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Degree	Institution				Year																
Ph.D.	STATE UNIVERSITY OF NEW YORK, BUFFALO, U.S.A.				1993																
M.Sc.	I.I.T., KANPUR				1987																
B.Sc.(Hons.)	UNIVERSITY OF DELHI				1985																
Postdoctoral Fellow	JOHNS HOPKINS UNIVERSITY, U.S.A.				1993 – 1995																
	UNIVERSITY OF MARYLAND, U.S.A.				1995 – 1998																
Visiting Fellow	UNIVERSITY OF NORTH CAROLINA, CHAPEL HILL, U.S.A.				April, 2008 – Sept., 2008																
Career Profile																					
<table border="1"> <thead> <tr> <th>Position</th> <th>Period</th> <th>Institution</th> </tr> </thead> <tbody> <tr> <td>Professor</td> <td>2010 to Present</td> <td>University of Delhi, INDIA</td> </tr> <tr> <td>Associate Professor</td> <td>2007 to 2010</td> <td>University of Delhi, INDIA</td> </tr> <tr> <td>Reader</td> <td>2004 to 2007</td> <td>University of Delhi, INDIA</td> </tr> <tr> <td>Lecturer</td> <td>1998 to 2004</td> <td>University of Delhi, INDIA</td> </tr> </tbody> </table>							Position	Period	Institution	Professor	2010 to Present	University of Delhi, INDIA	Associate Professor	2007 to 2010	University of Delhi, INDIA	Reader	2004 to 2007	University of Delhi, INDIA	Lecturer	1998 to 2004	University of Delhi, INDIA
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Associate Professor	2007 to 2010	University of Delhi, INDIA																			
Reader	2004 to 2007	University of Delhi, INDIA																			
Lecturer	1998 to 2004	University of Delhi, INDIA																			
Areas of Interest / Specialization																					
<ul style="list-style-type: none"> • Study of Biomolecular Interactions including DNA – Protein Interaction • Structural Biology and Protein/ Peptide Chemistry • Design and Synthesis of Inorganic and Polymeric Nanoparticles for Targeted Gene Delivery. • Synthesis of Nanomaterials for Catalysis. 																					

Research Guidance

SUPERVISION OF Ph.D. THESIS

S.N.	Name of Student	Year of Submission	Status
1.	Dhruba Jyoti Bharali	2003	Awarded
2.	Radha Gupta	2005	Awarded
3.	Richa Tyagi	2005	Awarded
4.	Amit Saxena	2006	Awarded
5.	Ajeet Kumar	2010	Awarded
6.	Swati Aerry	2010	Awarded
7.	Manika Diwan	2012	Awarded
8.	Seema Garg	2013	Awarded
9.	Pradeep Kumar	2013	Awarded
10.	Sushil Mishra	2014	Awarded
11.	Javaid Shabir	Research under progress	Research under progress
12.	Charu Garkoti	Research under progress	Research under progress
13.	Swati Rani Chauhan	Research under progress	Research under progress
14.	Digvijay Shah	Research under progress	Research under progress
15.	Surabhi Saran	Research under progress	Research under progress
16.	Padmini Gupta	Research under progress	Research under progress
17.	Manisha Sharma	Research under progress	Research under progress
18.	Mamta Kumari	Research under progress	Research under progress

SUPERVISION OF M.Phil. THESIS

S.N.	Name of Student	Year of Submission	Status
1.	Rakesh K. Sharma	1999	Awarded
2.	Dhruba Jyoti Bharali	2000	Awarded
3.	Savita Bist	2001	Awarded

Publications Profile

1. Javaid Shabir, Charu Garkoti, Surbhi, Digvijay Sah and Subho Mozumdar*, *Development of amine functionalised wrinkled silica nanospheres and their application as efficient and recyclable solid base catalyst*, Catalysis Letters 148 (2018) 194-204.
2. Javaid Shabir, Charu Garkoti, Swati Rani and Subho Mozumdar*, *Nitrolotri-acetic acid assisted one step synthesis of highly stable silver nanoparticles in aqueous medium: Investigation of catalytic activity*, Materials Letters 209 (2017) 207-211.
3. Charu Garkoti, Javaid Shabir, Swati Rani and Subho Mozumdar*, *Imidazolium Based Ionic Liquid Supported on Fe₃O₄@SiO₂ Nanoparticle as an Efficient Heterogeneous Catalyst for N-formylation of Amines*, NJC 41 (2017) 9291-9298.
4. Charu Garkoti, Javaid Shabir, Padmini Gupta, Manisha Sharma and Subho Mozumdar*, *Heterogenization of amine-functionalized ionic liquids using graphene oxide as a support material: a highly efficient catalyst for the synthesis of 3-substituted indoles via Yonemitsu-type reaction*, NJC 41 (2017) 15545-15554.
5. Seema Garg, Arnab De and Subho Mozumdar*, *pH-dependent immobilization of urease on glutathione-capped gold nanoparticles*, Journal of Biomedical Materials Research - Part A, (2015) Article in Press [Impact Factor: 2.841]
6. Manika Dewan, Arnab De and Subho Mozumdar*, *Efficient and reusable ionic liquid stabilized magnetic cobalt nanoparticles as catalysts for aza- and thia-Michael reactions*, Inorganic Chemistry Communications 53 (2015) 92-96. [Impact Factor: 2.062]
7. Ajeet Kumar, Arnab De, Amit Saxena and Subho Mozumdar*, *Environmentally benign synthesis of positively charged, ultra-low sized colloidal gold in universal solvent*, Advances in Natural Sciences: Nanoscience and Nanotechnology, 5 (2014) Article Number: 025017. [Citation: 0]
8. Seema Garg, Arnab De, Tanusri Nandi and Subho Mozumdar*, *Synthesis of a Smart Gold Nano-vehicle for Liver*

- Specific Drug Delivery*, AAPS PharmSciTech. 14 (2013) 1219-1226. [Impact factor: 1.584; Citation: 2]
9. Swati Aerry, Arnab De, Ajeet Kumar, Amit Saxena, DK Majumdar and Subho Mozumdar*, *Synthesis and characterization of thermoresponsive copolymers for drug delivery*, Journal of Biomedical Materials Research - Part A, 101(2013) 2015-2026. [Impact factor : 2.834 ; Citation : 4]
 10. Ajeet Kumar, Amit Saxena, Arnab De, Ravi Shankar and Subho Mozumdar*, *Controlled synthesis of size-tunable nickel and nickel oxide nanoparticles using water-in-oil microemulsions*, Advances in Natural Sciences: Nanoscience and Nanotechnology, 4 (2013) Article Number: 025009. [Citation: 3]
 11. Ajeet Kumar, Amit Saxena, Arnab De, Ravi Shankar and Subho Mozumdar*, *Facile synthesis of size-tunable copper and copper oxide nanoparticles using reverse microemulsions*, RSC Advances. 3 (2013) 5015-5021. [Impact factor : 2.562 ; Citation : 5]
 12. Swati Aerry, Ajeet Kumar, Amit Saxena, Arnab De and Subho Mozumdar*, *Chemoselective acetylation of amines and thiols using monodispersed Ni-nanoparticles*, Green Chemistry Letters and Reviews, 6 (2013) 183-188. [Impact factor : 1.392; Citation : 3]
 13. Ajeet Kumar, Manika Dewan, Arnab De, Amit Saxena, Swati Aerry and Subho Mozumdar*, *Aldol condensation in PEG-400 catalyzed by recyclable L-proline supported on nano gold surface*, RSC Advances, 3 (2013) 603-607. [Impact factor : 2.562 ; Citation : 4]
 14. Rituparna Bose, Arnab De, Subho Mozumdar, Goutam Sen, Ananda Deb Mukherjee, *Coastal water pollution in two rivers of the Bengal delta*, Geochemistry International, 50 (2012) 860-868. [Impact factor : 0.471; Citation : 1]
 15. Manika Dewan, Ajeet Kumar, Amit Saxena, Arnab De and Subho Mozumdar*, *Biginelli reaction catalyzed by copper nanoparticles*, PLoS ONE, 7 (2012) art no. e43078. [Impact factor : 3.730; Citation : 8]
 16. Ajeet Kumar, Swati Aerry, Amit Saxena, Arnab De and Subho Mozumdar*, *Copper nanoparticulates in Guar-gum: A recyclable catalytic system for the Huisgen [3 + 2]-cycloaddition of azides and alkynes without additives under ambient conditions*, Green Chemistry 14 (2012) 1298-1301. [Impact factor : 6.828; Citation :17]
 17. Manika Dewan, Ajeet Kumar, Amit Saxena, Arnab De and Subho Mozumdar*, *Using hydrophilic ionic liquid, [bmim]BF₄ - ethylene glycol system as a novel media for the rapid synthesis of copper nanoparticles*, PLoS ONE, 7 (2012) art no. e29131. [Impact factor : 3.730; Citation : 10]
 18. Ajeet Kumar, Amit Saxena, Manika Dewan, Arnab De and Subho Mozumdar*, *Recyclable Nanoparticulate Copper Mediated One-Pot Three Component Synthesis of Naphthoxazinones in PEG-400: A Green Approach*, Tetrahedron Letters 52 (2011) 4835-4839. [Impact factor : 2.397; Citation : 17]
 19. Pradeep Kumar, Prashant Singh, Kamlesh Kumari, Subho Mozumdar* and Ramesh Chandra, *A green approach for the synthesis of gold nanotriangles using aqueous leaf extract of Callistemon viminalis*, Materials Letters 65 (2011) 595-597. [Impact factor : 2.224; Citation : 4]
 20. Prashant Singh, Pradeep Kumar, Kamlesh Kumari, Pankaj Sharma, Subho Mozumdar and Ramesh Chandra, *A rapid and simple route for the synthesis of lead and palladium nanoparticles in tetrazolium based ionic liquid*, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, 78 (2011) 909-912. [Impact factor : 1.977; Citation : 4]
 21. Manika Dewan, Ajeet Kumar, Amit Saxena, Arnab De and Subho Mozumdar*, *Molecular Iodine in [bmim][BF₄]: A Highly Efficient Green Catalytic System for One-Pot Synthesis of 1,3-Oxathiolan-5-one*, Tetrahedron Letters, 51 (2010) 6108-6110. [Impact factor : 2.397; Citation : 17]
 22. Jun Li, Yu-Cheng Tseng, Y.C. Che, Subho Mozumdar and Leaf Huang*, *Biodegradable Calcium Phosphate Nanoparticle with Lipid Coating for Systemic siRNA Delivery*, Journal of Controlled Release, 142 (2010) 416-421. [Impact factor : 7.633; Citation : 103]
 23. Mazaahir Kidwai*, Neeraj Kumar Mishra, Saurav Bhardwaj, Anwar Jahan, Ajeet Kumar and Subho Mozumdar, *Cu nanoparticles in PEG: A new recyclable catalytic system for N-arylation of amines with aryl halides*, ChemCatChem 2 (2010) 1312-1317. [Impact factor : 5.181; Citation : 16]
 24. Yu-Cheng Tseng, Subho Mozumdar and Leaf Huang*, *Lipid-Based Systemic Delivery of siRNA*, Advanced Drug Delivery Reviews, 61(2009) 721-731. [Impact factor : 12.888; Citation : 173]
 25. Ajeet Kumar, Manika Dewan, Amit Saxena, Arnab De and Subho Mozumdar*, *Knoevenagel Condensation Catalyzed by Ni-Nanoparticles in Neutral Medium*, Catalysis Communication 11 (2010) 679-683. [Impact factor : 2.915; Citation : 19]
 26. Mazaahir Kidwai*, Saurav Bhardwaj, Neeraj Kumar Mishra, Vikas Bansal, Ajeet Kumar and Subho Mozumdar, *A Novel Method for Synthesis of β -Enaminones using Cu-Nanoparticles as Catalyst*, Catalysis Communications, 10 (2009) 1514-1517. [Impact factor : 2.915; Citation : 23]
 27. Mazaahir Kidwai*, Neeraj Kumar Mishra, Vikas Bansal, Ajeet Kumar and Subho Mozumdar, *Novel One-Pot Cu-Nanoparticles-Catalyzed Mannich Reaction* , Tetrahedron Letters, 50 (2009) 1355-1358. [Impact factor : 2.397; Citation : 39]

28. [Ajeet Kumar, Prashant Singh, Amit Saxena, Arnab De, Ramesh Chandra and Subho Mozumdar*](#), *Nano-Sized Copper as an Efficient Catalyst for One Pot Three Component Synthesis of Thiazolidine-2, 4-Dione Derivatives*, *Catalysis Communications*, Catalysis Communication 10 (2008) 17-22. [Impact factor : 2.915; Citation :17]
29. [Ajeet Kumar, Santosh Kumar, Amit Saxena, Arnab De and Subho Mozumdar*](#), *Ni-Nanoparticles: An Efficient Catalyst for the Synthesis of Quinoxalines*, *Catalysis Communications*, 9 (2008), 778-784. [Impact factor : 2.915; Citation : 44]
30. Mazaahir Kidwai*, Neeraj Kumar Mishra, Vikas Bansal, Ajeet Kumar and [Subho Mozumdar](#), *Ni-Nanoparticles Usage for the Reduction of Ketones*, *Catalysis Communications*, 9 (2008), 612-617. [Impact factor : 2.915; Citation : 18]
31. Ruchi Singh, Amit Saxena and [Subho Mozumdar*](#), *Calcium Phosphate DNA Nanocomposites: Morphological Studies and their Bile Duct Infusion for Liver-Directed Gene Therapy*, *International Journal of Applied Ceramic Technology* 5 (2008) 1-10. [Impact factor : 1.153; Citation : 6]
32. Amit Saxena, Ajeet Kumar and [Subho Mozumdar*](#), *Ni-nanoparticles: An Efficient Green Catalyst for Chemoselective Oxidative Coupling of Thiols*, *Journal of Molecular Catalysis A: Chemical* 269 (2007), 35-40. [Impact factor: 3.187; Citation : 50]
33. Amit Saxena, Ajeet Kumar and [Subho Mozumdar*](#), *Ni-nanoparticles: A Mild Chemoselective Catalyst for Synthesis of Thioethers*, *Applied Catalysis A: General* 317 (2007), 210-215. [Impact factor : 3.410; Citation : 32]
34. [Mazaahir Kidwai*](#), Neeraj Kumar Mishra, Vikas Bansal, Ajeet Kumar and [Subho Mozumdar](#), *Cu-Nanoparticle Catalyzed O-arylation of Phenols with Aryl Halides via Ullmann Coupling*, *Tetrahedron Letters*, 48 (2007), 8883-8887. [Impact factor : 2.397; Citation : 68]
35. Ajeet Kumar, Santosh Kumar, Amit Saxena, Arnab De and [Subho Mozumdar*](#), *Selective Protection of Carbonyl Compounds over Nano-Sized Nickel Catalysts*, *Catalysis Letters*, 122 (2008), 98-105. [Impact factor : 2.915; Citation : 11]
36. Ajeet Kumar, Prashant Singh, Santosh Kumar, Ramesh Chandra and [Subho Mozumdar*](#), *A Facile One-Pot Synthesis of Thioethers using Heteropoly Acids*, *Journal of Molecular Catalysis A: Chemical* 276 (2007), 95-101. [Impact factor : 3.187; Citation : 13]
37. Mazaahir Kidwai*, Vikas Bansal, Ajeet Kumar and [Subho Mozumdar](#), *The First Au-Nanoparticles Catalyzed Green Synthesis of Propargylamines Via Three-Component Coupling Reaction of Aldehyde, Alkyne and Amine*, *Green Chemistry* 9 (2007), 742 - 745. [Impact factor : 6.828; Citation : 83]
38. [Mazaahir Kidwai*](#), Neeraj Kumar Mishra, Vikas Bansal, Ajeet Kumar and [Subho Mozumdar](#), *Copper Nanoparticle-Catalyzed A3 coupling via C-H activation*, *Synlett* 10 (2007) 1581-1584. [Impact factor : 2.655; Citation : 42]
39. Amit Saxena, [Subho Mozumdar](#) and Atul Johri*, *Ultra-Low Sized Cross-Linked Polyvinylpyrrolidone Nanoparticles as Non-Viral Vectors for In Vivo Gene Delivery*, *Biomaterials* 27 (2006), 5596-5602. [Impact factor : 7.604; Citation : 14]
40. Mazaahir Kidwai*, Vikas Bansal , Amit Saxena, Swati Aerry and [Subho Mozumdar](#), *Cu-nanoparticles: Efficient Catalysts for the Oxidative Cyclisation of Schiff Base*, *Tetrahedron Letters* 46 (2006), 8049-8053. [Impact factor : 2.397; Citation : 63]
41. Surendra Nimesh, Rupesh Kumar, Preeti Chaudhary, Amit Saxena, [Subho Mozumdar](#) and Ramesh Chandra*, *Preparation, Characterization and In Vitro Drug Release Studies of Novel Polymeric Nanoparticles*, *International Journal of Pharmaceutics* 323 (2006), 146-152. [Impact factor : 3.458; Citation : 14]
42. Mazaahir Kidwai*, Vikas Bansal, Amit Saxena, Ravi Shankar and [Subho Mozumdar](#), *Ni-Nanoparticles: An Efficient Green Catalyst for Chemoselective Reduction of Aldehydes*, *Tetrahedron Letters*, 47(2006), 4161-4165. [Impact factor : 2.397; Citation : 36]
43. Vinay Gupta, [Subho Mozumdar](#), Arijit Chowdhuri and K. Sreenivas*, *Influence of CuO Catalyst in the Nanoscale Range on SnO₂ Surface for H₂S Gas Sensing Applications*, *Pramana Journal of Physics*, 65 (2005), 647 – 652. [Impact factor : 0.562; Citation : 7]
44. Radha Gupta, [Subho Mozumdar](#) and N.K. Chaudhury*, *Effect of Ethanol Variation on the Internal Environment of Sol–Gel Bulk and Thin Films with Aging*, *Biosensors and Bioelectronics*, 21 (2005) 549–556. [Impact factor : 5.437; Citation :14]
45. Radha Gupta, [Subho Mozumdar](#) and N. K. Chaudhury*, *Fluorescence Spectroscopic Studies to Characterize the Internal Environment of Tetraethyl-Orthosilicate Derived Sol–Gel Bulk and Thin Films with Aging*, *Biosensors and Bioelectronics*, 20 (2005), 1358-1365. [Impact factor : 5.437; Citation :20]
46. Akhilesh K. Verma*, Rupesh Kumar, Preeti Chaudhary, Amit Saxena, Ravi Shankar, [Subho Mozumdar](#) and Ramesh Chandra, *Cu-Nanoparticles: A Chemoselective Catalyst for the Aza-Michael Reactions of N-alkyl- and N-aryl piperazines with Acrylonitrile*, *Tetrahedron Letters*, 46 (2005), 5229-5232. [Impact factor : 2.397; Citation : 40]

47. Arijit Chowdhuri*, Vinay Gupta, K. Sreenivas, Rajeev Kumar, Subho Mozumdar and P.K. Patanjali, *Response Speed of SnO₂ Based H₂S Gas Sensors with CuO Nanoparticles*, Applied Physics Letters, 84 (2004), 1180 – 1182. [Impact factor : 3.794; Citation : 156]
48. Indrajit Roy, Susmita Mitra, Amarnath Maitra and Subho Mozumdar*, *Calcium Phosphate Nanoparticles as Novel Non-viral Vectors for Targeted Gene Delivery*, International Journal of Pharmaceutics, 250 (2003), 25 - 33. [Impact factor : 3.458; Citation : 171]
49. Dhruva Jyoti Bharali, Sanjeeb Kumar Sahoo, Subho Mozumdar and Amarnath Maitra*, *Cross-linked Polyvinylpyrrolidone Nanoparticles: A Potential Carrier for Hydrophilic Drugs*, Journal of Colloid and Interface Science, 258 (2003), 415 – 423. [Impact factor : 3.172; Citation :45]
50. Arijit Chowdhuri , Vinay Gupta, Rajiv Kumar, PK Patanjali, Subho Mozumdar and K Sreenivas, *Improved response of H₂S gas sensors with CuO nanoparticles on SnO₂ film*, Proceedings of IEEE Sensors 2 (2003) 201-205.
51. Anil Kumar, Amit Saxena, Subho Mozumdar and P. K. Patanjali*, *Phase Behaviour and Characterization of Various microdomain in Pseudo-ternary Triton X-100 + 1-Hexanol/Aqueous Electrolyte/Oil Systems*, Journal of Surface Science and Technology, 18 (2002), 139 - 52.
52. Rajiv Kumar, Subho Mozumdar and P. K. Patanjali*, *Solubilization of Some Hydrophobic Food Flavor Molecules in Single and Mixed Micellar Systems*, Journal of Surface Science and Technology , 18 (2002), 153-161. [Citation : 2]
53. Shraboni Das, Subho Mozumdar and Amarnath Maitra*, *Activity and Conformation of Yeast Alcohol Dehydrogenase (YADH) Entrapped in Reverse Micelles*, Journal of Colloid and Interface Science, 230 (2000), 328 – 333. [Impact factor : 3.172; Citation : 13]

Patents Filed

- Process for the preparation of ultrafine and nearly monodisperse inorganic nanoparticles as novel non-viral vectors for efficient gene delivery, A.N. Maitra, S. Mozumdar, S. Mitra and I. Roy. Indian Patent Application number 823/DEL/2001 dated 1.08.2001.
U.S. Patent Application number 10/201, 247 dated 24.07.2002.
U.S. Patent number 6,555,376, granted on April 29, 2003.
Patent sold to American Biosciences Inc., California, U.S.A.
- A method for targeted delivery of hydrogel nanoparticles into human hepatoblastoma cells through engineered Sendai virus envelope, Siddhartha Jana, Dhruva Jyoti Bharali, Prashant Mani, Subho Mozumdar, Amarnath Maitra, Chittar M. Gupta and Debi P. Sarkar.
U.S. Patent under filed through I.P.M.D., C.S.I.R.
- A method for producing stable and ultra-low sized nanoparticles by a novel microemulsion route, Amit Saxena, Ruchi Singh and Subho Mozumdar.
Indian Patent filed.
Indian Patent No. 2945/DEL/2005.
- A process for the preparation of a pH responsive polymer for coating micro/macro capsules/ particles intended for colonic delivery, Subho Mozumdar, Dipak. K. Majumdar, Richa Tyagi, Anjali Yadav, D.Hema Malini and Shreya Chand.
Indian Patent filed.
Indian Patent No. 1372/DEL/2006.

Book/Chapters

1. Arnab De, Sushil Mishra and Subho Mozumdar, Nanoparticles in Drug Delivery: A Practical Treatise, Springer (2016).
2. Arnab De, Rituparna Bose, Ajeet Kumar and Subho Mozumdar, Targeted Delivery of Pesticides Using Biodegradable Polymeric Nanoparticles, Springer (2014).
3. Arnab De, Manika Dewan and Subho Mozumdar, Ionic Liquids. In : A Tiwari and M. M. Demir (ed.), Advanced Sensor and Detection Materials, Wiley-Scrivener Publishing, Massachusetts (2014)
4. Arnab De, Manika Dewan and Subho Mozumdar, Experimental and Theoretical Background to Study Materials. In : A Tiwari and M. M. Demir (ed.), Advanced Sensor and Detection Materials, Wiley-Scrivener Publishing, Massachusetts (2014)
5. Arnab De, Sushil Mishra and Subho Mozumdar, Stimuli-Responsive Smart Nanoparticles for Biomedical Application. In : A Tiwari (ed.), Advanced Healthcare Materials, Wiley-Scrivener Publishing, Massachusetts (2014)
6. Arnab De, Sushil Mishra, Seema Garg and Subho Mozumdar, Synthesis of a Smart Nanovehicle for Targeting Liver. In: Kewal K. Jain (ed.), Drug Delivery System, Methods in Molecular Biology, vol. 1141, Springer Science+Business Media, New York (2014).
7. Sushil Mishra, Arnab De and Subho Mozumdar, Synthesis of Thermoresponsive Polymers for Drug Delivery. In: Kewal K. Jain (ed.), Drug Delivery System, Methods in Molecular Biology, vol. 1141, Springer Science+Business Media, New York (2014).

Research Projects (Major Grants/Research Collaboration)

- Spectroscopic Characterization of Curcumin-Polymer Nano-Complex. (Sanctioned)
Project to be funded by D.S.T., Govt. of India.
Total funds to be received: Rs. 53 lakhs.
- Development of recyclable nano-catalysts for the synthesis of bioactive compounds.
Project funded by D.S.T., Govt. of India.
Total funds received: Rs. 20.75 lakhs.
- Development of controlled-release nanoparticulate formulations for pesticides and insecticides.
Project funded by D.B.T., Govt. of India.
Total funds received: Rs. 40 lakhs.
- Combinatorial DNA chips coupled with nanoparticle probes for scanometric detection.
Project funded by D.S.T. under the Nano Science Nano Technology Initiative (N.S.T.I.) (2002 – 2005).
Total funds received: Rs. 44 lakhs.
- Fabrication and physico-chemical characterisation of a colorimetric type DNA biochip based on nanoparticulate gold impregnated surface.
Project funded by D.S.T., Govt. of India.
Total funds received: Rs. 9 lakhs.
- Targeted gene delivery using inorganic nanoparticles as non-viral vectors.
Project funded by D.S.T., Govt. of India (2001 – 2004) (Collaborator with Prof. A.N. Maitra).
Total funds received: Rs. 65.95 lakhs.
- Hydrogel and smart hydrogel nanoparticles: a new technology for drug delivery formulations.
Project funded by C.S.I.R. under the N.M.I.T.L.I. programme (2001 – 2003)
(Collaborator with Prof. A.N. Maitra).
Total funds received: Rs. 73.40 lakhs.

COLLABORATIVE RESEARCH

- Collaboration with the group of Professor Leaf Huang at the University of North Carolina, U.S.A., to conduct a comparative study on the therapeutic efficiency of inorganic phosphate nanoparticles and lipid based nanoparticulate gene carriers.
- Collaboration with Professor D.K. Majumdar at the Delhi Institute of Pharmacy Education and Research (formerly Delhi College of Pharmacy) for developing a pH sensitive polymer for applications in colon specific drug delivery.
- Collaboration with Professor Kam Leong's group at the Johns Hopkins University for developing a disease model and treatment based on gene delivery using calcium phosphate nanoparticles.

Awards and Distinctions

- Awarded D.B.T. Overseas Visiting Fellowship for 2007-2008.
- Awarded N.I.H. Postdoctoral Fellowship for Postdoctoral Research at Johns Hopkins University, U.S.A..
- Awarded Graduate Assistantship and Full Tuition Scholarship for Ph.D. Research at S.U.N.Y., Buffalo, U.S.A.
- Ranked First in Physical Chemistry and Inorganic Chemistry Examination at S.U.N.Y., Buffalo, U.S.A.

Association With Professional Bodies

- Academic Editor for PLOsone
- Reviewer for NATURE (Materials).
- Reviewer for International Journal for Applied Ceramic Technology.
- Reviewer for Tetrahedron Letters.
- Reviewer for Catalysis Communications.
- Selected as a Core Group Member for the D.B.T. Special Task Force for Nanobiotechnology and Applications of Nanotechnology in Agriculture (2006).
- Selected as Expert Member for D.R.D.O. Task Force on Biomolecular Motors and Nanobioelectronics.

Other Activities

- Participant in an Advanced Course on Fluorescence Spectroscopy conducted by Prof. J.R. Lakowicz at the University of Maryland (1997).
- Selected as one of the 20 participants after a nationwide search for the First National School on Nanotechnology held at I.I.Sc., Bangalore (February, 2003).

Signature