Curriculum Vitae

Name: Dr. Arabinda Mandal

Designation: Assistant Professor

Highest qualification: M.Sc., PhD

Contact details/ Office address: Department of Chemistry,
Darjeeling Government college, Lebong Cart Road, Darjeeling-

Vidwan ID:

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Date of joining to this institution: 03.01.2025

Date of joining W.B.E.S.: 16.06.2009

Previous position(s) held: Haldia Government College (16.06.20009 to 09.02.2016)

Bidhannagar College (10.02.2026 to 02.01.2025)

Teaching experience in years & months: 15 years and 10 Months

Awards, Recognition and Honours:

Courses taught: Inorganic Chemistry

Research area/ interest: Reaction Mechanism and Organic Methodology

Number of Publications-
***Peer reviewed journals: 26**
***Conference proceedings: NA**
***Chapters in books: NA**

Detailed list of publications:

1. Kinetic and mechanistic studies of the reactions of 2-mercaptoethanol and thioglycolic acid with a Co(III)-bound superoxide complex, A. Mandal*, R. S. Das, B. Singh, R. Banerjee, and S. Mukhopadhay, Can. J. Chem., 93, 2015, 1276–1282.

2. Penicillamine and captopril: mechanistic exploration of defensive actions of thiol drugs against a metal bound-superoxo complex, A. Mandal*, R. S. Das, B. Singh, R. Banerjee and S. Mukhopadhyay, Journal of Coordination Chemistry, 2017, 70 (10), 1723–1738.

3. Pd-catalyzed C-H Arylation: A General Route for the Synthesis of Benzo[b]carbazolenaphthoquinones, A. Mandal, S. K. Mondal, A. Jana, S. K. Manna, Sk A. Ali and S. Samanta, Journal of Heterocyclic Chemistry, **2017**, 54, 2529–2535.

4. Palladium-Catalyzed Intramolecular Cyclization: Access to Rare Pentacyclic N-Fused Heterocycles, S. K. Mondal, Sk A. Ali, S. K. Manna, A. Mandal, B. K. Senapati, M. Hossain and Dr. S. Samanta, Chemistry Select, **2017**, 29, 9312–9318.

5. Intramolecular macrolactonization, photophysical and biological studies of new class of polycyclic pyrrole derivatives, S. K. Mondal, A. Mandal, S. K. Manna, Sk A.sraf Ali, M. Hossain, V. Venugopal, A. Jana and S. Samanta, Org. Biomol. Chem., **2017**, 15, 2411–2421.

6. Platinum(II)-Catalyzed Novel Synthesis of 3,4-Fused Furans, S. K. Mannaa, A. Mandala, S. K. Mondala, S. Samantaa, J. K. Ray, M. Baidyac, Synthetic Communications, **2015**, 45, 625–634.

7. Pd(0)-catalyzed intramolecular Heck reaction: A general route for fused oxepine derivatives, A. K. Adak, A. Mandal, S. K. Manna, S. K. Mondal, A. Jana, D. Ghosh, D. Kundu, S. Samanta, J. K. Ray, Synthetic Communications, **2016**, 46, 452–459.

8. An efficient synthesis of pyrrole and fluorescent isoquinoline derivatives using NaN_3/NH_4Cl promoted intramolecular aza-annulation, A. Jana, S. K. Manna, S. K. Mondal, A. Mandal, S. K. Manna, A. Jana, B. K. Senapati, M. Jana, S. Samanta, Tetrahedron Letters, **2016**, 57, 3722–3726.

9. Pyrido[1,2-a]pyrimidinium ions – a novel bridgehead nitrogen heterocycles: synthesis, characterisation, and elucidation of DNA binding and cell imaging properties, S. K. Manna, A. Mandal, S. K. Mondal, A. K. Adak, A. Jana, S. Das, S. Chattopadhyay, S. Roy, S. K. Ghorai, S. Samanta, M. Hossain, M. Baidya, Org. Biomol. Chem., **2016**, 14, 1501.

10. One-pot synthesis of highly fluorescent polycyclic benzimidazole derivatives, S. K. Manna, S. K. Mondal, A. Ahmed, A. Mandal, A. Jana, M. Ikbal, S. Samanta, J. K. Ray, RSC Adv., **2014**, 4, 2474–2481.

11. Homogeneous Palladium Nanoparticles Surface Hosts Catalyzed Reduction of the Chromophoric Azo (–N=N–) Group of Dye, Acid Orange 7 by Borohydride in Alkaline Media, R. S. Das, B. Singh, A. Mandal, R. Banerjee, S. Mukhopadhyay, International Journal of Chemical Kinetics, **2014**, 46, 746–758.

12. Kinetics of palladium nano-particles catalyzed reduction of Methylene Green by hydrazine: Role of induction period in determining mechanistic pathway, R. S. Das, B. Singh, A. Mandal, R. Banerjee, S. Mukhopadhyay, Inorganica Chimica Acta, **2015**, 428, 185–192.

13. A facile, catalyst-free synthesis of new polycyclic pyrrolo[1,2-b]pyrazolone derivatives, S. K. Mondal, S. K. Manna, A. Mandal, S. Samanta, J. K. Ray, Tetrahedron Letters, 2014, 55, 6411–6415.

14. NaN_3/NH_4Cl-Promoted Aza-Cyclization: A Convenient Route for Bio-Active Diverse Isoindolinone Derivatives, Sk A. Ali, S. Bhaumik, A. Jana, S. K. Manna, M. Ikbal, **A. Mandal**, A. Bera, A. Jana and S. Samanta, Chemistry Select, 2018, 3, 11950–11956.

15. Comparative studies on the oxidative dechlorination of chlorophenols by a superoxide complex, B. Singh, R. S. Das and **A. Mandal**, Transition Metal Chemistry, 2019, **44,** 99–105**.**

16. The Greener Side of Polyoxometalate: As an Efficient Photocatalyst for Degradation of Phenol from Contaminated Water Source, **A. Mandal** and R. Chatterjee, International Journal for Multidisciplinary Research(IJFMR), Volume 4, Issue 5, September-October 2022.

17. A Detailed Review on C-Fused Furan/3,4-Fused Furan Analog and its Potential Applications, S. K. Manna, S. Giri, S. Mondal, R. N. Sana, A. K. Samal and **A. Mandal**, ChemistrySelect, 2023, *8*, e202203150. (doi.org/10.1002/slct.202203150)

18. In silico investigation of organometallic complexes for identification of RNase A inhibitor, N. Sepay, **A. Mandal**, A. Chakraborty, Journal of Organometallic Chemistry 983 (2023) 122556.

19. Recent synthetic journey on pyrrole-fused compounds, C. Pramanik, P. Barik, Sk A. Ali, D. S. Nayak, M. Ikbal, **A. Mandal**, R. Jana, S. Giri and S. Samanta, New J. Chem., 2023,47, 6476-6527.

20. Synthesis and Structural Elucidation of POM-Based Hybrid with A Common Cobalt Centre: It's Antibacterial Activity and Future Perspectives, R. Chatterjee and A. Mandal, International Journal for Multidisciplinary Research (IJFMR), Volume 5, Issue 2, March-April 2023, Page 1-14

21. The Greener Side of Polyoxometalate: As an Efficient Photocatalyst for Degradation of Phenol from Contaminated Water Source, A. Mandal and R. Chatterjee, International Journal for Multidisciplinary Research, Volume 4, Issue 5, September-October 2022, Page 1-11.

22. Copper(II) Catalyzed Oxidation of Aliphatic Thiols (Thioglycolic Acid and 2-Mercaptoethanol) by Heteroleptic Co(III)-Bound Superoxo Complex, Asian Journal of chemistry, A. Mandal, Vol. 35, No. 4 (2023), 969-976.

23. A New Avenue in Hybrid Polyoxometalate Chemistry: Synthesis and Characterization of Mn (II) Functionalized POM Based Ionic Liquids, R. Chatterjee, S. Dutta, A. Mandal. International Journal for Multidisciplinary Research, Volume 6, Issue 1, January-February 2024, Page 1-9.

24. Radical Chemistry: A Brief History and Overview, Asian Journal of Chemistry; A. Mandal, Vol. 35, No. 7 (2023), 1539-1562.

25. Synthesis, X-ray crystallography, and multi-computational investigation of (E)-N-(2-morpholinoethyl)-1-(pyren-1-yl)methanimine to explore solid-state electronic behaviour, Journal of Molecular Structure, S. Das, S. Samanta, A. Mandal and N. Sepay, 1292 (2023) 136136.

26. UV/visible light-promoted external photocatalyst-free transformations: A Decade's Journey of N-heterocycles and their functionalisation, S. Ghara,P. Barik,S. Ghosh, S. Ghosh, A. Mandal, C. Pramanik, M. Ikbal, S. Dhara and S. Samanta, Org. Chem. Front., 2025.

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Participation in Workshops/ Training programme/ Certificate course:

Sl. No.	Name of the Course/Summer School	Place	Duration		Sponsoring Agency
			From	To	
1	Orientation Programme	UGC-HRDC, Jadavpur University	13.01.2014	11.02.2014	UGC
2	Refresher Course in Advances in Chemistry through Teaching and Research.	UGC-HRDC, Jadavpur University	02.01.2015	22.01.2015	UGC
3	Refresher Course in Instrumentation and Automation (IDC)	UGC-HRDC, Jadavpur University	09.12.2019	21.12.2019	UGC
4	Inter-Disciplinary Refresher Course in	UGC-HRDC,	18.10.2021	01.11.2021	UGC

	E- Learning & E-Governance	Jawaharlal Nehru University, New Delhi			
5	NEP 2020 Orientation & Sensitization Programme under Malaviya Mission Teacher Training Programme (MM-TTP)	IIT Dhanbad (Indian School of Mines)	16.02.2024	28.02.2024	UGC