FIRST NAME LAST NAME

Seasoned academic with a strong background in chemistry, having over 16 years of experience as an Assistant Professor in the Department of Chemistry at the University of Delhi. Accomplished educator and researcher, holding an PhD in Chemistry (Nanotechnology), expertise lies in conducting robust research and working on insightful projects that have led to significant publications in reputable journals. Demonstrated expertise through numerous research papers published in prestigious international journals with high impact factors (up to 9.4 and 5.0).

SKILLS

- Strong Background in Chemistry
- Expertise in Conducting Robust Research
- Insightful Project Management
- Excellent Teaching and Communication Skills
- Student Engagement and Training
- Academic and Professional Growth Facilitation
- Knowledge of Emerging Trends and Advancements in Chemistry
- Data Analysis and Interpretation
- Laboratory Techniques and Procedures
- Grant Writing and Research Funding Acquisition
- Collaboration and Teamwork
- Attention to Detail and Accuracy
- Critical Thinking and Problem-Solving
- Effective Time Management and Organization
- Leadership and Mentoring Abilities

ACADEMICS

- PhD, University of Delhi | 2006
- MSc (Chemistry), Dept. of Chemistry, University of Delhi | 2001
- BSc (Chemistry Hons.), Shivaji College, University of Delhi | 1999

PERSONAL DOSSIER

- Date of Birth: Sep 22, 1978
- Address: Noida, 201307 UP
- Gender: Female
- Nationality: Indian

SUMMARY & OBJECTIVE

Served as a reviewer for the International Journal of Pharmaceutics with an impressive impact factor of 6.5. Successful in securing research funding as a Co-Principal Investigator for a Rs 65 lacs research project proposal submitted to the CCRH, Ministry of AYUSH, receiving positive feedback from mandatory reviewers. Contributed as a co-author to a chemistry textbook and as a Co-convener for two international conferences and over ten national conferences, seminars, and webinars.

Proven leadership skills as co-coordinator for a short-term certificate course. Actively participated as a member of the Advisory Board for an upcoming international conference and serves on multiple NAAC committees, Ramjas Staff Council committees, and Chemistry Department committees. A dedicated professional committed to making valuable contributions to academic institutions, excelling in creating an enriching learning environment by effectively communicating complex concepts and fostering student engagement. Skilled in designing comprehensive curricula tailored to meet the diverse needs of students, resulting in their academic and professional growth. With a passion for teaching and a strong foundation in chemistry, well-suited for a Professor's role in the Department of Chemistry. Willing to evolve as an increasingly valuable asset to the academic community through extensive experience, coupled with dedication to research and commitment to student development

WORK EXPERIENCE

DEPARTMENT OF CHEMISTRY, RAMJAS COLLEGE, UNIVERSITY OF DELHI
Dec 13, 2006 - Present
Assistant Professor (Ad-Hoc)

- Delivering high-quality lectures and conducting interactive classroom sessions to undergraduate students in the field of Chemistry.
- Developing and implementing effective teaching strategies, lesson plans, and course materials to enhance student engagement and learning outcomes.
- Conducting laboratory sessions, experiments, and practical demonstrations to provide hands-on learning experiences and reinforce theoretical concepts.
- Designing and administering assessments, including examinations, assignments, and projects, to evaluate student performance and provide timely feedback.
- Mentoring and guiding students, providing academic and career advice, and fostering a supportive and inclusive learning environment.
- Engaging in scholarly research activities, including publishing research papers, participating in conferences, and contributing to the field of Chemistry.
- Collaborating with colleagues to develop and update the curriculum, ensuring alignment with the latest advancements and industry standards.
- Participating in departmental meetings, committees, and academic events to contribute to the overall development and growth of the department.
- Providing academic assistance and guidance to students outside of regular class hours, addressing their queries and concerns effectively.

INSTITUTE OF NUCLEAR MEDICINE AND ALLIED SCIENCES (INMAS), DEFENSE RESEARCH DEVELOPMENT ORGANIZATION (DRDO) | JUL 2003 – FEB 2006
Senior and Junior Research Fellow

Conducted research and development activities in the field of nuclear medicine and allied sciences.
Designed and implemented experiments, collected and analyzed data, and interpreted research findings to contribute to the advancement of knowledge and technology.
Collaborated with a multidisciplinary team of scientists and researchers to achieve research objectives and meet project deadlines.
Authored and co-authored scientific papers, technical reports, and conference presentations to disseminate research findings and contribute to the scientific community.
Assisted in the supervision and mentoring of junior research fellows and technical staff, providing guidance and support in their research activities.

RESEARCH EXPOSURE

Preparation and Characterization of Polymeric Micelles and to Encapsulate the Hydrophobic/Hydrophilic Drugs in the Core of Nanoparticles

- Prepared and characterized polymeric micelles and encapsulated hydrophobic/hydrophilic drugs in the core of nanoparticles.
- Conducted experiments and performed various techniques for the synthesis and characterization of polymeric micelles.
- Evaluated the physicochemical properties of the synthesized polymeric micelles, such as size, stability, drug loading efficiency, and release profile.
- Developed and optimized formulation parameters to achieve desired drug encapsulation and release characteristics.
- Performed in vitro studies to assess the release kinetics and cytotoxicity of the drug-loaded polymeric micelles.
- Collaborated with a multidisciplinary team to analyze and interpret experimental data, contributing to the understanding of drug delivery systems.
- Documented research findings, prepared scientific reports, and presented results in internal meetings and conferences.

Surface Modification of Drug Loaded Nanoparticles for Targeted Drug Delivery Across the Blood-Brain Barrier

- Conducted surface modification of drug-loaded nanoparticles to enhance their ability to cross the blood-brain barrier for targeted drug delivery.
- Designed and executed experiments to optimize the surface modification process, considering factors such as nanoparticle size, surface charge, and ligand attachment.
- Characterized the modified nanoparticles using techniques such as [specific techniques] to assess their physicochemical properties and stability.
- Evaluated the drug release profile of the modified nanoparticles to ensure controlled and sustained drug delivery.

Preparation and Characterization of Calcium Phosphate Nanoparticles for Targeted Delivery of Gene Across the Blood-Brain Barrier

- Prepared and characterized calcium phosphate nanoparticles for the targeted delivery of genes across the blood-brain barrier.
- Developed and optimized protocols for the synthesis of calcium phosphate nanoparticles, considering factors such as particle size, morphology, and surface charge.
- Conducted in vitro experiments to evaluate the stability and biocompatibility of the synthesized nanoparticles.
- Loaded the nanoparticles with specific genes and assessed their encapsulation efficiency and release profile.

RECOGNITION AND ACCOLADES

- Successfully cleared the National Eligibility Test (NET) for Lectureship conducted by the Center for Scientific and Industrial Research, India (CSIR) in June 2002.
- Received the Best Poster Presentation award for the research on "Delivery of hydrophobized 5-fluorouracil derivative to brain tissue through intravenous route using surface modified nanogels" at the National seminar on "Multifunctional nanomaterials, nanostructures, and applications" on December 23, 2006.
- Awarded the Certificate of Merit by the Central Board of Secondary Education (CBSE) for exceptional performance in Class X.
- Recognized with the Certificate of Merit by the Sanskrit Sahitya Academy for achieving the highest marks in Sanskrit in Class X.

JOURNAL PUBLICATIONS

1. 1Polymeric nanoparticle-encapsulated curcumin (nanocurcumin): a novel strategy for human cancer therapy. Savita Bisht, Georg Feldman, Sheetal Soni, Rajani Ravi, Collins Karikari, Amarnath Maitra and Anirban Maitra. Journal of Nanobiotechnology, 2007, 5:3, doi 1186/1477-3155-5-3, Impact factor 3.87, ISSN : 1477-3155.
2. 2Delivery of hydrophobised 5-fluorouracil derivative to brain tissue through intravenous route using surface modified nanogels.Sheetal Soni, Anil Kumar Babbar, Rakesh Kumar Sharma and Amarnath Maitra, Journal of Drug Targeting, 2006, 14(2), 87-95, Impact Factor 2.885, ISSN: 1061-186X (print), 1029-2330 (web).
3. 3Pharmacoscintigraphic evaluation of polysorbate80 coated chitosan nanoparticles for brain targeting. Sheetal Soni, Anil Kumar Babbar, Rakesh Kumar Sharma, Tanima Banerjee and Amarnath Maitra, American Journal of Drug Delivery, 2005, 3:3, 205-212, ISSN : 1175-9038.

Book: Chemistry, Inorganic and Organic, Volume-1, Sonia Ratnani, Shriniwas Gurjar, Sheetal Budhiraja, Hari Mohan Meena, 2018, ISBN: 9789386221698, Manakin Press

Chapters in Book: Pharmacoscintigraphic evaluation of nanoparticulate drug delivery systems, Chapter 3, Bio-Nano-Geo Sciences The Future Challenge, Rakesh Kumar Sharma, Sheetal Soni¬¬, Anil Kumar Babbar and Amarnath Maitra, 2009, ISBN: 81-8052-180-X Ane Books Pvt. Ltd.

Newspaper Article: "Breakthrough by Delhi University scientist: Technology to break brain barrier", Indian Express, Oct 7, 2005.

CONFERENCE PROCEEDINGS

1. Polysorbate80 assisted delivery of 5-fluorouracil prodrug to brain tissue through intravenous route. Sheetal Soni, Anil Kumar Babbar, Rakesh Kumar Sharma and Amarnath Maitra, Proceedings of the Controlled Release Society, 33rd Annual Meeting and Exposition of the Controlled Release Society, #1027, 2006.
2. Pharmacoscintigraphic evaluation of polysorbate80 coated chitosan nanoparticles for brain targeting. Sheetal Soni, Anil Kumar Babbar, Rakesh Kumar Sharma, and Amarnath Maitra, Proceedings of the Controlled Release Society, 32nd Annual Meeting and Exposition of the Controlled Release Society, #653, 2005.
3. Polysorbate80 assisted delivery of N-hexylcabamoyl-5flurouracil loaded nanogels across the blood-brain barrier. Sheetal Soni, Anil Kumar Babbar, Amarnath Maitra and Rakesh Kumar Sharma, Abstract No. H9-Biotechnology and Biotherapeutic section, 57th IPC Hyderabad, pp89-90, 2-4 December 2005.
4. Pharmacoscintigraphic evaluation of polysorbate80 coated chitosan nanoparticles for brain targeting. Sheetal Soni, Anil Kumar Babbar, Rakesh Kumar Sharma, Tanima Banerjee and Amarnath Maitra, Indian Journal of Nuclear Medicine, Vol. 19, No. 4, December 2004. ISSN 0972-3919