**

Sl. No.	**Title**	**Journal, year, volume, page No.**	**Impact factor**
1	**Charge Transport through Polyaniline Incorporated Electrically Conducting Functional Paper**	Journal of Physical Chemistry C **(ACS Publication)** 120 (11), 03,March 2016, pp 5855–5860	**4.773**
2	**Synthesis and characterization of mixed phase manganese ferrite and hausmannite magnetic nanoparticle as potential adsorbent for methyl orange from aqueous media: Artificial neural network modeling**	Journal of Molecular Liquids **(ScienceDirect Elsevier Publication)** 05,April 2016 Vol. 219 , pp 1010–1022	**4.65**

3	**Synthesis of $MnFe_2O_4$ and Mn3O4 magnetic nanocomposites with enhanced properties for adsorption of Cr(VI): artificial neural network modeling**	Water Science and Technology **(IWA Publishing 2017)** Online September 2017, Wst2017501 DOI:10.2166/ wst.2017.501	**1.197**
4.	**Interaction of anionic dyes with polyaniline implanted cellulose: Organic π-conjugated macromolecules in environmental applications.**	Journal of Molecular Liquids 261 (2018) 189–198 **(Science Direct Elsevier Publication**	**4.65**
5	**Mesoporous Iron-Manganese Magnetic Bimetal Oxide for Efficient** **Removal of Cr(VI) from Synthetic Aqueous Solution.**	Applied Mechanics and Materials (Appl Mech Mater) **(Scitec Publications Ltd. Switzerland)** June 2017	**0.16**
6	**Ultrasonic assisted enhanced adsorption of methyl orange dye onto polyaniline impregnated zinc oxide nanoparticles: Kinetic, isotherm and optimization of process parameters.**	*Ultrasonics sonochemistry, Volume54, June 2019, Pages 290-301*.	6.513
7	**Conductive polyaniline on paper as a flexible electronic material with controlled physical properties through vapor phase polymerization.**	*Polymer Engineering & Science*, *58*(12), 2018, 2249-2255.	1.917

8	**The effective adsorption of tetracycline onto zirconia nanoparticles synthesized by novel microbial green technology.**	Journal of environmental managemen Academic Press Vol-261, pages110235, 2020	8.626
9	**Reduced Hopping Barrier Potential in NiO Nanoparticle-Incorporated, Polypyrrole-Coated Graphene with Enhanced Thermoelectric Properties**	ACS Applied Energy Materials, 2020	4.473
10	**Preparation and characterization of magnetic $CaFe_2O_4$ nanoparticles for efficient adsorption of toxic Congo Red dye from aqueous solution: predictive modeling by artificial neural Network.**	Desalination and Water Treatment 89, 197-209,2017	1.504
11	**Application of polyaniline impregnated mixed phase Fe_2O_3, $MnFe_2O_4$ and ZrO_2 nanocomposite for rapid abatement of binary dyes from aqua matrix: response surface optimisation**	International Journal of Environmental Analytical Chemistry Pages1-19, Publisher:Taylor & Francis,2021	2.731
12	**Camphor sulfonic acid incorporation in SnO_2/polyaniline nanocomposites for improved thermoelectric energy conversion.**	Sustainable Energy & Fuels Royal Society of Chemistry Vol-6,issue-5, pages 1332-1344,2022	6.813

13	**Mixed Ligand Complexes of Cobalt (II) – Synthesis, Reactivity, Physico-chemical and Spectroscopic studies,**	Asian Journal of Chemistry, 2023, 35(4), pp 910-916,	1.68
14	**Cd(II) and Zn(II) complexes with 2-mercaptopyridine: Synthesis, crystal structure, Hirshfeld surface analysis, luminescent properties, aggregation behaviours, current-voltage characteristic and antibacterial assay, ,**	Polyhedron (Elsevier), 247, 11674, 2024	2.6

Project Details:

Sl.No.	Title	Agency	Period	Grant/Amount mobilized (Rs. In Lakhs)
1	**Synthesis and Improvement of Physical properties of Polyaniline based conducting polymer thin film.**	**UGC**	**2 years**	**Rs. 3,65000**

Seminar/Conference/Workshops Participated:

Attendance of State/National/International Seminars with Paper

1. **ICIRSTM 2017, 16-17 September 2017, National University of Singapore (NUS), SINGAPORE,** International Conference on Innovative Research in Science, Technology and Management.
2. **4th 3R International Scientific Conference on Material Cycles and Waste Management** (8-10 March 2017 at India Habitat Centre, New Delhi, India.
3. **Second International Conference on Material Science (ICMS2017**) (16 – 18 February, 2017) Department of Physics, Tripura University (A Central University), Suryamaninagar -799022, Tripura, India.

4. **“National Conference on recent Trends of Research in physics” (NCRTRP-2015)** ,23rdand 24th July 2015. Department of Physics. Womens College, Agartala.
5. **“National Seminar on recent trends on Material science”**, Department of Chemistry, D.D.M memorial College, Khowai, West Tripura.

Seminar⁄Conference⁄Workshops Conducted: nil

Membership in Academic Bodies: Tripura Chemical society.

Involvement Beyond Academic Activities: Administrative post held: Drawing & Disbursing Officer(DDO), Bir Bikram Memorial College. Composing poetry, Photography & Recitation.

Name: **Dr. Biplab Ghosh**

Designation: Associate Professor, MBB College

Address for communication: M. B. B. College, Dept. Of Chemistry, Agartala, Tripura

Mobile no- 9856321738

Email: bpghnsm@gmail.com

Area of Specialisation: Ogranic Chemistry

Research area: Medicinal plant chemistry

Course taught: B.Sc General, B.Sc Honours, IMD (Chemistry)

Publication Details:

1. Antibacterial activity of *Evolvulus nummularius* Against standard ATCC	International journal of pure and applied Bioscience, vol-4(4).205-211,	2016
2. Iridoid Glucoside from leaves and stem barks of parkia javanica.	Journal of Asian Natural Products research vol-11, No-3, 229-235	march 2009,
3. Chemical constituents of *Mimosa Pudica* flower, B.Ghosh, A.Bhattacharjee, Book Chapter , Natural Products'chemistry**,**	ISBN: 978-93-86283-54-2, Sungraphics, Agartala	2017
4. A Brief review on aquatic plants having medicinal property in Tripura. Book Chapter(Proceedings of National Seminar),	Write and printing publishers , New Delhi ISBN: 978-93-81631-36-2,	2015,
5 Phytochemical investigation of *Steroid and Terpenoid*	*J.Ind.Chem.Soc.*83, 1043-1046,	2006.
6. Phytochemical investigation of *Gomphrena globosa* aerial parts.	*Indian J. Chemistry.* **43 B**, 2223-2227	2004
7.Antibacterial activity of extracts and phytochemicals f from *Evolvulus nummularius*,	*African Journal of Bio-medical Research*.vol-10,	2007

Mimosa Pudica and *Oroxylem Indicum*	83-88,	
8. Chemical constituents of *Gomphrena globosa* II	*J.Nat.Prod.Sc.* 12 (**2**), 89-93	2006
9.Phytochemical investigation of *Evolvulus nummularius* aerial parts.	*Indian J. Chemistry* Sec.B.46B,	2007

Orientation/ Faculty Development programme/ Refresher completed:

Orientation/ Faculty Development programme/ Refresher attended	**Duration**	**Organised by**
1. Orientation Programme of College/ University teachers,	17-8-09 to 12-09-09.	Academic staff college, Jadavpur University,
2. Faculty Development programme in Entrepreneurship ,	9-20 Feb 2010	organized by Tripura State Council for Science and Technology and Entrepreneurship Development Institute of India and DST (INDIA),
3. Work shop on Management of Project.	28/8/2010	Organized by State Institute of Public Administration and rural Development(SIPARD) agartala, Tripura, 26-
4.Orientation/ work shop programme for scicece communicators,	16-17/9/2015,	DST Tripura.
5. Two week refresher course on "Rural Development, New Media and social Change",	**01-7-2019 to 17-7-2019, obtained** Grade A	Tripura University,
6. Five days online interactive faculty development programme on "web apps and e-content----"	**25-29/5/2021**	IASE, AGARTALA, TRIPURA

Paper Presented at National/ Inter National Seminer/conference

Titles	Seminer/conference attended	Duration	Organised by
1. A Brief review on aquatic plants having medicinal property in Tripura.	UGC sponsored national seminar on "recene trend of research in chemistru---"	on 8-9/8-2015	Dept. of Chemistry, women's college-Agartala
2.Chemical constituents of *Mimosa Pudica* flower	National seminar on "Recent advance in natural products---"	28-29 nov/2015	NSM, Udaipur.
3.Bio-activity four medicinal plants of Tripura amd their bio chemicals	International conference on emerging areas of chemistry (ICEAC-2011)	12-14 jan 2011	Tripura University, Dept. Of Chemistry
4.Bio active unusual steroid ---- *Mimosa Pudica*	National seminar on Scope and recent development of natural products,	12-13 Nov 2010.	Iswarchandra Vidyasagar college
5. Bio Active Plant triterpene-------the gift of nature	National seminar on green chemistry and nanoscience technology,	20-21 july-2012	MBBC, Agartala, Tripura
6. Identification of amino acids----------organs	National seminar on recent trend in environment research and management	8-9sep,2012,	NSM,Udaipur,Tripura
7.Sterol ester from *Mimosa Pudica*	State level seminar on ," Frontier Areas of Chemistry	3rd sep/2010	organized by Tripura University, Dept. Of Chemistry in collaboration with Tripura Chemical Society and Tripura State Council for Science and Technology

Seminar Organized-

1. Organized a national seminar on " Recent advance in natural products chemistry---" as joint organizing secretary, 2015, at N.S.Mahavidyalaya

Name: **Dr. Saikat Das Sharma**

Designation: Assistant Professor, MBB College

Address for Communication: Department of Chemistry, MBB College, Agartala-799004

Mobile No: 9436451812

Email: saikatds@yahoo.com

Area of Specialisation: Organic Chemistry

Research Area:

- Organic reactions in water
- Synthesis of bio-active molecules by Diels-Alder cycloaddition reactions
- Development of Green method for oxidation reactions
- Synthesis of bio-active Heterocycles

Courses Taught:

- Organic Chemistry
- Inorganic Chemistry
- Analytical Chemistry

Publication Details:

Research Publications (At a glance)

1. S. Das Sharma and D. Konwar *Synthesis* **2009**, 1062

2. S. Das Sharma and D. Konwar *Synthetic Commun*. **2009**, 39, 980

3. S. Das Sharma, P. Hazarika and D. Konwar *Tetrahedron Lett.* **2008**, 49, 2216

4. S. Das Sharma, P. Hazarika and D. Konwar *Catalysis Commun.* **2008**, 9, 709

5. P. Hazarika, S. Das Sharma and D. Konwar *Catalysis Commun.* **2008**, 9, 2398

6. P. Hazarika, S. Das Sharma, P. Gogoi and D. Konwar *Synthetic Commun.* **2008**, 38, 2870

7. S. Das Sharma, P. Gogoi and D. Konwar *Green Chem.* **2007**, 9, 153

8. S. Das Sharma, P. Gogoi, M. Boruah and D. Konwar *Synthetic Commun.* **2007**, 37, 2473

9. S. Das Sharma, P. Gogoi and D. Konwar *Synthetic Commun.* **2007**, 37, 129

10. S. Das Sharma, P. Gogoi and D. Konwar *Indian J. Chem.* **2007**, 46B, 1672

11. P. Gogoi, S. Das Sharma and D. Konwar *Lett. Org. Chem.* **2007**, 4, 249

12. M. Boruah, D. Konwar and S. Das Sharma *Tetrahedron Lett.* **2007**, 48, 4535

13. P. Gogoi, D. Konwar, S. Das Sharma and P. K. Gogoi *Synthetic Commun.* **2006**, 36, 1259

14. S. Das Sharma, P. Pahari, S. Hazarika, P. Hazarika, M. J. Borah and D. Konwar *Arkivoc* **2013**, (i), 243

15. B. Dinda, S. Dinda, S. Das Sharma, R. Banik and M. Dinda *Eur. J. Med. Chem.* **2017**, 131, 68

Patent Granted

1. "An improved and green method for the preparation of 14-hydroxycodeinone from thebaine" D. Konwar* and S. Das. Sharma *Indian Patent No: 269936*, Grant Date: 19th November, **2015**

Project Details:

1. ***"Synthesis and Diels-Alder Cycloaddition Reactions of 14-Hydroxycodeinone"***

Minor Research Project (UGC-NERO), Fund Utilised: Rs. 433000, Completed on 16/03/2017.

Seminar/Conference Participated:

1. "Chemistry in December: Scientists, Events and Tragedies" on 22/12/2023 organized by Govt. Degree College, Kamalpur, Tripura.

2. **"Celebration of World Ozone Day-2023**" on 16/09/2023 organized by Tripura State Pollution Control Board, Agartala.

3. **"National Science Day-2022"** on 01/06/2022 organized by DDM College, Khowai, Tripura.

4. **"Intellectual Property Rights"** on 11/02/2022 organized by IQAC, MBB College, Agartala.

5. National Seminar on **"Equal Opportunity in the context of Social and Human Development"** on 3/07/2012 to 14/07/2012 organized by Dasaratha Deb Memorial College, Khowai, Tripura.

6. Seminar on **"Good Governance in Tripura: Issues and Prospects"** on 07/12/2012 to 08/12/2012 organized by Dasaratha Deb Memorial College, Khowai, Tripura.

7. **"National Seminar on Green Chemistry & Nanoscience: Theory & Applications"** was attended on 20-21 July, 2012 organized by M. B. B. College, Agartala, Tripura.

8. **"Fifteenth National Conference on Surfactants, Emulsions and Biocolloids-2011"** was attended on December 27-29, 2011 organized by Tripura University.

9. **"International Conference on Emergence Areas of Chemistry"** was attended on January 12-14, 2011 organized by Tripura Univerty.

10. **"National Seminar on Scope & Recent Development of Natural Products"** was attended on November 12-13, 2010 organized by Iswarchandra Vidyasagar College, Belonia, Tripura.

11. **"9th CRSI National Symposium in Chemistry"** was attended on February 1-4, 2007 organized by Delhi University.

12. **"International Symposium on Advances in Organic Chemistry"** was attended on January 9-12, 2006 organized by M. G. University, Kottayam, Kerala.

13. **"National Seminar on Current Trends in Crop Disease Management for Improving Productivity"** was attended on January 19-20, 2006 organized by Regional Research Laboratory, Jorhat.

14. **"National Seminar on Preventive Strategies Against Chemical Hazards"** was attended on December 12-14, 1998 organized by Maharaja Bir Bikram College, Agartala.

Workshop attended:

1. Short-term course on **"Nuclear Magnetic Resonance Spectroscopy"** on 28/05/2009 to 29/05/009 organized by Indian Institute of Technology, Madras.
2. Academies Lecture Workshop on **"Frontiers in Advanced Bio-Chemical Science"** on 25/02/2015 to 27/02/2015 organized by Indian Academy of Sciences (IAS) in DDM College, Khowai.

3. Workshop on **"Computational Information Processing"** on 04/02/2016 to 05/02/2016 organized by Indian Statistical Institute (ISI), Kolkata in DDM College, Khowai.

4. Workshop on **"Right to Information Act, 2005"** on 26/12/2016 to 27/12/2016 organized by State Institute of Public Administration and Rural Development (SIPARD).

5. Training programme on **"Information Technology and Digital Services"** on 26/11/2018 to 13/12/2018 organized by National Institute of Electronics and Information Technology (NIELIT) in DDM College, Khowai.

6. Workshop on **"Cyber Secuirity in the field of ICT"** on 25/02/2020 to 26/02/2020 organized by National Institute of Electronics and Information Technology (NIELIT) in DDM College, Khowai.

7. Short Term Course on **"E-Content Development and Online Pedagogy"** on 07/12/2020 to 13/12/2020 organized by UGC-HRDC: Sardar Patel University, Vallabh Vidyanagar, Gujrat.

8. Short Term Course on **"Patent and Start up in Higher Education"** on 17/08/2020 to 22/08/2020 organized by UGC-HRDC: Saurashtra University, Rajkot, Gujrat.

9. NPTEL-SWAYAM: Faculty Development Programme on **"Pericyclic Reactions and Organic Photochemistry"** on 24/02/2020 to 31/05/2020 organized by NPTEL on Swayam.

10. NPTEL-SWAYAM course on **"Reactive Intermediates-Carbene and Nitrene"** on 24/02/2020 to 20/03/2020 organized by NPTEL on Swayam.

11. NPTEL-SWAYAM: Faculty Development Programme on **"Principles of Organic Synthesis"** on 14/09/2020 to 04/12/2020 organized by NPTEL on Swayam.

12. NPTEL-SWAYAM: Faculty Development Programme on **"Industrial Inorganic Chemistry"** on 24/01/2022 to 15/04/2022 organized by NPTEL on Swayam.

13. NPTEL-SWAYAM course on **"Stereochemistry"** on 25/07/2022 to 16/09/2022 organized by NPTEL on Swayam.

14. NPTEL-SWAYAM: Faculty Development Programme **on "Introductory Organic Chemistry II"** on 22/08/2022 to 14/10/2022 organized by NPTEL on Swayam.

15. NPTEL-SWAYAM: Faculty Development Programme on **"Mechanisms In Organic Chemistry"** on 24/07/2023 to 15/09/2023 organized by NPTEL on Swayam.

Seminar/Conference/Workshops Conducted: Nil

Membership in Academic Bodies: Member, Tripura Chemical Society, Agartala

Involvement beyond Academic Activities:

1) Assistant State Public Information Officer (**ASPIO**), DDM College, Khowai
2) **Head-in-Charge**, Chemistry Department, D.D.M. College, Khowai
3) **Convener, Exam Committee,** D.D.M. College, Khowai
4) Nodal Officer, National Institutional Ranking Framework (**NIRF**), DDM College
4) **Member, IQAC Committee**, DDM College, Khowai
5) **Nodal Officer**, National Institutional Ranking Framework (**NIRF**), MBB College
6) **Member, IQAC Committee,** MBB College, Agartala
7) **Member, Admission Committee,** MBB College, Agartala
(For the year 2021-2022)
8) **Member, Examination Committee,** MBB College, Agartala
9) **Member, Seminar, Debate & Workshop Committee**
10) **Member, Academic Audit Committee,** MBB College, Agartala
11) Head, **Department of Chemistry,** Head, **Department of Chemistry**
12) Member, **"State Level Environment Impact Assessment Authority (SEIAA),"** Department of Science, Technology & Environment, Govt. of Tripura
13) Convener, "**Distribution of Food and Educational Kits to an Orphanage"** committee in connection with Platinum Jubilee Celebration of MBB College.
14) Member, **Integrated Teacher Education Programme Committee (ITEP),** MBB College, Agartala
15) Consignee, **GeM purchase**, MBB College, Agartala
16) Joint Convener, **Development Committee**, MBB College, Agartala
17) Member, **Tender Committee**, MBB College, Agartala
18) Member, **Cleaning, Jungle Cutting and Beautification Committee,** MBB College, Agartala

Name: **DR ARIJIT DAS**

Designation: Assistant Professor, BBM College

Address for Communication: Department of Chemistry, BBM College, Agartala, Pin-799004

Mobile No.: **09862211165**

Email: **arijitdas78chem@gmail.com**

Website: **https://arijitchemistryworld.in/**

Area of Specialization: Inorganic Chemistry (**Coordination Chemistry**)

Research Area:

SYNTHETIC INORGANIC CHEMISTRY:

- **i) Mixed ligand Complexes**
- **ii) 1,1-Dithiolates**
- **iii) Crystallography Study**
- **iv) DFT study**
- **v) TGA**
- **vi) Luminescent properties**

vii) Conductivity over a wide range of temperature

- **viii) Antibacterial and antifungal activity studies**

INNOVATION IN CHEMICAL EDUCATION:

i) Organic Chemistry ii) Inorganic Chemistry

Courses Taught: Chemistry (Hons. and general) & IMD Chemistry Course

Publication Details:

i) **57 research papers were published in different SCI, SCOPUS, UGC indexed and referred journals** (https://arijitchemistryworld.in/curriculum-vitae/) in which 21 research papers were indexed in the Stanford University (https://arijitchemistryworld.in/indexing-and-citation/).

ii) **Two (02) Books published** (International). Link: (https://arijitchemistryworld.in/books-book-chapter/) in which **one book indexed in the Stanford University (https://searchworks.stanford.edu/view/14279378).**

iii) **Twenty Eight (28) Innovative Chapters** on UG-PG course published in **WikiEducator (OER), Otago Polytechnic, New Zealand,** Under CC-BY-SA License w.e.f. May 2021 (https://arijitchemistryworld.in/chapters-published/).

iv) **Ten (10) innovative Articles Published from the ERIC, US Department of Education** (2013-2021)

(https://arijitchemistryworld.in/eric-indexed-articles/) .

v) **Nine (09) Innovative Chapters Published from the University of California, Davis, US** (https://arijitchemistryworld.in/uc-davis-us/).

ii) **Two (02) Educational Tools Launched from the Minerazzi.com , US** (https://arijitchemistryworld.in/tool-software/) (2015 & 2018) and **indexed in the City College of New York: City College Chemistry Web Resources Page (Computational Chemistry Section)** (https://library.ccny.cuny.edu/chemistry/computational).

Details List of Publications

Journal Articles:

1. **"Synthesis and characterization of ionic heterobimetallic complexes of Ni(II), Cu(II), Zn(II) and Cd(II) ions containing nitrogen and sulphur donors."**

   M.K.Singh, R.Laskar & **A.Das**, ***Indian Journal of Chemistry***, **41A, Nov 2002, p 2282**. **(IF-0.67)**

2. **"Synthesis and structural characterization of mixed ligand complexes of nickel(II) with 1,1-dicyanoethylene-2,2-dithiolate and some nitrogen donors"**

   Mahesh K.Singh, **Arijit Das** and Bijaya Paul, ***Trans. Metal Chem***, **Sept 2005, 30, p 655. (IF-1.7)**

3. **"Synthesis and structural characterization of mixed ligand complexes of nickel(II) with 1- cyano-1- carboethoxyethylene-2,2-dithiolate and some nitrogen donors"**

   Mahesh K.Singh, **Arijit Das** and Bijaya Paul, ***Trans Metal Chem***, **Sept 2007, 32, p 732**. **(IF-1.997)**

4. **"Synthesis and characterization of mixed ligand complexes of Zn(II) and Cd(II) with 1,1-dicyanoethylene-2,2-dithiolate and some nitrogen donors"**

   M. K.Singh, **A. Das**, B. Paul and R. Laskar, ***J.Ind.Chem.Soc.***, **May 2008, 85, p 485**. **(IF-0.384)**

5. **"Synthesis and characterization of mixed ligand complexes of Zn(II) and Cd(II) with 1-**

   cyano-1-carboethoxyethylene-2,2-dithiolate and some nitrogen donors"

M. K. Singh, **A. Das**, B. Paul and R. Laskar, ***J. Ind. Chem. Soc.***, **Feb 2009, 86,P-143**.

6.“Synthesis and characterization of mixed ligand complexes of cobalt(II) ion with some nitrogen and

sulphur donors” Mahesh K. Singh, **Arijit Das** and Bijaya Paul, ***Journal of Co-ordination***

Chemistry,62(16), Aug **2009**, **P-2745. (IF-1.932)**

7. “Synthesis, characterization and Luminescent properties of mixed ligand complexes of

nickel (II) with 1,1-dicarboethoxy ethylene-2,2-dithiolate and some nitrogen donors”.

M.K.Singh,**A. Das**, B.Paul, S.Sutradhar and S.Bhattacharjee, ***J.Ind.Chem.Soc.*,89,March 2012,P-421.**

8. “Synthesis, Characterization, Luminescent properties and biological activity studies of

mixed ligand complexes of nickel (II) with sulphur and some nitrogen donors”

Mahesh K Singh, Sanjit Sutradhar, Bijaya Paul, D. Barman and **Arijit Das*** ***J. Ind. Chem. Soc.*, 90**,

Feb - 2013, p-163.

9. “New Innovative Methods for prediction of hybridization State in a very short time”

Arijit Das, *Ind. Journal of Applied Research*, 3(7), p594, July-2013,

https://doi.org/10.15373/2249555x/july2013/188 (Crossref Metadata) (IF-0.8215)

Indexed Stanford University:

https://searchworks.stanford.edu/articles/edsair__edsair.doi.dedup.....90483a1acf253b2174b9fd9a181fe05e

10.“New innovative methods for prediction of bond order of mono and diatomic molecules,

ions and also acid radicals in a very short time”

Arijit Das, *Indian Journal of Applied Research*, 3(7), p114, July-2013,

https://doi.org/10.15373/2249555x/july2013/30 (Crossref Metadata) (IF-0.8215)

Indexed Stanford University:
https://searchworks.stanford.edu/articles/edsair__edsair.doi.....b397118b7b7ec0ba1920c8e369978044

11. "New innovative methods for determination of IUPAC nomenclature of spiro and bicyclo compounds in Organic Chemistry"

Arijit Das, *Indian Journal of Applied Research*, 3(7), p596, July-2013,

https://doi.org/10.15373/2249555x/july2013/189 (Crossref Metadata) (IF-0.8215), Indexed

Stanford University, Link:
https://searchworks.stanford.edu/articles/eric__ED610985

12. "New innovative methods for determination of spin multiplicity, spin state and Magnetic properties of diatomic heteronucler molecules or ions in a very short Interval of time"

Arijit Das, *Indian Journal of Applied Research*, 3(8), p67, Aug-2013,

https://doi.org/10.15373/2249555x/aug2013/21 (Crossref Metadata) (IF-0.8215)

Indexed Stanford University:
https://searchworks.stanford.edu/articles/edsair__edsair.doi.dedup.....7814003569841c47e4b864cbbcf15370

13. "A rapid and innovative method for the identification of aromatic and anti-aromatic nature of organic compounds"

Arijit Das, Suman Adhikari, Bijaya Paul, V. Jaggnnadam and R.Sanjeev, *World Journal of Chemical Education*, 1(1), p6, Sept-2013, SEP, USA, DOI:10.12691/wjce-1-1-2, Indexed

Stanford University, Link:
https://searchworks.stanford.edu/articles/eric__ED610995.

14. "A rapid and innovative method for the easy prediction of Magnetic behavior of homo and hetero nuclear mono and diatomic molecules or ions without MOT"

Arijit Das, *Indian Journal of Applied Research*, 3(10), p1, Oct-2013,

https://doi.org/10.15373/2249555x/oct2013/13 (Crossref Metadata) (IF-0.8215)

Indexed Stanford University: Link:
https://searchworks.stanford.edu/articles/edsair__edsair.doi.dedup.....7814003569841c47e4b864cbbcf15370

15. "New methods for prediction of Bond order of mono and diatomic homo and hetero Nuclear molecules or ions with (1-20)e⁻s and Oxide based acid radicals – An innovative approach"

Arijit Das, *Ind. J. of Applied Research*, 3(11), pp41-43 Nov-2013, (IF-0.8215)

Indexed Stanford University:

https://searchworks.stanford.edu/articles/edsair__edsair.doi.dedup.....16bd4464d1175bd201d3900668d1d415

16. "Simple Thinking Makes Chemistry Metabolic and Interesting - A Review Article"

Arijit Das, IOSR-Journal of Applied Chemistry (IOSR-JAC) TIE UP WITH NASA and ANED,

e-ISSN: 2278-5736. Volume 6, Issue 4 (Nov. – Dec. 2013), PP 08-15, DOI-10.9790/5736-0640815, USA.

Indexed Stanford University:
https://searchworks.stanford.edu/articles/edsair__edsair.doi.....8a8181b923391c07320a00e2809ecdad

17. "Simultaneous Equations as a Tool in the Spectrophotometric Analysis of Two Non-interacting Substances in a Binary Mixture: Senior Undergraduate Physical and Physical-Organic Chemistry Laboratory Experiment"

R. Sanjeev, V. Jagannadham, R. Ravi, R. Veda Vrath, Arijit Das

***Journal of Laboratory Chemical Education*, 2013, 1(4),p59-64,SAP,,USA, DOI: 0.5923/j.jlce.20130104.01**

18. "New Methods for the prediction of Magnetic Moment of homo and hetero nuclear mono and diatomic molecules or ions without MOT-A Rapid Innovative Approach"

Arijit Das, *International Journal of Advance Research in Applied Chemistry*, SCI Pub.,01(10),

Oct-2013, pp1-7, ISSN(online): 2320-9178, USA.

19. "Rapid calculation of the number of π-bonds, σ-bonds, single and triple bonds in aliphatic unsaturated open chain and cycloalkynes"

Arijit Das, Suman Adhikari, Debapriya Paul, Bijaya Paul, V. Jaggnnadam and R.Sanjeev,

***World Journal of Chemical Education,* 2014, 2(1), pp1-3, *SEP,* USA, DOI:10.12691/wjce-2-1-1,**

Indexed Stanford University, Link: https://searchworks.stanford.edu/articles/eric__ED610994

20. "Supramolecular Chemistry and its application" (Review Article)

Suman Adhikari, Arijit Das & Basu Maan Daas, Prayas, *Journal of Multidisciplinary Area,* Vol-01(01), pp 72-78, Feb-2014 Online ISSN 2348-618X.

21. "Rapid calculation of the number of π-bonds, σ-bonds, single and double bonds in aliphatic unsaturated open chain and cyclic olefinic hydrocarbons"

Arijit Das, Debapriya Pal, Bijaya Paul, R. Sanjeev and V. Jagannadham, *Education in Chemical Science and Technology,* published by *Ind. Chem. Soc.*, Aug-2014, 2(1), pp 41-46

Indexed Stanford University: https://searchworks.stanford.edu/articles/edsair__edsair.doi.dedup.....82605d8b4a6b30f248dae88821885581

22. "Synthesis and Characterization of mixed ligand complexes of Co(II) ion with some N and S donor" Mahesh K. Singh*, Ranajoy Laskar, Sanjit Sutradhar, Bijaya Paul,S.Bhattacharjee and **Arijit Das*,** ***IOSR Journal of Applied Chemistry (IOSR-JAC) e-ISSN: 2278-5736.Volume 7, Issue 4 (1), (Apr. 2014), PP 24-29,* DOI: 10.9790/5736-07412429, ANED DDL(American National Engineering Database Digital Data link) no: 23.5736/iosr-jac-E07412429**

23. "Innovative And Time Economic Pedagogical Views In Chemical Education – A Review Article"

Arijit Das, R.Sanjeev and V.Jagannadham, *World Journal of Chemical Education,* 2014,

***Vol. 2, No. 3, 29-38,* Science and Education Publishing , USA, DOI:10.12691/wjce-2-3-1.**

Indexed Stanford University: Link:
https://searchworks.stanford.edu/articles/eric__ED609695

24. "Association Behavior of Mono, Di and Tri-hydric Alcohols with Three Carbon

Skeleton in a Straight Chain"

R. Sanjeev, V. Jagannadham, Adam A. Skelton, Arijit Das, *World Journal of Chemical*

***Education,* 2014, *Vol. 2, No. 3, 39-41,* Science and Education Publishing, USA,**

DOI:10.12691/wjce-2-3-2.

25. "Time Economic Innovative Methodology on the Prediction of Hybridization State of

Heterocyclic Compounds"

Arijit Das, Bijaya Paul, R.Sanjeev and V.Jagannadham

IOSR Journal of Applied Chemistry (IOSR-JAC) e-ISSN: 2278-5736.Volume 7, Issue 8 (2),

***(Aug-2014), PP 38-39,* DOI: 10.9790/5736-07412429.**

Indexed Stanford University:

https://searchworks.stanford.edu/articles/edsair__edsair.doi.....163b173556164ad77ee822824fccb6a5

26. "Synthesis, Crystal Structure And Antifungal Activity Studies of a Newly Synthesized

Polymeric Mixed Ligand Complex of Zn (II) With 1,1-dithiolate and Nitrogen donors"

Mahesh Kumar Singh, Sanjit Sutradhar, Bijaya Paul, Suman Adhikari, Raymond J. Butcher,

Sandeep Acharya and Arijit Das*

***J.of Co-ordination Chemistry, Taylor & Francis Pub.(London),*Vol.67,No.22,3613–3620, 2014**

http://dx.doi.org/10.1080/00958972.2014.972388 (IF-2.223)

27. Cd(II) complexation With 1,1-dithiolate and Nitrogen donors: Synthesis, Luminescence, Crystal

Structure And Antifungal Activity Study

Mahesh Kumar Singh, Sanjit Sutradhar, Bijaya Paul, Suman Adhikari, Raymond J. Butcher,

Sandeep Acharya and Arijit Das*

J.of Co-ordination Chemistry,* 2015, Vol. 68, No. 8, 1423–1432, *Taylor & Francis Pub.(London)

http://dx.doi.org/10.1080/00958972.2015.1013946

28. Time Economic Innovative Pedagogies In Chemical Science - A Review Article

Arijit Das[a*] and Bijaya Paul, *Education in Chemical Science and Technology,* Ind.Chem.Soc., Vol-3, No.1, PP 1-28, Aug-2015. Indexed Stanford University: Link: https://searchworks.stanford.edu/articles/edsair__edsair.doi.dedup.....cc94683bf601ac348efedd716862353e

29. Six-coordinate cadmium (II) complex containing a bridging dithiolate ligand: Synthesis,

Crystal Structure and Antifungal Activity Study

Mahesh Kumar Singh, Sanjit Sutradhar, Bijaya Paul, Suman Adhikari, Raymond J. Butcher,

Sandeep Acharya and Arijit Das*

***J.of Co-ordination Chemistry, Taylor & Francis Pub.(London),UK* (online published 3rd Nov-2015)**

Volume 69, Issue 1, January 2016, pages 168-175.

30. Synthesis and Structural Characterization of Mixed Ligand Complexes of Manganese (II) With Some

Nitrogen and Sulphur Donors by Magnetic and Spectroscopic Methods

M.K.Singh, Bijaya Paul , **Arijit Das**, ***IOSR-JAC*, 9**, 2(1),p42-48, Feb-2016

31. Manganese(II) Complexation with 1,1-dithiolate and Nitrogen donors – Synthesis, magnetic properties and

spectroscopic studies

Mahesh K. Singh, Bijaya Paul and Arijit Das, *IOSR-JAC,* Vol 9, Issue 11(11), p1-7 Nov-2016

32. Synthesis, TGA, Luminescent and Antifungal Activity Studies of Nickel (II) Complexes

of 1,1-dithiolate - Mahesh K. Singh, Sanjit Sutradhar, Arijit Das and Sandeep Acharya, *Asian J. of*

***Chemistry*, Vol 29, No 5, 1023-1028, 2017**

33. A new Cadmium(II) complex with bridging dithiolate ligand: synthesis, crystal structure

and antifungal activity study

Mahesh Kumar Singh, Sanjit Sutradhar, Bijaya Paul, Suman Adhikari, F.Laskar, Raymond J.

Butcher, Sandeep Acharya and Arijit Das*, *Journal of Molecular Structure*, Elsevier Pub., Vol

1139, 5 July 2017, Pages 395–399, https://doi.org/10.1016/j.molstruc.2017.03.073.

34. Synthesis andStructural characterization of mixed ligand complexes of nickel(II) with

1, 8-diaminonaphthalene and 1-cyano-1-carboethoxyethylene-2,2-dithiolate

M. K.Singh, Sanjit Sutradhar and Arijit Das, J. of the Indian Chem. Soc., pp 497-502, May 2017.

35. Bond-order and Magnetic Behavior of Diatomic Species without Molecular Orbital

Theory Arijit Das, *World Journal of Chemical Education*, Book Chapter, vol. 5, no. 4, 19th

June 2017, pp 128-131, doi:10.12691/wjce-5-4-2, Indexed Stanford University, Link:

https://searchworks.stanford.edu/articles/eric__ED610993

36. Chemical Bonding: Time Economic Innovative Pedagogies - A Review Article

Arijit Das, *Global Journal of Science Frontier Research Chemistry* (GJSFR B), Vol 17,

Issue 2 (1), 28th Nov 2017, pp 1-16, doi:10.17406/GJSFR

37. Mixed-ligand complexes of zinc(II) with 1,1-dicyanoethylene-2,2-dithiolate and N-donor ligands: A

combined experimental and theoretical study

Arijit Das *et al*. *Journal of Molecular Structure*, Elsevier, 1164, **July 2018**, pp 334-343,

https://doi.org/10.1016/j.molstruc.2018.03.073.

38. Time Economic Innovative Mnemonics In Chemical Education - A Review Article

Arijit Das, *International Journal of Physics & Chemistry Education* (Eurasian Journal of

Physics and Chemistry Education - EJPCE), 10(1), June 2018, pp 27-40,

(https://doi.org/10.12973/ijpce/81589)

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Compounds - Innovative Mnemonics

Arijit Das, *World Journal of Chemical Education*, vol. 6, no. 2, 4th April 2018, pp95-101,

DOI: 10.12691/wjce-6-2-4, Indexed Stanford University, Link:

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40. Time Economic Innovative Mnemonics in Chemical Education - A Review Article

Arijit Das, *American Journal of Chemistry and Applications*, Open science, 5(1), pp 19-32, 2018.

41. Lone Pair of Electrons Discriminate Hybridization with Aromaticity in the Heterocyclic

Compounds - Innovative Mnemonics

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42. Review of Innovative Mnemonics for Inorganic and Organic Chemical Education

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2018 Issue, ***ISSN 2227-5835***

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44. Innovative Mnemonics Make Chemical Education Time Economic – A Pedagogical Review Article

Special Issue "Teaching Science in the 21st Century", Arijit Das, ***World Journal of Chemical***

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45. 'Predicting the hybridization state: a comparative study between conventional and innovative

formulae' Arijit Das, ***Journal of Education and Learning (EduLearn)*****, Vol. 14, No. 2, May 2020, pp. 272-**

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(Indexed Stanford University), Link: https://searchworks.stanford.edu/articles/eric__EJ1266632 .

46. 'Bimetallic and Trimetallic Cd(II) and Hg(II) Mixed-Ligand Complexes with 1,1-dicyanoethylene-2,2-

dithiolate and Polyamines: Synthesis, Crystal structure, Hirshfeld Surface analysis, and Antimicrobial

study', Suman Adhikari, Tirtha Bhattacharjee, Priyatosh Nath, **Arijit Das**, Jerry P. Jasinski, Raymond J.

Butcher, Debasish Maiti, ***Inorganica Chimica Acta***, **512 (2020), pp 119877,** Available **online 11 July 2020,**

doi: https://doi.org/10.1016/j.ica.2020.119877.

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Arijit Das, *World Journal of Chemical Education*, Vol. 9, No. 2, pp 42-45, 2021

49. Classification of Negative Charge Discriminate Hybridization with Aromatic and Anti-aromatic Behavior of Organic Compounds - Innovative Mnemonics (**Indexed Stanford University**), Link: **https://searchworks.stanford.edu/articles/eric__ED613509**

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50. Exploring dithiolate-amine binary ligand systems for the supramolecular assemblies of Ni(II) coordination compounds: Crystal structures, theoretical studies, cytotoxicity studies, and molecular docking studies

Tirtha Bhattacharjee, Suman Adhikari, , Sharmila Bhattacharjee, Sourav Debnath, **Arijit Das**, Constantin Gabriel Daniliuc , Krishnan Thirumoorthy, Sarubala Malayaperumal, Antara Banerjee, Surajit Pathak, Antonio Frontera,

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51. Mixed Ligand Complexes of Cobalt (II) – Synthesis, Reactivity, Physico-chemical and Spectroscopic studies, ARIJIT DAS, PARESH DEBNATH, BIJAYA PAUL, KARTICK LAL BHOWMIK, ABHIJIT BHATTACHARYA, and BANTI GANGULY, ***Asian Journal of Chemistry***, 2023, **35(4),** pp 910-916, https://doi.org/10.14233/ajchem.2023.27479 (**SCOPUS Indexed**).

52. Metal Ions Separation Via Paper Chromatography: Enhanced Methods Using Eluting Solutions. **Arijit Das**, Digvijoya Sarmaa, Paresh Debnath and Bijaya Paul, *World Journal of Chemical Education*. **Nov 2023;** 11(4):134-140. doi: 10.12691/wjce-11-4-2 (**SCOPUS Indexed**).

53. Cd(II) and Zn(II) complexes with 2-mercaptopyridine: Synthesis, crystal structure, Hirshfeld surface analysis, luminescent properties, aggregation behaviours, current-voltage characteristic and antibacterial assay, Arijit Das, Syed Arshad Hussain, Hritinava Banik, Debasish Maiti, Tamanna Aktar, Bijaya Paul, Pratima Debnath, Lesław Sieron, Abhijit Bhattacharya, Kartick Lal Bhowmik , Waldemar Maniukiewicz, Paresh Debnath, Polyhedron (Elsevier), 247, 11674, **2024**, https://doi.org/10.1016/j.poly.2023.116747.

54. Metal-Based Drugs in Cancer Therapy, Sourav Nath, Abhijit Datta, **Arijit Das** and Suman Adhikari, *Int. J. Exp. Res. Rev.*, Vol. 37: 159-173 (2024), DOI:

https://doi.org/10.52756/ijerr.2024.v37spl.014, International Academic Publishing House (IAPH).

55. Multifunctional Transition Metal Complexes: Design, Synthesis, Luminescent Features, Electrical Behaviour, Nanostructure Morphology and Bioactive Properties with 1,1- Dicyanoethylene-2,2-dithiolate and p-Phenylenediamine Ligands, **Arijit Das**, Syed Arshad Hussain, Hritinava Banik, Debasish Maiti, Tamanna Aktar, Sandeep Acharya, Paresh Debnath, Asian Journal of Chemistry, Volume 36 (2024) **(Accepted).**

56. Advanced Methods for the Separation and Identification of p and d block elements by Paper Chromatography, Arijit Das, Digvijoya Sarmaa, Rupak Das, Bijaya Paul, Pratima Debnath, Suman Adhikari, Arnab Bhattacharya, and Paresh Debnath, (Book Chapter), "A Basic Handbook of Science,
Technology and Innovation for Inclusive Development (Volume-1)", **International Academic Publishing House (IAPH) (2024) (Accepted)**.

57. Separation and Identification of Metal ions by Paper Chromatography: Improved Qualitative Inorganic Analysis, Arijit Das, Paresh Debnath, Digvijoya Sarmaa, Rupak Das 2 , Bijaya Paul 3 and Pratima Debnath, **African Journal of Chemical Education (AJCE),** Vol. 14, No. 1, July 2024 **(Accepted).**

Two (02) BOOK PUBLISHED:

1.TITLE: **'Innovative Mnemonics in Chemical Education: A Handbook for Classroom Lectures'**

Publication Date: 11Sept 2019 (Online) & 1st Nov-2019 (Hard Back)

Publisher: Cambridge Scholars Publishing, Lady Stephenson Library, Newcastle upon Tyne,NE6 2PA, UK, ISBN (10): 1-5275-3922-9; ISBN (13): 978-1-5275-3922-8

Link: https://www.cambridgescholars.com/innovative-mnemonics-in-chemical-education.

Indexed:

British Library Cataloguing in Publication Data. A catalogue record for this book is available from the British Library.

Link:

https://bll01.primo.exlibrisgroup.com/discovery/search?query=any,contains,Arijit%20Das%20Innovative%20Mnemonics%20in%20Chemical%20Education:%20A%20Handbook%20for%20Classroom%20Lectures&tab=LibraryCatalog&search_scope=Not_BL_Suppress&vid=44BL_INST:BLL01&lang=en&offset=0

Stanford University, US: https://searchworks.stanford.edu/view/14279378

2. TITLE: ***'Mixed Ligand complexes of 1,1-dithiolates and Nitrogen Donors'***,

Publication Year: 2016.

Publisher: Lambert Academic Publishing (LAP), Germany,

ISBN-10: 3659909807

ISBN-13: 978-3-659-90980-1

Link: https://www.amazon.com/Ligand-Complexes-1-Dithiolates-Nitrogen-Donors/dp/3659909807

Twenty eight (28) Chapters Published in the WikiEducator, Open Educational Resource (OER) Foundation, Otago Polytechnic, Dunedin, New Zealand (2021-2023):

CHEMICAL BONDING

Chapter 1 - PREDICTION OF THE HYBRIDIZATION STATE OF SIMPLE MOLECULES or IONS, pp 1-22

Link: https://wikieducator.org/File:Chapter_1-PREDICTION_OF_THE_HYBRIDIZATION_STATE_OF_SIMPLE_MOLECULES_or_IONS.pdf

Pub Date: May 06, 2021

Chapter 2 - PREDICTION OF THE HYBRIDIZATION STATE OF ORGANIC COMPOUNDS, pp 23-34

Link: https://wikieducator.org/File:Chapter_2_-_PREDICTION_OF_THE_HYBRIDIZATION_STATE_OF_ORGANIC_COMPOUNDS_pp_23-34.pdf

Pub Date: May 06, 2021

Chapter 3 - Prediction Of The Hybridization State – A Comparative Study Between Conventional and Innovative Formulae, pp 35-43

Link: https://wikieducator.org/File:Chapter_3_-_Prediction_Of_The_Hybridization_State_%E2%80%93_A_Comparative_Study_Between_Conventional_and_Innovative_Formulae_pp_35-43.pdf

Pub Date: May 06, 2021

Chapter 4 - BOND ORDER OF DIATOMIC SPECIES WITHOUT MOLECULAR ORBITAL THEORY (MOT), pp 44-54

Link: https://wikieducator.org/File:Chapter-4_BOND_ORDER_OF_DIATOMIC_SPECIES_WITHOUT_MOLECULAR_ORBITAL_THEORY_(MOT)_pp_44-54.pdf

Pub Date: May 06, 2021

Chapter 5 - PREDICTION OF THE BOND ORDER OF OXIDE BASED ACID RADICALS, pp 55-58 Link: https://wikieducator.org/File:Chapter_5_-_PREDICTION_OF_THE_BOND_ORDER_OF_OXIDE_BASED_ACID_RADICALS_pp_55-58.pdf

Pub Date: May 06, 2021

Chapter 6 - PREDICTION OF THE MAGNETIC BEHAVIOUR AND BOND ORDER OF DIATOMIC SPECIES WITHOUT MOLECULAR ORBITAL THEORY (MOT), pp 59-68

Link: https://wikieducator.org/File:Chapter-6_-_PREDICTION_OF_THE_MAGNETIC_BEHAVIOUR_AND_BOND_ORDER_OF_DIATOMIC_SPECIES_WITHOUT_MOLECULAR_ORBITAL_THEORY_(MOT)_pp_59-68.pdf

Pub Date: May 07, 2021

Chapter 7 - INNOVATIVE METHOD FOR THE PREDICTION OF SPIN MULTIPLICITY, pp 69-80

Link: https://wikieducator.org/File:Chapter_7_-_INNOVATIVE_METHOD_FOR_THE_PREDICTION_OF_SPIN_MULTIPLICITY_pp_69-80.pdf

Pub Date: May 08, 2021

AROMATICITY

Chapter 8 - INNOVATIVE METHODS FOR THE PREDICTION OF AROMATIC ANTI-AROMATIC AND NON-AROMATIC BEHAVIOUR OF SIMPLE ORGANIC COMPOUNDS, pp 81-91

Link: https://wikieducator.org/File:Chapter_8_-_INNOVATIVE_METHODS_FOR_THE_PREDICTION_OF_AROMATIC_ANTI-AROMATIC_AND_NON-AROMATIC_BEHAVIOUR_OF_SIMPLE_ORGANIC_COMPOUNDS_pp_81-91.pdf

Pub Date: May 10, 2021

Chapter 9 - INNOVATIVE METHODS FOR THE PREDICTION OF AROMATIC, ANTI-AROMATIC AND NON AROMATIC BEHAVIOUR OF HETEROCYCLIC COMPOUNDS, pp 92-109

Link: https://wikieducator.org/File:Chapter_9_-_INNOVATIVE_METHODS_FOR_THE_PREDICTION_OF_AROMATIC,_ANTI-AROMATIC_AND_NON_AROMATIC_BEHAVIOUR_OF_HETEROCYCLIC_COMPOUNDS_pp_92-109.pdf

Pub Date: May 15, 2021

HYDROCARBONS

Chapter 10 - INNOVATIVE METHODS FOR THE CALCULATION OF CHEMICAL BONDS IN ALKENES, pp 110-113

Link: https://wikieducator.org/File:Chapter_10_-_INNOVATIVE_METHODS_FOR_THE_CALCULATION_OF_CHEMICAL_BONDS_IN_ALKENES_pp_110-113.pdf

Pub Date: May 19, 2021

Chapter 11- INNOVATIVE MNEMONICS FOR THE CALCULATION OF CHEMICAL BONDS IN ALKYNES, pp 114-117

Link: https://wikieducator.org/File:Chapter_11-INNOVATIVE_MNEMONICS_FOR_THE_CALCULATION_OF_CHEMICAL_BONDS_IN_ALKYNES_pp_114-117.pdf

Pub Date: Aug 09, 2021

ORGANIC IUPAC NOMECLATURE

Chapter 12 - INNOVATIVE METHODS FOR THE IUPAC NOMENCLATURE OF BICYCLO AND SPIRO COMPOUNDS, pp 118-124

Link: https://wikieducator.org/File:Chapter_12_-_INNOVATIVE_METHODS_FOR_THE_IUPAC_NOMENCLATURE_OF_BICYCLO_AND_SPIRO_COMPOUNDS_pp_118-124.pdf

Pub Date: Aug 11, 2021

Chapter 13 - IUPAC Nomenclature of Higher Alkanes – Innovative Method, pp 125-130

Link: https://wikieducator.org/File:Chapter_13_-_IUPAC_Nomenclature_of_Higher_Alkanes_%E2%80%93_Innovative_Method_pp_125-130.pdf

Pub Date: Nov 21, 2021

Chapter 14 - Classification of Negative charge discriminate hybridization with aromatic and anti-aromatic behavior of organic compounds - Innovative Methods, pp 131-143

Link: https://wikieducator.org/File:Chapter_14_-_Classification_of_Negative_charge_discriminate_hybridization_with_aromatic_and_anti-aromatic_behavior_of_organic_compounds_-_Innovative_Methods_pp_131-143.pdf

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CHEMICAL BONDING

Chapter 15 - PREDICTION OF BOND ANGLE OF POLYATOMIC MOLECULES, pp 144-147

Link: https://wikieducator.org/File:Chapter_15_-_PREDICTION_OF_BOND_ANGLE_OF_POLYATOMIC_MOLECULES_pp_144-147.pdf

Pub Date: Nov 25, 2021

INFRARED SPECTROSCOPY (IR)

Chapter 16 - Infrared spectroscopy (Theory & Principle), pp 148-150

Link: https://wikieducator.org/File:Chapter-16_Infrared_spectroscopy_(Theory_%26_Principle)_pp_148-150.pdf

Pub Date: Nov 28, 2021

Chapter 17 - Infrared spectroscopy (Vibrational Modes), pp 151-155

Link: https://wikieducator.org/File:Chapter-17_Infrared_spectroscopy_(Vibrational_Modes)_pp_151-155.pdf

Pub Date: Dec 06, 2021

Chapter 18 - Infrared spectroscopy (FINGERPRINT REGION), pp 156-158

Link: https://wikieducator.org/File:Chapter-18_Infrared_spectroscopy_(FINGERPRINT_REGION)_pp_156-158.pdf

Pub Date: Dec 17, 2021

Chapter 19 - Infrared spectroscopy (Bond Parameter & Hybridization), pp 159-160

Link: https://wikieducator.org/File:Chapter-19_Infrared_spectroscopy_(Bond_Parameter_%26_Hybridization)_pp_159-160.pdf

Pub Date: Dec 25, 2021

Chapter 20 - Infrared spectroscopy (Identifying Compounds or ligands), pp 161-173

Link: https://wikieducator.org/File:Chapter-20_Infrared_spectroscopy_(Identifying_Compounds_or_ligands)_pp_161-173.pdf

Pub Date: Dec 30, 2021

Coordination Chemistry

Chapter 21 - Coordination Chemistry (Introduction), pp 174-178

Link: https://wikieducator.org/File:Chapter-21_Coordination_Chemistry_(Introduction)_pp_174-178.pdf

Pub Date: Jan 12, 2022

Chapter 22 - Coordination Chemistry (Structural Isomerism), pp 179-187

Link: https://wikieducator.org/File:Chapter_22_-_Coordination_Chemistry_(Structural_Isomerism)_pp_179-187.pdf

Pub Date: Jan 19, 2022

Chapter 23 - Coordination Chemistry (Geometrical Isomerism), pp 188-196

Link: https://wikieducator.org/File:Chapter_23_-_Coordination_Chemistry_(Geometrical_Isomerism)_pp_188-196.pdf

Pub Date: Jan 25, 2022

Chapter 24 - Coordination Chemistry (Optical isomerism), pp197-203

Link: https://wikieducator.org/File:Chapter-24_Coordination_Chemistry_(Optical_isomerism)_pp197-203.pdf

Pub Date: March 14, 2022

Chapter 25 - Coordination Chemistry (IUPAC Nomenclature), pp 204-208

Link: https://wikieducator.org/File:Chapter-25_Coordination_Chemistry_(IUPAC_Nomenclature)_pp_204-208.pdf

Pub Date: March 19, 2022

Chapter 26 - Coordination Chemistry - Crystal Field Theory (CFT), pp 209-220

Link: https://wikieducator.org/File:Chapter-26_Cordination_Chemistry_-_Crystal_Field_Theory_(CFT)_pp_209-220.pdf

Pub Date: Sept 05, 2022

File:Chapter-27 Coordination Chemistry - Crystal Field Stabilization Energy (CFSE) pp 221-228

Link:https://wikieducator.org/File:Chapter-27_Coordination_Chemistry_-_Crystal_Field_Stabilization_Energy_(CFSE)_pp_221-228.pdf

Pub Date: Dec 02, 2022

File: Chapter-28 Paper Chromatography-Separation of mixtures of ions (Pb2+ & Ag+) by Paper Chromatographic Technique pp 229-231

Link: https://wikieducator.org/File:Paper_Chromatography-Separation_of_mixtures_of_ions_(Pb2%2B_%26_Ag%2B)_by_Paper_Chromatographic_Technique_pp_229-231.pdf

Pub Date: Dec 02, 2022

ERIC Published Innovative 10 Articles (2013-2021):

ERIC is an **online library of education research and information**, sponsored by the **Institute of Education Sciences (IES) of the U.S. Department of Education.**

1. IUPAC Nomenclature of Higher Alkanes -- Innovative Mnemonics

ERIC Number: ED611724 Pub Year: 2021
ERIC Link: https://eric.ed.gov/?q=Arijit+Das+chemistry&id=ED611724

2. Classification of Negative Charge Discriminate Hybridization with Aromatic and Anti-Aromatic Behavior of Organic Compounds - Innovative Mnemonics

ERIC Number: ED613509

ERIC Link: https://eric.ed.gov/?q=arijit+chemistry&id=ED613509

Pub Year: 2021

3. Predicting the Hybridization State: A Comparative Study between Conventional and Innovative Formulae ERIC Number: EJ1266632

ERIC Link: https://eric.ed.gov/?q=Hybridization&id=EJ1266632

Pub Year: 2020

4. Lone Pair Electron Discriminate Hybridization with Aromatic and Anti Aromatic Behavior of Heterocyclic Compounds - Innovative Mnemonics

ERIC Number: ED609311

ERIC Link: https://eric.ed.gov/?q=Arijit+Das+chemistry&id=ED609311

Pub Year: 2018

5. Innovative Mnemonics Make Chemical Education Time Economic -- A Pedagogical Review Article ERIC Number: ED609695

ERIC Link:
https://eric.ed.gov/?q=Arijit+Das+World+Journal+of+Chemical+Education&id=ED609695

Pub Year: 2018

6. Review of Innovative Mnemonics for Inorganic and Organic Chemical Education

ERIC Number: ED610991

ERIC Link: https://eric.ed.gov/?q=Mnemonics&pg=2&id=ED610991

Pub Year: 2018

7. Bond-Order and Magnetic Behavior of Diatomic Species without Molecular Orbital Theory ERIC Number: ED610993

ERIC Link:
https://eric.ed.gov/?q=Arijit+Das+World+Journal+of+Chemical+Education&id=ED610993

Pub Year: 2017

8. Rapid Calculation of the Number of [Pi]-Bonds, [Sigma]-Bonds, Single and Triple Bonds in Aliphatic Unsaturated Open Chain and Cycloalkynes

ERIC Number: ED610994

ERIC Link: https://eric.ed.gov/?q=Arijit+Das+chemistry&id=ED610994

Pub Year: 2014

9. A Rapid and Innovative Method for the Identification of Aromatic and Anti-Aromatic Nature of Organic Compounds ERIC Number: ED610995

ERIC Link: https://eric.ed.gov/?q=Arijit+Das+chemistry&id=ED610995

Pub Year: 2013

10. New Innovative Methods for IUPAC Nomenclature of Bicyclo and Spiro Compounds in Organic Chemistry

ERIC Number: ED610985

ERIC Link: https://eric.ed.gov/?q=Spiro+and+bicyclo&id=ED610985

Pub Year: 2013

Published Nine (09) Innovative article in the chem.libretexts.org , University of California, DAVIS, US (2015-2018):

Title with Digital Links:

1.PREDICTING THE BOND-ORDER OF DIATOMIC SPECIES
https://chem.libretexts.org/Core/Physical_and_Theoretical_Chemistry/Electronic_Structure_of_Atoms_and_Molecules/Predicting_the_Bond-Order_of_Diatomic_Species

2.PREDICTING THE HYBRIDIZATION OF SIMPLE MOLECULES
https://chem.libretexts.org/Core/Physical_and_Theoretical_Chemistry/Electronic_Structure_of_Atoms_and_Molecules/Predicting_the_Hybridization_of_Simple_Molecules

3.PREDICTING THE HYBRIDIZATION OF HETEROCYCLIC COMPOUNDS
https://chem.libretexts.org/Core/Organic_Chemistry/Fundamentals/Bonding_in_Organic_Compounds/Predicting_the_Hybridization_of_Heterocyclic_Compounds

4.MAGNETIC BEHAVIOR OF DIATOMIC SPECIES
https://chem.libretexts.org/Core/Physical_and_Theoretical_Chemistry/Electronic_Structure_of_Atoms_and_Molecules/Magnetic_Behavior_of_Diatomic_Species

5.CALCULATING OF Π-BONDS, Σ-BONDS, SINGLE AND DOUBLE BONDS IN STRAIGHT CHAIN AND CYCLOALKENE SYSTEMS
https://chem.libretexts.org/Core/Organic_Chemistry/Fundamentals/Bonding_in_Organic_Compounds/Calculating_of_%CF%80-bonds%2C_%CF%83-Bonds%2C_single_and_double_bonds_in_Straight_Chain_and_Cycloalkene_Systems

6.IDENTIFING AROMATIC AND ANTI-AROMATIC COMPOUNDS
https://chem.libretexts.org/Core/Organic_Chemistry/Fundamentals/Bonding_in_Organic_Compounds/Identifing_Aromatic_and_Anti-Aromatic_Compounds

7.PREDICTING THE BOND-ORDER OF OXIDES BASED ACID RADICALS
https://chem.libretexts.org/Core/Physical_and_Theoretical_Chemistry/Electronic_Structure_of_Atoms_and_Molecules/Predicting_the_Bond-Order_of_Oxides_based_Acid_Radicals

8.EVALUATING SPIN MULTIPLICITY
https://chem.libretexts.org/Core/Physical_and_Theoretical_Chemistry/Electronic_Structure_of_Atoms_and_Molecules/Evaluating_Spin_Multiplicity

9. **Prediction of Aromatic, Anti Aromatic and Non Aromatic Character of Heterocyclic Compounds along with their Omission Behavior- Innovative Mnemonics**

https://chem.libretexts.org/Core/Physical_and_Theoretical_Chemistry/Electronic_Structure_of_Atoms_and_Molecules/Prediction_of_Aromatic%2C_Anti_Aromatic_and_Non_Aromatic_Character_of_Heterocyclic_Compounds_along_with_their_Omission_Behavior-_Innovative_Mnemonics

Two (02) EDUCATIONAL TOOLS LAUNCHED IN THE US

1. **HYDROCARBONS PARSER Tool:**

It was launched on 24th Aug-2015 by Minerazzi.com, Bayamon, Puerto Rico, US to calculate number

of chemical bonds in Hydrocarbon. It came in the form namely 'Hydrocarbon Parser'.

This tool parses an input chemical formula and predicts the number and types of chemical bonds present in them with its normal boiling point and few other things. The predicted data can then be comparing with experimental results.The tool works without consulting molecular orbital theory (MOT) or a chemical database. Just enter a set of formulae 'CxHy'.

'Hydrocarbons Parser' tool freely accessible online in the Tools section of Minerazzi at **http://www.minerazzi.com/tools/hydrocarbons/parser.php.**

2. **Bond Order Calculator Tool:**

It was launched on 20th Dec-2018 by the Minerazzi.com, Bayamon, Puerto Rico, USA. This tool computes bond orders of diatomic species having up to 20 electrons, without using Molecular Orbital Theory. **This tool is useful for chemistry educators, scholars, and students interested in bond order theory and its applications. 'Bond Order Calculator'** tool freely accessible online in the Tools section of Minerazzi at http://www.minerazzi.com/tools/bond-order/calculator.php.

Both **tools indexed in the 'City College of New York',US**

Link : Computational - Chemistry - LibGuides at City College Libraries (cuny.edu).

Project Details:

1. SERB, DST, Govt. of India, New Delhi : (Ongoing)

Title of the project: "Transition Metal Complexes with Nitrogen & Sulphur donors - Synthesis, Crystal Structure, Luminescent Properties and Biological Activity Studies".

Lab: 'SERB-DST Research Lab', Sponsored by SERB-DST, New Delhi, Govt. of India, at Bir Bikram Memorial College, Agartala, West Tripura, Tripura, India, PIN-799004.

Amount: Rs. 34,37,808/- (Rs. Thirty Four Lakh Thirty Seven Thousand Eight Hundred and Eight Only).
Duration: 03 yrs (March-2022 to March-2025).

Sanctioned No: EEQ/2021/000257 dated Feb 25, 2022.

Number of Project Associate: One (01), Name: Dr. Paresh Debnath, M.Sc., Ph.D., NET (Inorganic Chem.) @ 33480.00 / month (Duration 3yrs).

2. SERB, DST, Govt. of India, New Delhi : (Completed)

Title of the project: "Synthesis, Characterization, Luminescent Properties and Biological Activity Studies of mixed ligand complexes of some Transition Metal ions with Nitrogen and Sulphur Donors".

Lab: 'Synthetic Inorganic Research Lab.', Sponsored by DST, New Delhi, Govt. of India, at Ramthakur College, Agartala, West Tripura, Tripura, India, PIN-799003

Amount: Rs.12,00,000/-(Rupees twelve lakhs) .
Duration: 02 yrs (Dec-2013 to Dec-2015).

Sanctioned No: SB/EMEQ-014/2013 dated 28/11/2013

Number of Project Fellow: One (01), Name: Mr. Sanjit Sutradhar, M.Sc., NET (Inorganic Chem.) @ 14000.00 / month (Duration 2yrs).

Seminar/Conference/Workshops Participated: 46

Seminar/Conference/Workshops Conducted: 04

Membership in Academic Bodies:

1. Editorial Board Member, **'Cambridge Scholars publishing', Lady Stephenson Library, Newcastle upon Tyne, UK (2019 - 2023).**

2. Editor, **WORLD JOURNAL OF CHEMICAL EDUCATION', Science and Education Pub., US (Link: http://www.sciepub.com/journal/WJCE/EditorialBoard) (2013-till).**

3. Nominated Member of American Chemical Society (ACS), US (06-12-2013-till)

4.'Indian Chemical Society',92,A.P.C.Road, Kolkata-700009 **– Senior Fellow / 7158 (2010 - till).**

5.'Indian Academy of Forensic Science', 30, Gorachand Road, Kolkata-700014 – **A-029 (Life Member) (2011-till)**.

6.'Indian Science Congress Association',14, Dr. Biresh Guha Street, Kolkata – 700017, India - **L18176 (2011-) (Life Member).**

7. IQAC, Member, Tripura University, Agartala, Tripura, India (May 01, 2020-) (Link: https://www.tripurauniv.ac.in/UploadFile/AdminPanel/IQAC/88f6c7bb-55ca-41d3-9c51-f152d61f67db.pdf).

Involvement Beyond Academic Activities:

Worked as **NTA Observer** (NEET-2023).

TBJEE Observer (TBJEE-2024).

Resource person in DDK, Agartala (2018, 2020 & 2022).

Resource person in the **District and State Level Science Fair organized by the SCERT, District Education office, Govt. of Tripura** (2020-2024).

KEY Note Speaker in the Program organized by the **Department of Science, Technology and Environment, Govt. of Tripura** (September 2018).

Judge in the 50th Jawaharlal Nehru National Science Mathematics & Environment Exhibition and Seminar JNNSMEE- 2022-23 and 50th Rashtriya Bal Vaigyanic Pradarshini (RBVP) for students of all the KVs of Tripura Cluster on 21.04.23.

Resource Person in the National Seminar organized by the G.D.C. Dharmanagar along with Indian Science Congress March 2024.

Name:	**Dr Banti Ganguly**
Designation:	Assistant Professor, BBM COLLEGE
Address for Communication:	Department of Chemistry, BBMC
Mobile No.:	8974878021
Email:	banti.gangulyy@gmail.com
Area of Specialisation:	Surface Chemistry
Research Area:	Green Nanoparticles Synthesis, Microbial Surfactants & cold process Soaps Synthesis & Application, Cosmetic Chemistry
Courses Taught:	Undergraduate students and Integrated Master degree Students.

Publication Details:

1) B. Ganguly, R. K. Nath, *Chem. Mat. Res 2*, **2012**, 3, 13-23.
2) B. Ganguly, R. K. Nath, *Journal of Surfaces and Interfaces of Materials* 1, **2013**, 1, 87-92.
3) B. Ganguly, R. K. Nath, A. K. Panda, *J Surface Sci Technol*, **2013**, 29, 1-16.
4) B. Ganguly, R. K. Nath, S. A. Hussain, A. K. Panda, *Indian Journal of Physics*, **2010**, 84, 653-658.
5) I. Ghosh, B. Das, R. K. Nath, B. Ganguly, B. K. Mishra, *A Pal Surface Review and Letters*, 201623 (06), 1650056,
6) B Ganguly, B Das, I Ghosh, RK Nath Recent Trends in Engineering and Technology (NCRTET-2017), 281, 2018
7) B Das, B Ganguly, I Ghosh, RK Nath, BK Mishra, A Pal Journal of Advanced Microscopy Research 12 (1), 22-28, 2017
8) B Ganguly, RK Nath Asian Journal of Research in Chemistry 5 (9), 1113-1117, 2012
9) B Ganguly, RK Nath International Journal of Science & Research, 569-573,2014
10) B Ganguly, RK Nath International Journal of Scientific Research & Education, 1860-1869, 2014
11) Banti Ganguly, Bandana Das, RK.Nath Rasayan Journal of Chemistry, 121-124, 2017
12) Mixed Ligand Complexes of Cobalt (II) – Synthesis, Reactivity, Physico-chemical and Spectroscopic studies, ARIJIT DAS, PARESH DEBNATH, BIJAYA PAUL,

KARTICK LAL BHOWMIK, ABHIJIT BHATTACHARYA, and BANTI GANGULY, Asian Journal of Chemistry, 35(4), 910-916,2023

Project Details: 01 completed under UGC Nero

Seminar/Conference/Workshops Participated: 10

Seminar/Conference/Workshops Conducted: 03

Membership in Academic Bodies:

Indian Science Congress Association, Tripura Chemical Society, Indian Biophysical Society

Involvement Beyond Academic Activities:1) placement Cell Cordinator, 2)Academic Convenor, 3)NEP Coordinator (UGC), 4)Members of certain administrative bodies 5) Reviewer of Journals like Taylor Francis, Biomedical & Pharmacology 6) Resource person in some Seminars

Name:	**Dr. Jayasree Nath**
Designation:	Guest Teacher, M.B.B. University
Address of communication:	SBI Quarter, C 2/5, Badharghat, West Tripura, 799003.
Mobile Number:	9089479221
Email:	message2jayasree@yahoo.co.in
Area of Specialization:	Physical Chemistry
Research Area:	Thin film (Langmuir –Blodgett and Spin coating) Bio-Organic substance.
Courses Taught:	Polymer Chemistry, Colloid and Surface Chemistry, Quantam Chemistry, Physical Chemistry Practical.

Publication Details:

1. J. Nath, S. Deb, D. Bhattacharjee, R. K. Nath, *Molecular Crystals and Liquid Crystals*, **2011**, 548, 96-106.
2. S. Glutinosa, N. Das, J. Nath, A. Saha, B. dinda. *Journal of Pharmacy Research*, **2012**, 5, 4845-4848.
3. J. Nath, S.A.Hussian , A. Pal, S. Deb, R. K. Nath, I. Ghosh. *American international Journal of Research in Formal Applied & Natural Science.* **2013**, 3, 70-77.
4. I. Ghosh, A. Pal, J. Nath, B. K. Mishra & R. K. Nath. *Macromolecular Science, Part A: Pure and Applied Chemistry*, **2014**, 51, 49-54.
5. I. Ghosh, A. Pal, J. Nath, B. K. Mishra & R. K. Nath. Surface Review and Letters, **2014**, 21, 1450030.
6. J. Nath, S. Deb, A. Chakrabarty, A. Pal, R. K. Nath. *International Journal of Modern Physics B*, **2014**, 28, 1450020.
7. J. Nath, A. Pal, S. Deb, B. K. Mishra, R. K. Nath. *International Journal of Modern Physics B.* **2014**, 28, 1450073.
8. J. Nath, A. Chakraborty, R. K. Nath, S. A. Hussain, *Surface Review and Letters*, **2014**, 21, 1450049.
9. P. Debnath, S. Chakraborty, S. Deb, J. Nath, D. Bhattacharjee, S. A. Hussain *Journal of Physical Chemistry C*, **2015**, 11, 9429-9441.
10. P. Debnath, S. Chakraborty, S. Deb, J. Nath, B. Dey, D. Bhattacharjee, S. A. Hussain. *Journal of Luminescence*, **2016**, 179, 287-296.

11. P. Debnath, S. Chakraborty, S. Deb, J. Nath, B. Dey, D. Bhattacharjee, H. Soda, M. Tominaga, Y. Suzuki, J. Kawamata, S. A. Hussain. *Applied Clay Science,* **2017**, 147 105-116.

12. J. Saha, A. D. Roy, D. Dey, J. Nath, D. Bhattacharjee, S. A. Hussain. *Spectrochimica Acta Part A: Molecular and Biomolecular spectroscopy*, **2017**, 175, 110-116.

Seminar/ Conference/ Workshops Participated:

1. Formation and Characterisation of Layer-by-Layer films of Organic Molecules by Electrostatic Adsorption Process. **Jayasree Nath**, S.Deb, R.K.Nath *(State Level Seminer on Frontier Areas of Chemistry, 3rd September 2010. Best Presentation)*

2. Formation of Complex Langmuir monolayer of Water Soluble DTAB molecules **Jayasree Nath**, Subrata Deb, R.K.Nath *(National Seminer on Membranes, micro emulsion and Self –Assembled Systems [MMSAS-2010])* Formation and Characterisation of Langmuir-Blodgett Films of Bathophenonthroline.

3. **Jayasree.Nath**, S.Deb, A.Pal, R.K.Nath *(International Conference on Emerging Areas of Chemistry ICEAC -2011)*

4. Miscibility of Two Components in a Binary Mixture of p-Quarterphenyl in Mixed Langmuir and Langmuir-Blodgett (LB)Films. **Jayasree.Nath**, Subrata Deb, R.K.Nath. *(Fifth National Conference on Surfactents, Emilsions and Biocolloids-2011**[Best presentation, J.K.Mittal Award])***

5. Miscibility of Non-amphiphilic Coronene in Langmuir-Blodgett Films Mixed with Stearic Acid I.Ghosh**, J.Nath**, S.Biswas, S.Deb, R.K.Nath *(National Seminer On Green Chemistry & Nanoscience: Theory and Applications, 20-21 July,2012.)*

6. Monolayer Characteristics of Chitosan assembled in Langmuir Films missed with Arachidic acid. **Jayasree Nath**, Subrata Deb, Adrita Chakraborty, R.K.Nath. *(100thIndian Science Congress, 2013, Kolkata)*

7. Miscibility of Nonamphiphilic 2-aminoanthrcence and behenic acid in monolayer at the air-water interface:A spectroscopic study. **Jayasree Nath**, Indra Ghosh, A.Pal, Subrata Deb, Ranendu Kumar Nath *(International conference on material science (ICMS-2013))*

8. Antioxidant Activity of Isolated Phytochemicals from Sida Glutinosa. Niranjan Das, **Jayasree Nath**, Amitabha Saha, Biswanath dinda. *(National Seminer On Green Chemistry & Nanoscience: Theory and Applications, 20-21 July,2012.*

Participation at Symposium / Seminar / Conference

1. **Regional Seminer on Recent Trends in Chemistry,** 12-13th Sep 2009, Government Degree College, Dharmanagar, North Tripura.

2. **Frontier Lacture Series,** Tezpur University 20-22 Nov. 2009

3. **One Day Awereness Programme on Chemical Weapons Convention, Indian Chemical Council.**13th March, 2011.

4. Seminar on **MAKE IN INDIA: SCIENCE AND TECHNOLOGY DRIVEN INNOVATION**. Catalysed and supported by Tripura State Council for Science and technology, Govrnment Degree College, Teliamura. **(As a Chief Speaker)**

Seminar/ Conference/ Workshops Conducted: NIL

Membership in Academic Bodies: N/A

Involvement beyond Academic Activities:

1) Cultural Convenor
2) Member of certain administrative bodies
3) Resource person in a seminar

Name: **Dr. Arnab Bhattacharya**

Designation: Guest Teacher, M.B.B. University

Address for Communication: H-51, Road No. 13, A.D. Nagar, Agartala, Tripura – 799003

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Area of Specialization: Inorganic Chemistry and Computational Chemistry

Research Area: Environmental and biosensors, Conceptual DFT, Coordination chemistry of B, S, and Re, Nanochemistry of Au and Fe AI and ML in chemistry, Blockchain technology in chemistry

Courses Taught: Inorganic reactions and mechanisms, Analytical chemistry Molecular symmetry and group theory, Bio-inorganic chemistry Applications of NMR, EPR, mass spectrometry, FT-IR, and Mossbauer spectroscopy in inorganic chemistry Inorganic photochemistry, Practical inorganic chemistry

Publication Details:

1. S. Majumder, A. Bhattacharya, J. P. Naskar, P. Mitra and S. Chowdhury, *Inorganica Chimica Acta*, **2013**, 399, 166–171.
2. S. Majumder, J. P. Naskar, S. Banerjee, A. Bhattacharya, P. Mitra and S. Chowdhury, *Journal of Coordination Chemistry*, **2013**, 66, 1178–1188.
3. S. Chowdhury, S. Majumder, A. Bhattacharya, P. Mitra and J. P. Naskar, *Journal of Coordination Chemistry*, **2013**, 66, 3365–3379.
4. A. Bhattacharya, S. Majumder, J. P. Naskar, P. Mitra and S. Chowdhury, *Journal of Coordination Chemistry*, **2014**, 67, 1413–1428.
5. A. Bhattacharya, J. P. Naskar, S. Majumder, R. Ganguly, P. Mitra and S. Chowdhury, *Inorganica Chimica Acta*, **2015**, 425, 124–133.
6. S. Majumder, J. P. Naskar, A. Bhattacharya, R. Ganguly, P. Saha and S. Chowdhury, *Journal of Coordination Chemistry*, **2015**, 68, 599–615.
7. P. Saha, J. P. Naskar, A. Bhattacharya, R. Ganguly, B. Saha and S. Chowdhury, *Journal of Coordination Chemistry*, **2016**, 69, 303–317.

8. A. Bhattacharya, J. P. Naskar, P. Saha, R. Ganguly, B. Saha, S. T. Choudhury and S. Chowdhury, *Inorganica Chimica Acta*, **2016**, 447, 168–175.
9. S. Chowdhury, A. Bhattacharya, P. Saha, S. Majumder, E. Suresh and J. P. Naskar, *Journal of Coordination Chemistry*, **2016**, 69, 3664–3676.
10. A. Bhattacharya, P. Saha, B. Saha, D. Maiti, P. Mitra, J. P. Naskar and S. Chowdhury, *Journal of Molecular Structure*, **2017**, 1146, 43–49.
11. P. Saha, J. P. Naskar, S. Majumder, B. Saha, R. Ganguly, A. Bhattacharya and S. Chowdhury, *J Chinese Chemical Soc*, **2018**, 65, 1035–1043.
12. M. S. S. Danish, A. Bhattacharya, D. Stepanova, A. Mikhaylov, M. L. Grilli, M. Khosravy and T. Senjyu, *Metals*, **2020**, 10, 1604.
13. M. S. S. Danish, T. Senjyu, A. M. Ibrahimi, A. Bhattacharya, Z. Nazari, S. M. S. Danish and M. Ahmadi, *J Sustain Energy Rev*, **2021**, 2, 6–15.
14. S. Debnath, R. R. Nair, A. Bhattacharya, R. Ghosh and P. B. Chatterjee, *Dyes and Pigments*, **2021**, 196, 109821.
15. R. Ghosh, S. Debnath, A. Bhattacharya, D. Pradhan and P. B. Chatterjee, *Journal of Inorganic Biochemistry*, **2022**, 233, 111845.
16. P. Debnath, P. Debnath, Th. S. Devi, S. S. K. Singh, A. Bhattacharya, K. S. Singh, M. Roy and T. K. Misra, *Journal of Coordination Chemistry*, **2022**, 75, 3015–3032.
17. A. Bhattacharya, R. Ghosh, S. Debnath and P. B. Chatterjee, *Sensors and Actuators B: Chemical*, **2023**, 378, 133158.
18. R. Ghosh, S. Debnath, A. Bhattacharya and P. B. Chatterjee, *ChemBioChem*, **2023**, 24, e202200541.
19. A. Bhattacharya, *SciRevs.Biology*, **2023**, 2, 20–26.
20. A. Bhattacharya, K. B. Patel, R. Ghosh, D. N. Srivastava and P. B. Chatterjee, *Sensors and Actuators B: Chemical*, **2024**, 398, 134772.
21. P. Debnath, C. Majumder, A. Bhattacharya, P. Debnath, S. Roy, A. S. Novikov, M. Roy and T. K. Misra, *J Chem Crystallogr*, **2024**, 54, 28–40.

Google Scholar link:
https://scholar.google.co.in/citations?user=GJcbZekAAAAJ&hl=en

Project Details: N/A

Seminar/Conference/Workshops Participated: 4

Seminar/Conference/Workshops Conducted:	Nil
Membership in Academic Bodies: Association	Life member – Indian Science Congress
	Life Member – Tripura Chemical Society
Involvement Beyond Academic Activities:	N/A

Name: **Dr. Kamal Das**

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Area of Specialization: Organic Chemistry

Research Area: Synthetic Organic Chemistry

Courses Taught: Organic Chemistry, Analytical chemistry, Medicinal Chemistry

Publication Details:

1. K. Das and S. Majumdar, *ChemistrySelect*, **2022**, 7, e202200937.
2. K. Das and S. Majumdar, *RSC Adv.*, **2022**, 12, 21493–21502.
3. K. Das, B. Das, B. Paul, R. Natarajan, and S. Majumdar, *Silicon*, **2024**, 16, 967–977.
4. C. Roy, MD H. Sanfui, S. Roy, N. Hassan, M. Deb, K. Das, S. Masanta, M. Rahaman, S. Mondal, S. Majumdar, P. Kanti Chattopadhyay, and N. R. Singha, *ACS Appl. Nano Mater.* **2023**, 6, 17952-17971.

Project Details: N/A

Seminar/Conference/Workshops Participated:

1. The Present and Future of Excellence in Organic Synthesis (**PFEOS-2021**), An International Conference (Virtual), **7th and 8th January, 2021**, organized by **Tezpur University**, Assam, India.
2. A Three Days International Conference on Recent Developments in Chemistry (**RDC 2021**), **3-5th March, 2021** organised by Department of Chemistry, **NIT Durgapur**.
3. International Conference on Emerging Trends in Chemistry (**ICETC-2023**) **16-17th March, 2023,** organised by Department of Chemistry **Assam Don Bosco University** & Department of Chemistry **Pandu College**, Guwahati, Assam.

Seminar/Conference/Workshops Conducted: N/A

Membership in Academic Bodies: N/A

Involvement Beyond Academic Activities: To motivate students for UGC-CSIR NET Examinations, IIT-JAM Examination and other co-curricular activities.