

FACULTY PROFILE PROFORMA

Title (Ms/Mr/Dr/Prof)	Dr.	First Name	Rajesh Kumar	Last Name	Meena	Photograph
Designation	Assistant Professor					
Department	Chemistry					
Address (Official)	Department of Chemistry Kalindi College, University of Delhi East Patel Nagar, New Delhi-110008					
Phone No.	+91-9460168909					
Email	rajeshkumarmeena@kalindi.du.ac.in 1988rajeshmeena@gmail.com					
Education						
Subject	Institution			Year	Details	
Nanotechnology	University of Kota, Rajasthan, India			2019	Ph.D.	
Science (Biology)	University of Kota, Rajasthan, India			2012	B.Ed.	
Chemical Science	University of Rajasthan, Jaipur, India			2011	M.Sc.	
Chem., Zool., Botany	University of Kota, Rajasthan, India			2009	B.Sc.	
Career Profile						
Organisation/Institution		Designation		Duration		Role
Kalindi College, Delhi University, Delhi		Assistant Professor		24 July 2019 - Continue		Teaching
Maa Bharti P.G. College, UOK, Rajasthan		Assistant Professor		25/07/2018 to 23/07/2019		Teaching
M.D. Mission College, UOK, Rajasthan		Assistant Professor		01/09/2014 to 24/07/2018		Teaching
Research Interests/Specialization						
Interest of research field like as fabrication, characterization and application of nanomaterials, quantum dots, plasmonic materials. As well as synthesis of inorganic and organic based nanomolecular devices via chemical and green synthesis methods for organic pollutant degradation						
Administrative Assignments / Contribution to corporate life						
❖ Convener: Add on Course (NASDP) for the academic session (2026-Cont.) ❖ Convener: Value-Added Courses for the academic session 2024-26. ❖ Co-Convener: Lab Development/Equipment Committee for the academic session (2026-Cont.) ❖ Co-Convener: Value-Added Courses for the academic session 2021-24. ❖ Co-Convener: SC/ST/OBC Cell Committee for the academic session 2021-23. ❖ Co-Convener: Non-Teaching Staff Feedback for the academic session 2021-24. ❖ Committee Member: Research Committee for the academic session (2024-26) ❖ Committee Member: Value-Added Courses for the academic session 2026 to Cont. ❖ Committee Member: Yearly Academic Journal Committee for the academic session (2024-26) ❖ Committee Member: Add on Courses Committee for the academic session (2024-26) ❖ Committee Member: Management Information System Committee Academic session 2021-22. ❖ Committee Member: Admission Committee for the academic session 2021-23 ❖ Committee Member: Attendance Committee for the academic session 2020-24. ❖ Committee Member: Criteria 1 AQAR Committee for the academic session 2021-22. ❖ Committee Member: IQAC Computational team member for the academic session 2021-24. ❖ Committee Member: NAAC Data Preparation (Computational team)for the academic session 2021-22. ❖ Committee Member: Disaster Management Cell for the academic session 2022-24. ❖ Committee Member: NIRF Committee for the academic session 2022-24. ❖ Committee Member: NIRF Committee for the academic session 2024-26. ❖ Admission related duties at Kalindi College: - Member of Core Committee Assistance for session 2021-22. - Actively participated and completed the duties assigned by Kalindi College Committees. - Appointed as an Internal Examiner & External Examiner for Semester Practical Examination at						

DU for B.Sc. Hons and Programme courses.

- Examiner: Appointed as an examiner for Paper Setting of B.Sc. Hons Chemistry, B.Sc. Programme Chemistry in 2019-20, 2020-21, 2021-22, 2022-23 and 2023-24.
- Invigilation duties for Practical & Theory Examination (regular, SOL, non-colleageate) at Kalindi College.
- Evaluation for theory papers at the evaluation center for chemistry.
- ❖ Member: Committee for Organizing “Lehren” the Inter-college Cultural Fest, 2020 by Kalindi College.
- ❖ Involved in NAAC Data Preparation of Kalindi College, University of Delhi, Delhi (India).
- ❖ Participation Internal Quality Assurance Cell (IQAC) Kalindi College Organized Training session for Teaching and non-Teaching Staff on 11th June 2020
- ❖ Involved in NAAC Data Preparation of Department of Chemistry, University of Kota, Rajasthan India.
- ❖ Campus Ambassador of University of Kota in APOGEE 2015, 2017 & 2018 Technical festival of BITS Pilan, Rajasthan, India.

Academic and Extra-curricular Activities for students

- ❖ **Staff Advisor:** Online event ‘Rasayanika-21’ organized by Rasa-ion, Chemical Society of Kalindi College, University of Delhi on 25th and 26th February 2021.
- ❖ **Staff Advisor:** Documentary on the theme of ‘Celebrating Marie Curie: A Life Story’ under Rasaion, Chemical Society of Kalindi College in the academic session 2020-21.
- ❖ **Organizer:** Online Inter-College Poster Competition organized by Rasa-ion, Chemical Society of Kalindi College, University of Delhi in October 2020.
- ❖ **Member:** Inter college cultural event ‘JAM’ Just a minute organized in College Fest ‘Lehren’
- ❖ **Resource Person of Value Added Course on** “ “Green Synthesis of Nanomaterial and Applications” held from 28 September to 6 November 2020 organized by the Department of Chemistry, Kalindi College, University of Delhi, Delhi.
- ❖ **Coordinator and Resource Person of Value Added Course on** “ Fundamentals of Nanomaterials and Nanotechnology” held from 12 November to 27 November 2021 organized by the Department of Chemistry, Kalindi College, University of Delhi, Delhi.
- ❖ **Co-Convenor and Resource person** for the **Internship Programm** entitled “Fundamentals and Skill Development in Nanomaterials and Nanotechnology”, held from 1st December, 2022 to 20th January, 2023 organized by the Department of Chemistry, Kalindi College, University of Delhi.
- ❖ **Edited Book ID: IIPV3EBS06_G82:** Futuristic Trends in Chemical, Material Science & Nano Technology Published under IIP International Publishers, USA and India. 2023

Research Guidance (10)

- ❖ “Synthesis of Ag Nanoparticles by *Acacia Concinna* plant extract, Characterization and Optical Properties” UGC INSPIRE Scholarship Project Submitted in Department of Science & Technology, Delhi, during August 2015- March 2016.
- ❖ “Synthesis of CdS Nanoparticles Characterization and Optical Properties” UGC INSPIRE Scholarship Project Submitted in Department of Science & Technology, Delhi, during August 2015- March 2016.
- ❖ Kalindi College, University of Delhi funded research project for students entitled “Synthesis of ZnO Nanomaterial by Precipitation Method and Characterization” (2/2019) July 2019-June 2020.
- ❖ Kalindi College, University of Delhi funded research project for students entitled ‘Synthesis of Silver Nanoparticles by Tea leaf extract and Optical properties’ (26/2021) 2021-22.
- ❖ Kalindi College, University of Delhi funded research project for students entitled ‘Green Synthesis of Silver Nanoparticles from Leaf Extract of *Rhoeo discolor* and Study its Antimicrobial Properties’ (24/2018_03/2021) 2021-22.
- ❖ Kalindi College, University of Delhi funded research project for students entitled “Synthesis of Zinc

oxide nanoparticles and surface modification by Hydrothermal Method” 2023-24

- ❖ Kalindi College, University of Delhi funded research project for students entitled “Green Synthesis of Silver Nanoparticles from Leaf Extract of Ocimum sanctum and their Antibacterial Properties” 2023-24

Publication (Peer Reviewed/Indexed Journals) 25 Total Citations 1867 h-index: 09 i10-index 08

- ❖ Green synthesis of nanoparticles using plant extracts: A review, Environmental Chemistry Letters 19 (1), 355-374, 2021
- ❖ Synthesis of Silver Nanoparticles by Phyllanthus emblica Plant Extract and Their Antibacterial Activity, Mat. Sci. Res. India 17 (2) 2020
- ❖ Biogenic Silver Nanoparticle from Trachyspermum Ammi (Ajwain) Seeds Extract used in Catalytic Reduction of p-Nitrophenol to p-Aminophenol in excess of NaBH₄, Journal of Molecular Liquids 230, 74-84, 2017
- ❖ Biosynthesis of Silver Nanoparticles Using Trachyspermum Ammi and Evaluation of Their Antibacterial Activities, J. Pharm. Biochemical Sciences, 6(2): 1077-1086, 2015
- ❖ Visible light harvesting Pt/CdS/Co-doped ZnO nanorods molecular device for hydrogen generation □ International Journal of Hydrogen Energy, 41(4), 2298-2306, 2016
- ❖ ZnO Nanoparticles Synthesized by a Novel Approach at Room Temperature and Antibacterial activity, American International Journal of Research in Formal, Applied & Natural Sciences, 11(1), June-August, pp. 68-72, 2015 □ □
- ❖ Biosynthesis of Silver Nanoparticles Tea Leaves Reducing Method and their Optical Properties, Research Journal of Recent Sciences 7 (11), 39-43, 2016 □
- ❖ Eco-friendly production of silver nanoparticles from fenugreek seeds extract for organic pollutant degradation, Research Journal of Material Science 5 (3), 6-11, 2017
- ❖ Biosynthesis of silver nanoparticles from plant (fenugreek seeds) reducing method and their optical properties, Research Journal of Recent Sciences, 4:47-52, 2015 □ Synthesis of ZnO Nanoparticles for Organic Pollutant Degradation, International Journal of Advance Research in Science and Engineering, volume 6, Issue 1, pages 802-808, 2017
- ❖ Green synthesis of silver nanoparticles using acacia concinna plant extract and their antibacterial activity Research Journal of Recent Sciences, Vol. 7(3), 1-6, 2015
- ❖ Rapid green synthesis of silver nanoparticles by using acacia concinna plant extract, International Journal of Advance Research in science and Engineering Vol. No 6(01), January P.P 809-818, 2017
- ❖ Electronic Structure and Room Temperature Ferromagnetism in Gd-doped Cerium Oxide Nanoparticles for Hydrogen Generation via Photocatalytic Water Splitting Global Challenges (2019), □
- ❖ Published by WILEY-VCH Verlag GmbH & Co. KGaA, Weinheim. 2019 □ ZnO Nanoparticles Synthesized by Precipitation Method and Optical Properties, ISST Journal of Applied Chemistry 7 (2), p.p. 7-10, 2016
- ❖ Synthesis and characterization of Flower-shaped ZnO/Ag nanocomposite and Antibacterial Activities, Proceeding of National Conference on “Green Chemistry and Sustainable Technologies for Society 2016” (NCGCSTS-2016) held at Government Women Engineering College, Ajmer on – 11-12, pp-16-18, 2016
- ❖ Synthesis of CdS Nanoparticles by precipitation method and Antibacterial Activities, International Journal of Advance Research in science and Engineering Vol. No 6(01), January, P.P 819-825, 2017
- ❖ Rapid Biosynthesis of Silver Nanoparticles using Fenugreek Seeds, , Proceeding of 3rd International Conference on “Advance Trends in Engineering, Technology and Research” (ICATETR-2014) held at Balkrishna Institute of Technology, IPR-15, Kota on 22-24 Dec.2014
- ❖ Effect of Morality and Annealing on Structural and Magnetic Properties of MnFe₂O₄ , Yearly Academic Journal, Kalindi College Pg 75-82, ISSN: 2348-9014, 2023

Publications Book Chapters: Author of Book Chapters (14)

- ❖ Book Chapter: Solar Energy Conversion and Storage Photochemical Modes: Some Photochemical Modes, (Editors: Suresh C. Ameta, Rakshit Ameta) Chapter 8 Hydrogen: An Alternative fuel Neelu Chouhan, Rajesh Kumar Meena and R. S. Liu, Apple Academics Press CRC Press, a Taylor & Francis Group, Florida- USA. 2015 (978-48-224630-8)
- ❖ Book Chapter: Innovations in Green Nanoscience and Nanotechnology (Edited by Shrikaant Kulkarni), Book Chapter: Agro Industrial wastes derived carbon nanomaterials: Synthesis and multi

faceted applications; ISBN 9781032333281 by CRC Press 1st Edition 2022.

- ❖ Book Chapter: Biological and Physical Applications of Silver Nanoparticles, New Horizons in Life Science; Page no 211-243, May 2022, Vital biotech publication. ISBN: 978-93-92953-00-2, 2022
- ❖ Book Chapter: Biological and Physical Applications of Gold Nanoparticles, Recent Trends in Environmental Sustainability, July 2022, Vital biotech publication. ISBN: 978-93-92953-56-9, 2022
- ❖ Book Chapter: Applications and challenges of iron oxide nanoparticles, Recent Trends in Environmental Sustainability, August 2022, Vital biotech publication. ISBN: 978-93-92953-56-9, 2022
- ❖ Book Chapter: Achiral Polymer Supported Organic Reagents, entitled Polymer Supported Organic Catalysts, published by CRC Press Taylor and Francis Group Florida USA. June 2022 (Accepted)

Seminar/Workshop/Conferences Presentation

- ❖ Around joined 120 International, National, Symposium, Workshop and Conferences and presented their research work.

Administrative/Examination Assignments

S. No.	Nature of Activity	Designation	Institution/Department	Period
1	Paper Evaluation	Evaluator	VMOU, Kota, Rajasthan	2016-2019
2	Paper Evaluation	Evaluator	University of Rajasthan	2018-2019
3	Practical Examiner	Examiner	University of Kota	2018-2019
4	Practical Examiner	Examiner	University of Rajasthan	2019-2021
5	Paper Evaluation	Evaluator	University of Delhi	Nov 2019
6	Paper Evaluation/Paper Setter	Evaluator/Examiner	University of Delhi	June 2020
7	Paper Evaluation/Paper Setter	Evaluator/Examiner	University of Delhi	Nov 2020
8	Paper Evaluation/Paper Setter	Evaluator/Examiner	University of Delhi	June 2021
9	Paper Evaluation/Paper Setter	Evaluator/Examiner	University of Delhi	Dec 2021
10	Paper Evaluation	Evaluator/Examiner	University of Delhi	June 2022 to Cont.

Awards & Distinctions (31)

- ❖ Awarded ICS Young Scientist Award in Chemical Sciences by Indian Chemical Society, India 2016.
- ❖ Dr. S. K. Banerjee Memorial Award in UGC-Sponsored National Conference on Modern Trends in Chemical Sciences 2016.
- ❖ International Best Research Scholar Award 2018 in 4th International Young Scientist Congress (IYSC-2018) organized by International Science Community Association (ISCA) in collaboration with Rashtriya Sanskrit Vidyapeeth, Tirupati, Andhra Pradesh, India on 8th & 9th May 2018.
- ❖ International Young Scientist Award 2018 in 4th International Young Scientist Congress (IYSC-2018) organized by International Science Community Association (ISCA) in collaboration with Rashtriya Sanskrit Vidyapeeth, Tirupati, Andhra Pradesh, India on 8th & 9th May 2018.
- ❖ 21th Century Educational Leadership Award 2018 by American Leadership Board (USA) 15th Dec 2018.
- ❖ IARDO Research Excellence Award 2018 in International Award Conference on multidisciplinary research and latest innovation jointly organized by International Association of research and Development Organization (IARDO), 28 Oct 2018 The International Centre Goa, Panjim, India.
- ❖ Best Poster Presentation Award during International Conference on Recent Trends in Chemical Sciences (ICRCS-2017) Organized by Department of Chemistry, Govt. Engineering College Bikaner, Rajasthan, India Jan 12-13, 2017.
- ❖ Best Poster Presentation Appreciation Award during National Symposium Global Environmental Challenges: Present Scenario (GECPS-2017) Organized by Department of Botany, University of Rajasthan, Jaipur, India 21st Jan 2017
- ❖ Qualified National Eligibility Test (CSIR-NET) for lectureship conducted by CSIR-UGC, Dec, 2011.
- ❖ Qualified GATE-2019 examination in Chemistry, held by Indian Institute of Technology, IIT Madras in 2019

Public Service/ University Service/ Consulting Activity

- ❖ NCC C- Certificate in “B” Grade (2009) & NCC B- Certificate in “B” Grade (2008)
- ❖ Dr. Meena arranged a visit for Ms.c Students learned for water treatment process, 130 MLD Water Treatment Plant Sakatpura, kota; Kota, Rajasthan (April 2017)

Professional Societies Memberships (12)

- ❖ Life membership of Indian society of technical Education (ISTE)
- ❖ Soft Material Research Society (SMRS)
- ❖ Indian Chemical Society (ICS)

Projects (Major Grants/ Collaborations)

- ❖ DST Research Project “Eco-friendly photocatalytic degradation of plastic waste for LPG production” Department of Science & Technology, Rajasthan (2014-15).
- ❖ Advanced Nanotechnology & Nanomaterials, Coalesce Research Group USA.

Other Details / Skills

- Synthesis and fabrication of metallic nanoparticles, Quantum dots, graphitic CN, metal oxide and metal sulfide semiconductor nanoparticles using different synthetic routes.
- Applications of metal, metal oxide and sulfide nanoparticles in catalysis and dye degradation and their recovery after the reaction.
- Optical microscope: FESEM, HRTEM, and Spectroscopy techniques UV-Vis spectroscopy, FT-IR, EDS, Photoluminescence & Powder XRD.