

FACULTY CURRICULUM VITAE

Dr Niyati Singh

Assistant Professor
Department of Chemistry,
Gargi College,
University of Delhi
Delhi-47

Email id: niyati.singh@gargi.du.ac.in



Education Qualifications: M.Sc. Analytical Chemistry, CSIR-UGC NET in *Chemical Sciences* for Lectureship, Ph.D. in Chemistry, with nearly twenty one years of teaching experience in *Inorganic, Physical and Analytical chemistry* for M.Sc. and B.Sc. classes at various institutes. About 4 and 1/2 years of research experience with modern electro-analytical instruments.

PhD: **“Bio-Electrochemical Studies of Some Selective Hematological Agents”** (Mar 2005-Aug 2009) Dr. H. S. Gour University, Sagar (M.P.)

NET: Joint CSIR-NET (July-2001) in chemical Science for Lectureship.

M.Sc.: **Analytical Chemistry** 1996-98, Dr. H.S.G University, Sagar (M.P.)

B.Sc.: Life sciences. (Botany, Zoology and Chemistry), 1993-96, Dr. H. S. G University, Sagar (M.P.)

Career Profile: Assistant Professor, Gargi College, Since 20th Oct 2015.

Administrative Assignments:

- ❖ CIC Life Sciences, Gargi College from Nov 2022
- ❖ Convener, Zenith Association (Association of BSc Program LSc and PSc), Nov 2022
- ❖ Dy Superintendent
- ❖ Student Union advisor 2018-2022
- ❖ Convener, Chemical Society: Rasgandhayan Gargi College 2020-21
- ❖ Co convener, Enactus Gargi College 2022-
- ❖ Member Indian Dance Society from 2016- till date
- ❖ Member, Admission Committee B.Sc. Physical Sciences, Gargi College 2020-21
- ❖ Member, Time Table Committee, Department of Chemistry, Gargi College 2020-21

Area of Interest/ Specialization: Analytical Chemistry, Clinical chemistry, electro-analytical and instrumentation methods of analysis.

Subjects Taught: Inorganic chemistry and Analytical Chemistry

Research experience: 4 and 1/2 years of research experience with modern electro-analytical instrumentation and their use for interdisciplinary purposes especially in clinical and pathological purposes of human interest.

Electro-analytical chemical approach to solve problems of modern computerized world with modifiable lifestyle and unstable environment, which produce some of the prominent *cerebrovascular disorders* (CVD) such as **strokes**, which have no prehistory or prior indications.

Publications:

1. N. Singh, K.S. Pitre, "Polarographic Behavior of Human Plasma Thrombin and Changes in its Anticoagulation Activity through Various Conformations", **Electroanalysis**, 2008; 20 (12): 1339-1345.

Impact factor: 3.1

2. N. Singh, "Electrochemical Assay of Heparin to Monitor Anticoagulation Action in Cardiovascular Patients" **Indian J Hematol Blood Transfus**, 2011: 28 (2): 97-104.

Impact factor: 0.056

ISSN: 0971 4502, DOI 10.1007/s12288-011-0111-1

International/National Conferences/Symposia Attended:

Oral Paper Presentation:

1. *Oxygenated Juice (Wheat Grass Juice): To Combat Lifestyle Diseases, Online International Seminar, Current Trends in Chemical and Pharmaceutical Sciences [CTCPS-2021], 20-22 Jan 2021, Dr Hari Singh Gour University Sagar M.P.*
2. *Electroanalytical study on the wheat grass juice for CVD patients*, National Conference on Combating Industrial Pollution for Sustainable Environment-A fusion of Industrial & Scientific Efforts, Gargi College 22 -23 Sept 2016, Department of Chemistry, Gargi College.
3. *Designing of aspirin molecules for increase antiplatelet activity via pulse polarography*, 45th Annual Convention of Chemists 2008 and International Conference on Recent Advances in Chemistry, Organized by Indian Chemical Society, 23-27 Nov. 2008, Department of Chemistry, Karnataka University, Dharwad. 580003.
4. *Electroanalysis of Platelets at Different Stages in Human Blood Plasma*, 44th Annual convention of chemists, Indian Chemical Society, 23-27 December 2007, Mahatma Gandhi institute of Applied Sciences, Jaipur.
5. *Polarographic analysis of heparin to regulate anticoagulation therapy in cardiovascular patients*, Silver Jubilee, All India Young Scientist Conference, 23-25 Nov 2007, M.P. Council of Science and Technology, Bhopal 462003.
6. *Study of conformational changes of active thrombin enzyme through heparin and plasma human albumin*, International Conference on emerging Trends in Chemical Sciences (ICETCS 2007), 23-25 Jan 2007, Department of Chemistry, University of Mumbai 400098.

7. ***Action of hematological agents on blood clot***, National Science Day, 28th Feb 2005, Dr. Hari Singh Gour University, Sagar (M.P.) 470003.

POSTER PRESENTATION

1. ***Molecular designing of heparin for CVD patients***, National Seminar on Chemistry in Interdisciplinary Applications, Hans Raj College, 19th Mar 2013, Department of chemistry, Hans Raj College, University of Delhi.
2. ***Polarographic behavior of heparin and molecular designing for increased anti coagulation potency to treat thrombotic disorders***, 10th CRSI National Symposium in Chemistry, 1-3 Feb 2008, Chemical research Society of India, Indian Institute of Science, Bangalore.
3. ***Electrophoretic-polarographic study on the effect of albumin on anticoagulation potency of HEPARIN***, National seminar on Multifunctional Nanomaterials, Nanostructures and Applications (MNNA 2006), 22-23 Dec 2006, Department of Physics and Astrophysics, University of Delhi, Delhi 110007.

PARTICIPATION

1. Participated in Indian council of Chemists, 26th Annual Conference, 26-28 Feb 2008, Department of Chemistry, Dr. Hari Singh Gour University, Sagar (M.P.) 470003.
2. ***Workshop on information literacy and competency***, 14 March 2011, Delhi University Library System, University of Delhi-110007.
3. ***Role of Chemistry in Food & Technology***, One Day Seminar, Shyam Lal College, 28th Sept 2015, Department of Chemistry, SLC, Delhi
4. Interactive session on FOLDSCOPE, Gargi College, 16th Dec 2015, Gargi College, Delhi
5. ***National Conference in chemistry on Environment & Harmonious Development***, Shyam Lal College, 7th -8th Apr 2016, Shyam Lal College, UGC sponsored, Delhi
6. Seminar on ***Technical terminology & Science Teaching***, Zakir Husain College, 22-23 Feb 2017, Commission for Scientific & Technical Terminology, MHRD Delhi
7. National Seminar on ***Mentoring the teacher- Mentors: capacity Building Program***. 19-20th Jan 2018, IQAC of Gargi College, Delhi
8. ***2nd Task Force meet under Star college Scheme***, 8-9th May 2018, Gargi college with Department of Biotechnology, Delhi
9. Multidisciplinary Conference "***Emerging trends in tertiary education: Assessing challenges and possibilities***" Gargi College 8-9 May 2018, BA Program, Chemistry, English and History, Gargi College, Delhi.
10. Webinar "***Covid-19 Managing Challenges and exploring opportunities***" Online Gargi College, 9 May 2020, Add on Course Committee, Gargi College Delhi

11. Webinar Series “**5-Day Fitness Capsule**” 11-15 May 2020, organized by Internal Quality Assurance Cell (IQAC) and Physical Education Department, Janki Devi Memorial College, Delhi.
12. Webinar “**Nanoscience and nanotechnology in present scenario**” 9-10 June 2020, School of Physical Sciences, JNU Delhi.
13. National Webinar “**International Yoga Day**” on 21st June 2020 organized by IQAC Gargi college, Delhi.
14. Online National webinar “**National education Policy: Features and Prospects in Higher Education**” 14 Sept 2020, Dr Hari Singh Gour University Sagar M.P.
15. One Day National Workshop entitled “**ICT Tools for Chemistry Teachers**” 22 Feb 2021, Guru Angad Dev Teaching Learning Centre, a Centre under PMMMNMTT, MHRD.
16. Three Days Workshop on “**Designing and Development of e-Resources for Teaching and Learning**”, 22-24 June 2021, Department of Chemistry & Department of Computer Science RAJDHANI COLLEGE, Delhi University.
17. One Day Webinar “**Implementation of Academic Bank of Credits**”, 10 JULY 2021, Guru Angad Dev Teaching Learning Centre, a Centre under PMMMNMTT, MHRD.
18. National Webinar entitled “**Experiential Learning as Envisaged in NEP-2020**” 19 JUNE 2022, Guru Angad Dev Teaching Learning Centre, a Centre under PMMMNMTT, MHRD
19. One day **International Educators workshop-22**, 6 Sept 2022, iSTEP and University of Melbourne.

Conference/Seminar/Webinar Organized:

Convener, 3 Days Inter College workshop for Laboratory staff “**Enhance Laboratories & IT Skill along with yoga**” 13-15 July 2022, Department of Chemistry under the aegis of IQAC Gargi college, Delhi

Resource person:

1. Summer Workshop, **Chemistry in day to day life**, Department of chemistry, Gargi College, 17-18 July 2018, Star College Scheme, DBT Delhi.
2. Evaluator in 30th National children Science congress (NCSC), 2-3 Nov 2022, Kendriya Vidyalaya Masjid Moth Sadiq Nagar, Delhi-49

Association With Professional Bodies:

Life member of ISCA, Life Membership No. is L42271

Orientation/Refresher course/ Faculty Development Programme:

1. Orientation OR-84, CPDHE, University of Delhi, 25 May-24 June 2016, UGC
2. FDP “*Sustainable Development*” ARSD College Delhi, 10-22 Oct 2018, Star College Scheme, DBT Delhi.
3. FDP “*Advancements in Integrated Sciences: Learning & Adaptation for effective teaching and research*”, Shyam Lal College 10-16 Dec 2018, UGC-HRDC, Jamia Milia Islamia, CSIR-IGIB.
4. One-week online certificate course on “*Digital Teaching Techniques*” ICT Academy from 29 Jun to 4 Jul 2020.
5. Online FDP “*Development of Teacher's e-kit and MOOCs in Four Quadrant Format of e-Content*”, 12-20 SEPT 2020, Guru Angad Dev Teaching Learning Centre, a Centre under PMMMNMTT, MHRD
6. Online FDP “*Digital Tools for 21st Century: Word Processing & Spreadsheets*”, 27 Jan to 2 Feb 2021, Guru Angad Dev Teaching Learning Centre, a Centre under PMMMNMTT, MHRD
7. Online two weeks interdisciplinary refresher course “*Managing online classes and co-creating MOOCs 6.0*”, 5-19 July 2021, Teaching Learning Centre, Ramanujan College University of Delhi Under the aegis of PMMMNMTT, MHRD
8. Online two weeks interdisciplinary refresher course, *Advance Research Methodology*, 22 Aug- 5 Sept 2022, Teaching Learning Centre, Ramanujan College University of Delhi Under the aegis of PMMMNMTT, MHRD.