



Shaheed Rajguru College of Applied Sciences for Women
University of Delhi
Faculty Profile

Name	Dr. Parul	
Designation	Assistant Professor (Adhoc)	
Email	Parul.singh@rajguru.du.ac.in	
Degree	Institution	Year
B.Sc(H)Chemistry	Miranda House, University of Delhi	2010
M. Sc. Chemistry	Department of Chemistry, University of Delhi	2012
PhD	Department of Chemistry, University of Delhi	2019
Areas of Interest / Specialization		
Area of interest lie at the interface of physical chemistry and materials science, focusing on functional nanomaterials for photocatalytic and biomedical applications. Particular emphasis is placed on designing light-responsive nanostructures for photocatalysis, photodynamic therapy, and controlled drug delivery, and evaluating their performance through systematic in vitro studies on cancer cells. The magnetic properties of such materials are also of interest, to enable magnetic targeting or hyperthermia, thereby integrating photocatalytic, photodynamic, and magnetic functionalities in a single therapeutic platform.		
Publications Profile		
1. Gold nanoparticle enhanced photodynamic therapy from photosensitizer entrapped ormosil nanoparticle. (Research paper, Journal of nanoscience and nanotechnology) 2. Synthesis and characterization of indium oxide NPs and applications in light activated therapy. (Conference Proceeding) 3. Fluorescein-entrapped magnetosomes for magnetically assisted photodynamic therapy. (Research paper, Nanomedicine) 4. Iron oxide-based magneto-optical nanocomposites for in vivo biomedical applications. (Review, Biomedicines) 5. Iron oxide nanoparticles conjugated with organic optical probes for in vivo diagnostic and therapeutic applications. (Review, Nanomedicines) 6. Environment Sustainability, Compliance and life cycle assessment of AI-Integrated Systems. (Book Chapter, Springer) 7. Nanocomposites Incorporating Functionalized Magnetic Nanomaterials (FMNs). (Book Chapter, Springer)		
Awards and Distinctions		
1. Qualified National Eligibility Test (NET). Period: December 2012. 2. Qualified University Grants Commission of India (UGC India) Fellowship, New Delhi, India. Period: June 2013. 3. Qualified Graduate Aptitude Test in Engineering (GATE-Chemical Science) January 2013. 4. Awarded with Mrs Laxmi Sen memorial award for best oral presentation in 2nd international		

symposium on Functional Nanomaterials in Industrial Applications: Academy- Industry-Clinicians-Meet.

5. Visited the laboratory of UCLAN, Preston (United Kingdom), as a part of an-exchange programme on a project funded by UK-India Education and Research Initiative (UKIERI) for a period of 10 Days.