

Dr. SNIGDHA CHANDRA



Contact: chemistrsc11@gmail.com

Qualification: M.Sc., M.Phil., Ph.D.

Designation: Associate Professor

Teaching Experience (in years): UG: 22 Years PG: 14Years

Research Experience (in years): 21 Years

Date of Joining Present Institution:

29/04/1998

Institutions/Companies Previously Served:

Name of Institution/Company	Designation	Tenure	
		From (DD-MM-YYYY)	To (DD-MM-YYYY)
Indian Statistical Institute	Technical Assistant	23/12/1997	31/03/1998

Specialization/Research Interest: Inorganic Chemistry, Environmental Chemistry and Environmental Management

Membership:

- 1.Life Member of the 'Indian Science Congress Association' (LM-9713)
- 2.Life Member of the 'Chemical Research Society of India', IISc. Bangalore (LM-855).
- 3.Life Member of the 'Society for Fertilizer and Environment', 16, Ellora Road, Kolkata- 700075(LM-SFE/2015/23)

Awards & Recognitions:

- University Merit Scholarship for U.G. and P.G. course, Visva-Bharati, Santiniketan
- Paper appreciation award at the convention of Indian Society of Soil Science, Ranchi Chapter, Ranchi 2007.
- Felicitation from The Bengal College of Engineering and Technology for Women, Durgapur, 2010

Courses taught

	B.Sc Honours	B.Sc. Program	M.Sc.
Semester-I	Inorganic Chemistry (Theory and practical)		Inorganic Chemistry(Theory and practical), Analytical Chemistry
Semester-II			Inorganic Chemistry, Analytical Chemistry(Theory and practical)
Semester-III	Inorganic Chemistry(Theory and practical)		Advanced Inorganic Chemistry General
Semester-IV	Inorganic Chemistry(Theory and practical),SEC		Advanced Analytical Chemistry General and Term Paper/Project
Semester-V	Inorganic Chemistry (Theory and practical)		
Semester-VI	Inorganic Chemistry & Analytical Chemistry(Theory and practical)	Skill Enhancement Course	

Online Mode of Teaching

Online classes are scheduled, announced and conducted using available useful online platforms. The Syllabus, Modules, Study Materials and Review Materials are provided online. Assignments, Quizzes and Tests are conducted online. Core Rules of Netiquette and Tips & Strategies for Successful Learning at a Distance are provided.

Publications

Journals:

1. Mandal, S, Saha H., Hajra J N (2003), Preparation of Phosphocompost from Paddy Straw and Water hyacinth and it's Evaluation on Paddy and Rice Bean, *Environment and Ecology*, 21, 2, 267-271.
2. Mandal, S, Saha H., Hajra J N (2003), Effect of Phosphate Rock and Pyrite on the Decomposition and Enrichment of Rice Straw Inoculated with Cellulose Decomposing Fungi, *Indian Agriculturist*, 47, No.3 and 4, 265-272.
3. Mandal, S, Hajra J N (2001), Mineralisation of Phosrus from Paddy Straw and Water hyacinth during their Decomposition, *Indian Agriculturist*, 46, No.3, 207-209.

4. Mandal, S, Ghosh S, Hajra J N (2001), Performance of Iron Pyrite on the Dissolution of Sedimentary and Igneous Rock Phosphate, *Indian Agriculturist*, 45, No.3 and 4, 201208.
5. Mandal, S, Rehman F. H., Hajra J N (2001), Effect of Amjhore Pyrite on the Release of Phosphorus from Mussoorie Rock Phosphate, *Journal Interacad*, 5, 2,198-201.
6. Mandal, S, Santra S.C (1996), Changes in Microbiological population in the Rice Field induced by Fertilizer Application, *Indian Biologist*, Vol XXVIII, No.2.

Sponsored Research projects

1. Dr. Snigdha Chandra (PI) "A new biotechnological method for rapid decomposition of heterogeneous organic wastes "UGC (ERO Project No. F.PSW-042/01-02,India,Tenure: 2002-2004.
2. Dr. Snigdha Chandra (PI) "Understanding environment and health for sustainable development "UGC (ERO Project No. F.PSW-004/05-06, India, Tenure: 2005-2006.
3. Dr. Snigdha Chandra (PI) "Studies on indoor air pollution and its impact on human health over the slums and other locale around the industrial area of Durgapur "UGC (ERO Project No. F.PSW-011/11-12, India, Tenure: 20112013.
4. Dr. Snigdha Chandra (PI) "Understanding the surface and ground water quality parameters for Sustainable Development: Case Studies of Bankura, Birbhum, Purulia, East Bardhaman and West Bardhaman, West Bengal".West Bengal Pollution Control Board, Government of West Bengal No.. 3904 - 1M - 24/ 2010 (Part - III), dated 27.12.2019.Tenure 2020-

Guidance of M.Sc. Projects

1. Nivedita Biswas(2007-2009, *Durgapur Government College*) Ambient Air Quality over Selected Locale of Durgapur Steel City with Special Emphasis on Heavy Metal Toxicants(Guide: Dr. Snigdha Chandra)
2. Himanish Prasad Jana(2007-2009, *Durgapur Government College*) Monitoring of Inhalable Particulate Matters in Selective Traffic Cross Section and Residential Area of Durgapur, West Bengal, India(Guide: Dr. Snigdha Chandra)
3. Goutam Chakraborty(2008-2010, *Durgapur Government College*) A brief Discussion on Carbon Nano Tubes: Preparation, Properties and Application(Guide: Dr. Snigdha Chandra)
4. Debasmita Ghosh (2008-2010, *Durgapur Government College*)Composite Materials (Guide: Dr. Snigdha Chandra)

5. Haradhan Dey(2009-2011, *Durgapur Government College*) Green Chemistry: a Beginner's Crawl (Guide: Dr. Snigdha Chandra)
6. Anirban De(2009-2011, *Durgapur Government College*) Metals as Toxicants and Their Chelators: an Overview(Guide: Dr. Snigdha Chandra)
7. Swarup Pan(2011-2013, *Durgapur Government College*) Green Chemistry : a Benign Chemistry (Guide: Dr. Snigdha Chandra)
8. Arup Sadhu (2011-2013, *Durgapur Government College*) Gold Nano Particles as Catalyst: a Material Perspective (Guide: Dr. Snigdha Chandra)
9. Bhanu Mondal (2012-2014, *Durgapur Government College*) Human Toxicity Potential of Hg, Cd & Pb (Guide: Dr. Snigdha Chandra)
10. Suman Manna (2013-2015, *Durgapur Government College*) Toxicity of Heavy Metals (Guide: Dr. Snigdha Chandra)
11. Sudip Panda(2015-2017, *Durgapur Government College*) Smart Drugs: a Beginner's Review (Guide: Dr. Snigdha Chandra)
12. Manisha Kundu(2015-2017, *Durgapur Government College*) Opioid Analgesics: an Overview (Guide: Dr. Snigdha Chandra)
13. Maxcimilan Patra (2016-2018, *Durgapur Government College*) Catalysis-Facing the Future (Guide: Dr. Snigdha Chandra)
14. Sunit Ranjan Das (2017-2019, *Durgapur Government College*) A Brief Review on Nano-Catalysts (Guide: Dr. Snigdha Chandra)
15. Namrata Das(2018-2020, *Durgapur Government College*) Nootropics- the Complex Cognitive Enhancers(Guide: Dr. Snigdha Chandra)

Invited Lectures

1. Invited Lecture in an awareness programme on "*Sustainable Development: Role of Industrial Establishments*" (Dr. Snigdha Chandra), held on March, 2009 organized by the Regional office, WBPCB, Durgapur, in association with West Bengal Pollution Control Board, Kolkata.
2. Invited Lecture in an awareness programme on "*Creating a Common League*" (Dr. Snigdha Chandra), held on February, 2013 organized by the Women's Cell, CISF Unit, DSP, Durgapur.
3. Invited Guest Lecture on "*Social Contribution of Women in the Unorganised Sector*" on 08/03/2011 (Dr. Snigdha Chandra) organized by Bengal college of Engineering and Technology for Women, Durgapur.
4. Key note address in the one day Seminar on "*Soil Health Management for Sustainable Crop Production in Burdwan District*" on 10/08/2012 (Dr. Snigdha Chandra) organized by CRIJAF, ICAR at at Burdwan KVK, Budbud, Burdwan.
5. Two Invited Lectures in the two-day workshop on "*Farmers-Students- Scientists Interaction Programme on Soil Health Management for Murshidabad District*" on 22/09/2017 and 23/09/2017 (Dr. Snigdha Chandra) organized by ICAR-Agricultural Technology

Application Research Institute, Kolkata, at Sargachhi Ramkrishna Mission Ashrama, Murshidabad.

Paper Presentation in seminar/conference/symposium/workshop/discussion meeting

1. Oral presentation on "*Mineralization of C, N and P.... experiment (Dr. Snigdha Chandra)*" in the Forty-second Annual Convention of Chemist-2005 during February 09-13, 2006 at Department of Chemistry, Visva-Bharati.
2. Oral presentation on "*Influence of Microbiological Consortium on availability of P during preparation of organic with phosphate rock (Dr. Snigdha Chandra)*" in the National Conference on Plant and Microbial Diversity 2005, Visva Bharati.
3. Oral presentation on "*Preparation of Organic manure from heterogeneous Organic waste*" (Dr. Snigdha Chandra) in the National Seminar on Pollution in urban Industrial Environment during December 02-03, 2004 at CSIR, Bhubaneswar.
4. Oral presentation on "*Preparation of Phosphocompose.....uptake by Cajanus cajan L(Dr. Snigdha Chandra)*" in the National Seminar in Developments in Soil Science 2007, BAU, Ranchi .
5. Poster Presentation on "*Antimicrobial properties of silver nanoparticles*" (Dr. Snigdha Chandra) in the IUPAC-sponsored Second International Symposium on Green/Sustainable Chemistry, January 10-13, 2006, Department of Chemistry, University Of Delhi.

Participation in faculty development programmes

1. "*Thirty-sixth Four-Week Orientation Programme*" from 02/11/2001 to 29/11/2001 (Dr. Snigdha Chandra) organised by the UGC Academic Staff College, The University of Burdwan.
2. Refresher Course on "*Spectroscopy, Chemical Reactions and Biology*" from 21/11/2002 to 07/12/2002 (Dr. Snigdha Chandra) organised by the Indian Academy of Science, Bangalore.
3. "*Seventh Three-Week Refresher Course in Environmental Studies*" from 10/09/2003 to 30/09/2003 (Dr. Snigdha Chandra) organised by the UGC Academic Staff College, The University of Burdwan.
4. Second Scientific Meeting on "*Celebration of Chemistry*" on 03/08/2004 (Dr. Snigdha Chandra) organised by the Department of Chemistry, The University of Burdwan.
5. 55th national workshop on "*Radiochemistry and Applications of Radioisotopes*" from 29/10/2004 to 06/11/2004 (Dr. Snigdha Chandra) organised by the IANCAS, BARC and UGC Academic Staff College, The University of Burdwan.
6. Seminar on "*Faculty Training and Motivation and Adoption of Schools and Colleges by CSIR Laboratories*" from 25/05/2005 to 26/05/2005 (Dr. Snigdha Chandra) organised by CMERI, Durgapur.

7. One-Day Workshop on "*Intellectual Property Rights*" on 18/08/2005(Dr. Snigdha Chandra) organised by West Bengal State Council of Science and Technology and Technology Information Forecasting and Assessment Council and, Durgapur Government College.
8. "*Tenth Three-Week Refresher Course in Environmental Studies*" from 30/08/2005 to 19/09/2005(Dr. Snigdha Chandra) organised by the UGC Academic Staff College, The University of Burdwan.
9. Training Course under Retraining of College Teachers Scheme under UGC-University with potential for Excellence Scheme on "*An Introduction to Environmental Policy: A Non-Technical Approach*" from 18/11/2005 to 20/11/2005(Dr. Snigdha Chandra) organised by Jadavpur University,Kolkata-700032.
10. National conference on "*Plant and Microbial Diversity: Prospects and Potentials*" from 17/12/2005 to 19/12/2005(Dr. Snigdha Chandra) organised by the Department of Botany, Siksha-Bhavana,Visva-Bharati, Santiniketan
11. IUPAC sponsored Second International Symposium on "*Green/Sustainable Chemistry*"from 10/01/2006 to 13/01/2006(Dr. Snigdha Chandra) organised by the Department of Chemistry, University of Delhi, Delhi.
12. Seminar on "*Einstein and Revolution of Science*" on 19/01/2006(Dr. Snigdha Chandra) organised by the Department of Physics, National Institute of Technology, Durgapur.
13. Seminar on "*Nanotechnology and its Application*" on 27/01/2006(Dr. Snigdha Chandra) organised by the Department of Physics, National Institute of Technology, Durgapur.
14. 2nd Symposium on "*ONGC for Improving Quality of Life & Science Education in India*" from 28/01/2006 to 29/01/2006(Dr. Snigdha Chandra) organised by CMERI and DVSC, Durgapur.
15. "*42nd Annual Convention of Chemists*" from 09/02/2006 to 13/02/2006(Dr. Snigdha Chandra) organised by the Department of Chemistry, Siksha-Bhavana Visva-Bharati, Santiniketan.
16. Short term course on "*Materials Property and Characterisation(MPC06)*" from 24/04/2006 to 28/04/2006(Dr. Snigdha Chandra) organised by the Department of Physics, National Institute of Technology, Durgapur.
17. Workshop on "*Quantitative Techniques for Research Workers*" from 24/08/2006 to 26/08/2006(Dr. Snigdha Chandra) organised by the Indian Association for Productivity Quality and Reliability and Department of Statistics, The University of Burdwan.
18. National Seminar on "*Precambrian Life: Indian Scenario*"from 23/08/2006 to 24/08/2006(Dr. Snigdha Chandra) organised by the Depart of Geology, Durgapur Government College.
19. UGC sponsored seminar on "*Reactivity of Atoms and Molecules*" on 08/09/2006(Dr. Snigdha Chandra) organised by the Department of Chemistry, Durgapur Government College.
20. "*Two-Days e-learning Awareness Seminar*" under Retraining of College Teachers Scheme under UGC-University with potential for Excellence Scheme from 15/12/2006 to 16/12/2006(Dr. Snigdha Chandra) organised by the Academic Staff College , Jadavpur University.

21. AICTE funded National Workshop on *"Bioinformatics: State of the Art and Future Prospects"* from 14/02/2007 to 15/02/2007(Dr. Snigdha Chandra) organised by the Bengal College of Engineering and Technology, Durgapur.
22. Training Course under Retraining of College Teachers Scheme under UGC-University with potential for Excellence Scheme on *"Monitoring Financial Issues for Research Project Activities"* from 14/03/2007 to 15/03/2007(Dr. Snigdha Chandra) organised by Jadavpur University,Kolkata-700032.
23. Training Course under Retraining of College Teachers Scheme under UGC-University with potential for Excellence Scheme on *"E-Governance-Bridging the Digital Divide"* on 24/03/2007(Dr. Snigdha Chandra) organised by Jadavpur University,Kolkata-700032.
24. National Seminar on *"Development in Soil Science"* from 02/11/2007 to 05/11/2007(Dr. Snigdha Chandra) organised by the Indian Society of Soil Science, Birsa Agricultural University, Ranchi, Jharkhand.
25. National Symposium on *"Soil Science Research: Retrospect and Prospect in the Context of Environmental Quality and Food Security"* from 07/12/2007 to 09/12/2007 (Dr. Snigdha Chandra) organised by the Kolkata Chapter of Indian Society of Soil Science, ICAR, Kolkata.
26. Workshop under TEQIP on *"Relevance of Physics Education in Present Technological Scenario"* 18/01/2008 to 19/01/2008(Dr. Snigdha Chandra) organised by the Department of Physics, National Institute of Technology, Durgapur.
27. Seminar on *"Biponno Naari:Pratibaad o Protirodh"* on 27/02/2008(Dr. Snigdha Chandra) organised by the CGSSHP, Durgapur Government College, Durgapur.
28. Workshop under TEQIP on *"Environmental Management, Testing and Monitoring"*from 07/04/2008 to 11/04/2008(Dr. Snigdha Chandra) organised by the Department of Chemistry, National Institute of Technology, Durgapur.
29. MHRD sponsored Summer School on *"Corrosion Fundamentals, Testing and Prevention"*from 14/07/2008 to 25/07/2008(Dr. Snigdha Chandra) organised by the Department of Chemistry, National Institute of Technology, Durgapur.
30. Workshop on Equality-Inequality in India: Through the Lense of Gender on 22/08/2008(Dr. Snigdha Chandra) organised by the CGSSHP, Durgapur Government College, Durgapur.
31. National Seminar on *"Advanced Spectroscopy, Theoretical Chemistry, Synthesis, Reactivity and Structure Evaluation "*from 20/02/2009 to 22/02/2009(Dr. Snigdha Chandra) organised by the Department of Chemistry, The University of Burdwan.
32. National Seminar on *"Design, Synthesis, Interaction, Chemical and Biochemical Activities of Different Functional Molecules "*from 15/03/2011 to 17/03/2011(Dr. Snigdha Chandra) organised by the Department of Chemistry, The University of Burdwan.
33. *"Training Programme on Agri-Electronics"* from 04/03/2013 to 15/03/2015(Dr. Snigdha Chandra) conducted by C-DAC, Kolkata, Government of India.
34. State level Seminar on *"Challenges of Higher Education: Role of IQAC"* on 19/04/2017(Dr. Snigdha Chandra) organised by the IQAC, Asansol Girls' College, Asansol,West Bengal.
35. One-Day Discussion Meeting, an outreach programme of S.N.Bose National Centre for Basic Sciences, on *"Current Research on Chemistry of Biomolecules: Theory and Experiment"*

on 27/09/2018(Dr. Snigdha Chandra) organised by the Department of Chemistry, Durgapur Government College, Durgapur.

36. Two-Day National Seminar on “*Contemporary Era of Sciences: Biological and Chemical Interface*” from 26/03/2019 to 27/03/2019(Dr. Snigdha Chandra) organised by the Department of Botany, Chemistry, Conservation Biology and Zoology, Durgapur Government College, Durgapur.
37. State Level Seminar on “*Celebration of International Year of Periodic Table*” on 04/12/2019(Dr. Snigdha Chandra) organised by the Department of Chemistry, Durgapur Government College, Durgapur.

Organization of events (Durgapur Government College)

1. Organising Secretary, UGC sponsored seminar on “*Reactivity of Atoms and Molecules*” on 08/09/2006
2. Several Awareness Programs from the ICC, Durgapur Government College
3. Online class/discussion meeting for students on “*Marvels of Particle Detectors*” on 23/08/2017 by Professor Nayana Majumdar, Saha Institute of Nuclear Physics, Kolkata.
4. Convener, BOSE-125 Outreach Programme on “*Current Research on Chemistry of Biomolecules: Theory and Experiment*” 27/09/2018.

Participation in committees of Durgapur Government College since 2017

1. Canteen Sub Committee (Dr. Snigdha Chandra, Joint Convener, 2017-2018)
2. 2nd Semester University Examination Committee (Dr. Snigdha Chandra, Member, 2019-2020)
3. 4th Semester University Examination Committee (Dr. Snigdha Chandra, Member, 2019-2020)
4. 6th Semester University Examination Committee (Dr. Snigdha Chandra, Jt. Convener, 2019-20)
5. Student Council Election Sub Committee (Dr. Snigdha Chandra, Member, 2019-2020)
6. Internal Complaints Committee (Dr. Snigdha Chandra, Presiding Officer, 2018-2020)