Faculty Profile



Personal Details

Name: Dr. Chandan Adhikary

Designation: Associate Professor

Department: Department of Education, The University of Burdwan

Qualification: M.Sc (Chem), M.A. (Education), M.Ed., Ph.D (Chemistry), Ph.D (Education)

Residential Address: Renaissance Township, Burdwan, Nakshatra Eco, Rohini-

10/3D, P.O.: Lakurdi, Dist: Purba Bardhaman, Pin Code: 713102

Email Id: cadhikary@edu.buruniv.ac.in

Mobile No: 9432184217

Education

Ph.D. (Education, Arts): Burdwan University, Burdwan, West Bengal, India

Ph.D. (Education) Supervisor: Dr. K.N. Chattopadhyay, University of Burdwan

Title of the Thesis: 'Development of some improvised and sustainable teaching learning modules in chemistry and to study their pedagogical effectiveness'

ZZ Ph.D. (Chemistry, Science): Jadavpur University, Kolkata, West Bengal, India

Ph.D. (Chemistry) Supervisor: Dr. Subratanath Koner, Jadavpur University

- **Title of the Thesis:** 'Structure and Magnetism of Transition Metal Azido Complexes'
- M.Ed: The University of Burdwan, Burdwan, West Bengal, India
- M. A.: Education, NSOU, Kolkata, West Bengal, India
- M. Sc.: Chemistry (Specialization in Inorganic Chemistry), University of Calcutta, West Bengal, India

Teaching Experience

- Associate Professor, Department of Education, Burdwan University since 31.07.2020
- Assistant Professor in Chemistry, Institute of Education (P.G) For Women, Chandernagore, Hooghly (From 08.04.2015 to 30.07.2020)
- Assistant Professor in Chemistry, Government College of Education, Burdwan (From 12.07.2007 to 07.04.2015)
- Ex-Guest Lecturer, Department of Education, Kazi Nazrul University, Asansol
- Academic Counsellor, NSOU, PG studies in Education, Raj College Centre, Burdwan
- Academic Counsellor, B.Ed., DDE, Burdwan University
- Ex-coordinator & Academic Counsellor, IGNO, Govt. Training college, Hooghly
- Ex-coordinator & Academic Counsellor, IGNO, Govt. Training college, Hooghly
- Ex-coordinator & Academic Counsellor, Primary ODL, Institute of Education (P.G) For Women, Chandernagore, Hooghly

Research Interest

- Science Education
- **EX** Chemical Education
- Synthetic Chemistry
- **Educational Management**

- MM Teacher Education
- Environmental Education

Research Project Undertaken

- Title of the Project undertaken: "Studies on Inorganic-Organic Hybrid Materials having Poly-dentate Blockers" (Major Project).
- Funding Agency: DST, New Delhi, Duration: 2011-2015

Academic Achievements

- Qualified National Eligibility Test (NET) in *Chemical Sciences* in 2001, 2002
- Qualified National Eligibility Test (NET) in *Education* in 2012
- Gold Medal Award, Conferred by Burdwan University, M.Ed. Examination, 2011

Conference/Symposiums Attended

Participated/ acted as Paper presenter/Resource persons in various State level, National level and International level Conferences, Seminars, Symposia, Workshops etc.

List of Publications (Books)

- ∠ C. Adhikary, B.Ed. Practicum Ruprekha, SEM-IV, Aheli Publishers, Kolkata
 West Bengal, India 2020
- EE K. N. Chattopadhyay and C. Adhikary, Gyancharchar Kshetra o Bisoysamuher Dharana, B.Ed., SEM-I, Aheli Publishers, Kolkata West Bengal, India 2018
- EE C. Adhikary, B.Ed. Practicum Ruprekha, SEM-II, Aheli Publishers, Kolkata West Bengal, India, 2018.
- EE C. Adhikary, *Physical Science Method*, DDE, Burdwan University, West Bengal, India 2016.
- EX. C. Adhikary, *Chhaya B.Ed. Practicum Guide*, SEM-I, Chhya Prakashani Pvt. Ltd., Kolkata, West Bengal, India 2016.

List of Publications

- (1) H. Chowdhury, A. Bie ko, C. Rizzoli and **C. Adhikary***, *Polyhedron*, 2020, 188, 114693, 'Syntheses, structures and magnetic behaviors of 1D and 3D $\mu_{1,5}$ -dicyanamide bridged copper(II) coordination polymers containing a symmetrical 1,2-diammine as chelator'.
- (2) H. Chowdhury, R. Bera, C. Rizzoli and C. Adhikary*, *Transition Metal Chemistry*, 2020 (accepted), 'A nitrate bridged one-dimensional copper(II) coordination polymer with a tridentate (NNO) Schiff base: Synthesis, X-ray structure and catalytic efficacy'
- (3) H. Chowdhury, R. Bera, C. Rizzoli and C. Adhikary*, *Journal of Coordination Chemistry*, 2020 (accepted), 'Double end-on azido derivative of a tridentate (NNO) Schiff base dimeric copper (II) complex: Synthesis, X-ray structure, magnetic property and catalytic effectiveness'.
- (4) H. Chowdhury, C. Rizzoli and C. Adhikary*, *Transition Metal Chemistry*, 2020 (accepted), 'Azido derivative of dinuclear copper (II) and 1D polynuclear nickel(II) complexes containing an unsymmetrical bidentate amine: Syntheses, crystalline architectures and magnetic behaviours'.
- (5) A. Ghosh, S. Gupta, M. K. Jana, and **C. Adhikary***, *Research and Reflections on Education*, 2020, (Accepted), 'Perception and attitudinal disposition of secondary school teachers towards inclusiveness in classroom'.
- (6) S. Sana, C. Adhikary and K. N. Chattopadhyay, *Asia Pacific Journal of Multidisciplinary Research*, Vol 7, No 4, Nov 2019, 'The role of Antecedent Knowledge and Competency of Techno-pedagogy for Judicious Implementation of Interactive Multimedia Courseware in Organic Chemistry'.
- (7) **C. Adhikary**, S. Sana, K.N. Chattapadhyay, *International Journal of Innovative Knowledge Concepts*, 2019, 7(3), 82-96, 'ICT Mediated Blended Approach for Teaching Hydrolytic Behaviour of *P*-Block Halides: A pathway of Conceptualizing Inorganic Reaction Mechanism with Organic Eyes'.
- (8) **C. Adhikary**, S. Sana, K.N. Chattapadhyay, *Wesleyan Journal of Research*, 2018, 11, 35-46, 'Choice-based Instructional Strategies for Determination of Molecular Geometry: A Way to Revisiting Valence Shell Electron Pair Repulsion Theory'.

- (9) S. Sana, C. Adhikary and K.N. Chattopadhyay, *Inquisitive Teacher*, 2018, 5(2), 174-188, 'Exploring Teacher's Techno-Pedagogical Competency to Achieve Process Oriented Skills of Learners: A Multimedia Context'.
- (10) S. Sana, C. **Adhikary** and K.N. Chattopadhyay, *Inquisitive Teacher*, 2018, 5(2), 31-39, 'Synchronous Vis-a-vis Asynchronous Learning: A Blended Approaqch'.
- (11) S. Sana, **C. Adhikary** and K.N. Chattopadhyay, *Review of Research*, 2018, 8(1), 1-7, 'Interactive Multimedia Courseware: An effective Techno-Pedagogical Tool for Developing Basic Concepts of Organic Chemistry'.
- (12) S. Sana, C. Adhikary and K. N. Chattopadhyay, *Bhatter College Journal of Multidisciplinary Studies*, 2018, 8(1), 72-79, 'Evolutionary Paradigm Shift in the Instructional Strategies of Chemical Concepts'.
- (13) **C. Adhikary** and K.N.Chattapadhyay, *Wesleyan Journal of Research*, 2017, (1), 49-56. 'Convergent-Divergent Scheme For Teaching Reactions Of Potassium Permanganate'
- (14) **C. Adhikary**, S. Sana and K.N. Chattapadhyay, *International Journal for Science and Research in Technology* (IJSART), 2017 (3) 429-434. 'Advance Organizer Based Anchored Instruction For Teaching Sigma and Pi Bonds: An Orbital Overlap Analogy'
- (15) S. Sana and C. Adhikary*, *International Journal for Science and Research in Technology* (IJSART), 2017 (3) 400-406. 'Synthesis and Entrapment of Polyynes inside Nano-Pores of Anodized Alumina Membrane: A Linear Allotrope of Carbon'
- (16) S. Sana and C. Adhikary*, *International Journal for Science and Research in Technology* (IJSART), 2017, 2, 132-137. 'ICT Mediated Teaching Learning in Higher Educational Enterprise'
- (17) S. Sana and C. Adhikary*, *International Journal of Current Research and Modern Education* (IJCRME), 2017 (3) 506-511. 'Purposive Learning For Sustaining Hygiene From Undesired Administration of Adulterants, Hormones and Antibiotics in Food Stuff'
- (18) S. Sana and C. Adhikary*, *International Journal of Current Research and Modern Education* (IJCRME), 2017, 2(1) 197-201, 'Micro and Macro level Phenomena in Chemistry: Learning Difficulties, Deficiencies and Remedial Measures'.

- (19) **C. Adhikary** and S. Sana, *North Asian International Research Journal of Social Science & Humanities*, 2017, 3, 57-69. 'Holistic Development of Process Oriented Skills: A Metacognitive Model of Learning'.
- (20) C. Adhikary and S. Sana, *North Asian International Research Journal of Social Science & Humanities*, 2017, 3(7), 83-95. 'A Casket of innovative Teaching Learning Practices: A Blissful or Baleful Effort'.
- (21) Sk A. Badsha and C. Adhikary*, *Scholarly Research Journal for Humanity Science & English Language*, 2017, 4(21) 5125-5136. 'Chunking cum Acrostics Strategy as a tool for memorizing the names of countries and continents'.
- (22) **C. Adhikary*** and S. Dasgupta, *International Journal of Yoga, Physiotherapy and Physical Education*, 2017, 2(4), 44-48, 'Yoga in Educational Venture: A way towards Holistic Development'.
- (23) M. Sarkar and C. Adhikary*, *Scholarly Research Journal For Interdisciplinary Studies*, 2017, 4(31), 5232-5238, 'Revisiting Her Stories: Women, Empowerment and Indian Culture'.
- (24) **C. Adhikary** and K.N. Chattopadhyay, *International Journal of Multidisciplinary Educational Research*, 2017, 6(2) 188-201, 'A Social Constructivist Strategy for Teaching Electron Configurations'.
- (25) A.K. Dutta and C. Adhikary*, *International Journal of Interdisciplinary and Multidisciplinary Studies*, 2017 (4) 103-108, 'Refining and Redefining Basic Education in the Perspective of Blended Learning: A Constructivist Outlook'.
- (26) S. Gayen and C. Adhikary*, 2017, 3(5) 702-704, *International Education and Research Journal*, 'Protective Discrimination in Post Independent India: A critical Analysis'.
- (27) S. Sana and C. Adhikary*, 2017, 3(5) 697-701, *International Education and Research Journal*, 'Modern Trends in Pedagogical Practices for Teacher Educational Institutions'.
- (28) P. Dutta, C. De and **C. Adhikary***, *International Journal of Multidisciplinary Research and Development*, 2017 (4) 479-486, 'Impact of Social Media on Student Life: A Blessing or Curse'.

- (29) **C. Adhikary** and K.N. Chattopadhyay, *Teacher Education: New Vistas-New Challenges* (Edited Volume) School of Education, NSOU, Kolkata, ISBN No. 978-93-82112-56-3, 1 (2017) 70-80, 'Depletion of Quality of Existing Teacher Education in India: A Desk-Top Analysis'.
- (30) M. Sarkar and C. Adhikary*, *Teaching Social Sciences Through Open and Distance Learning-A Twenty First Century Perspective* (Edited Volume), NSOU, Kolkata, ISBN No. 978-93-82112-59-5, 2017, page 209-218, 'A Casket of Novel Educational Resources: Learning Through Distance Mode 2017'.
- (31) **C. Adhikary*** and S. Gayen, Curriculum, *Pedagogy and Learning: Quest for a New Paradigm* (Edited Volume), Institute of Education (P.G.) For Women, Chandernagore, ISBN No. 978-93-81669-55-6, 2017, 1, 29-38, 'Impact of Tagore's Educational Thoughts in existing Teacher Education Programme'.
- (32) S. Adak and C. Adhikary*, *Scholarly Research Journal For Interdisciplinary Studies*, 3(24) 2016, 2282-2287, 'Youth Dynamics and The Nation: An Impact of A.P.J. Abdul Kalam's Philosophy'.
- (33) **C. Adhikary**, S. Sana, K. N. Chattapadhyay, *J. Chem. Education*, 2015, 92, 664–667, 'Chunking Strategy as a tool for teaching electron configuration'.
- (34) **C. Adhikary** and K. N. Chattopadhyay, *Open and Distance Learning System: Recent Developments* (Edited Volume), NSOU, Kolkata, ISBN No. 978-93-821112-28-0, 2015, 'Blended Learning: A Strategy for Fostering Open Educational Resources'.
- (35) S. Dasgupta and C. Adhikary*, *Sufism And Indian Spiritual Traditions: An Educational Perspective* (Edited Volume), Visva Bharati University, ISBN No. 978-81-85503-006-6, 1 (2015) 29-38, 'Sufism: A Way towards Retaining Peace, Solidarity and Harmony'.
- (36) **C. Adhikary** and K. N. Chattapadhyay, *ENVIRONICA* (Edited volume), Department of Environmental Science, Burdwan University, ISBN No. 978-93-84106-14-0, 1 (2014) 303, 'Food Adulteration: A Social Offence'.

- (37) S. Banerjee, **C. Adhikary***, C. Rizzoli, R. Pal, *Inorg. Chim Acta* 409 (2014) 202, 'Tridentate (NNO) schiff base c opper (II) complex and its 1D chains azido derivative: structure, magnetism and catalytic efficacy'.
- (38) **C. Adhikary***, S. Banerjee, J. Chakraborty, S. Ianelli, *Polyhedron* 65 (2013) 48. 'Copper(II) azide complexes with NNO donor ligands: Syntheses, structure, catalysis and biological studies'.
- (39) **C. Adhikary** and K. N. Chattapadhyay, *The Light of Education* (Edited Volume), ISSN No. 2277-4556, 2 (2013) 135-140, 'Sustainable Learning: Innovations in Teacher Education'.
- (40) **C. Adhikary** and S. Koner, *Coord. Chem. Rev.*, 254 (2010) 2933 'Structural and magnetic studies on copper(II) azido complexes'.
- (41) R. Bera, **C. Adhikary**, S. Ianelli, S. Chaudhuri, S. Koner, *Polyhedron*, 29 (2010) 2166, 'Single end-on azido bridged 1D chain copper(II) complex: active catalyst for homogeneous olefin oxidation', Polyhedron'.
- (42) **C. Adhikary**, R. Sen, J.-P. Tuchagues, S. Chaudhuri, S. Ianelli, M. Solzi, S. Koner, *Inorg. Chim. Acta* 362 (2009) 5211, 'Novel 1D ladder-like azido-bridged copper(II) complexes: Synthesis, X-ray Structure and Magnetic Study'.
- (43) **C. Adhikary,** R. Sen,G. Bocelli, A. Cantoni, S. Chaudhuri, S. Koner, *J. Coord. Chem.*, 62 (2009) 3573, 'Tridentate (NNO) Schiff base copper (II) complex: Synthesis, crystal structure and magnetic study'.
- (44) **C. Adhikary**, R. Bera, B. Dutta, S. Jana, G. Bocelli, A. Cantoni, S. Chaudhuri, S. Koner, *Polyhedron*, 27 (2008) 1556, 'Catalytic efficacy of Schiff-base copper (II) complex: Synthesis, X-ray structure and olefin oxidation'.
- (45) D. Mal, R. Sen, C. Adhikary, A. Bhattacharjee, P. Gütlich, Y. Miyasita, K.-I. Okamoto, S. Koner, *Inorg. Chim. Acta*, 361 (2008) 183, 'Synthesis, X-ray crystal structure and magnetic study of a dicyanamido bridged 1D chain nickel(II) complex'.
- (46) D. Mal, R. Sen, C. Adhikary, Y. Miyasita, K.-I. Okamoto, A. Bhattacharjee, P. Gütlich, S. Koner, *J. Coord. Chem.*, 61 (2008) 3486, 'Synthesis X-ray crystal structure and magnetic study of a $\mu_{1.5}$ -dca bridged ferromagnetic dimeric copper(II) complex'.
- (47) **C. Adhikary**, D. Mal, R. Sen, A. Bhattacharjee, P. Gütlich, S. Chaudhuri, S. Koner, *Polyhedron*, 26 (2007) 1658, 'Synthesis, X-ray crystal structure and magnetic study of a novel $\mu_{2-1,1}$ -azido bridged dimeric copper(II) complex'.

- (48) D. Mal, C. Adhikary, E. Rentschler, Y. Miyashita, K.-I. Okamoto, S. Koner, *Polyhedron*, 26 (2007) 736, 'Synthesis, X-ray crystal structure and magnetic study of the 1D {[Cu(N,N-diethyl-1,2-ethanediamine)($\mu_{1,5}$ -dca)(dca)]}_n complex'.
- (49) **C. Adhikary**, D. Mal, K.-I. Okamoto, S. Chaudhuri, S. Koner, *Polyhedron*, 25 (2006) 2191, 'Synthesis, characterization, X-ray structure and magnetic study of the azido adducts of tridentate (NNO) Schiff base copper (II) complexes'.
- (50) **C. Adhikary**, D. Mal, S. Chaudhuri, S. Koner, *J. Coord. Chem.*, 59 (2006) 699. 'Synthesis, characterization and X-ray structure of an azido adduct of a tridentate (NNO) Schiff base Nickel(II) complex'.
- (51) M. Zbiri, S. Saha, **C. Adhikary**, S. Chaudhuri, C. Daul, S. Koner, *Inorg. Chim. Acta*, 359 (2006) 1193, 'Asymmetric $\mu_{2-1,1}$ -azido bridged copper(II) complex: synthesis, X-ray structure, magnetic study and DFT calculate ions'.