

NAME Gunjan Agarwal		POSITION TITLE Assistant Professor	
EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Allahabad, India	B.S.	1991	Physics, Maths, Computer Science
Indian Institute of Technology, Delhi, India	M.S.	1993	Physics
Tata Institute of Fundamental Research, Bombay, India	Ph.D.	1993-1997	Biophysics
Albert Einstein College of Medicine, Bronx, NY	Post-doc	1997-2000	Biophysics
Procter and Gamble Pharmaceuticals, Mason, OH	Post-doc	2000-2001	Microscopy/Biophysics

A. POSITIONS AND HONORS

PROFESSIONAL EXPERIENCE

Sep. 2003 – present: Assistant Professor, Davis Heart & Lung Research Institute and Biomedical Engineering Center, Ohio State University, Columbus, OH

Nov. 2001- May 2003: Research Scientist, Air Force Research Lab, Wright Patterson Air Force Base, OH

HONORS

- Best poster award to my student at the OSU graduate and post-graduate research day, April, 1, 2004.
- Best Youngster's presentation award at National Symposium on Molecular and Cellular Biophysics, New Delhi, India (1996).
- Highest percentile in Graduate Aptitude Test in Engineering, Physics, Delhi zone, India (1993).
- Junior Research Fellowship (Physics) from Council for Scientific & Industrial Research, India (1992).
- Invited lectures at University of Cincinnati, OH, Procter and Gamble Company, OH, Ecole Polytechnique Federale de Lausanne, Switzerland and Centro "E. Piaggio", University of Pisa, Italy.

Professional Societies (member)

American Association of the Advancement of Science
 American Chemical Society
 Biophysical Society
 Indian Biophysical Society

B. PEER REVIEWED RESEARCH PUBLICATIONS

1. "Ceramic Nanoparticle Assemblies with Tailored Shapes and Tailored Chemistries via Biosculpting and Shape-preserving Inorganic Conversion" B. Dickerson, R. R. Naik, P. M. Sarosi, **G. Agarwal**, M. O. Stone, and K. H. Sandhage *J. Nanoscience and Nanotechnology* (2005) Volume: 5 Number: 1 Page: 63 -- 67
2. "Bio-inspired approaches and biologically derived materials for coatings" Rajesh R. Naik, Lawrence L. Brott, Francisco Rodriguez, **Gunjan Agarwal**, Sean M. Kirkpatrick and Morley O. Stone *Progress in Organic Coatings* Volume 47, Issues 3-4, September 2003, Pages 249-255
3. "Immobilization of Histidine Tagged Proteins On Nickel By Electrochemical Dip Pen Nanolithography", **Gunjan Agarwal**, Rajesh R. Naik and Morley O. Stone, *J. Am. Chem. Soc.* (2003) Jun 18;125(24):7408-12
4. "Dip Pen Nanolithography in Tapping Mode", **Gunjan Agarwal**, Laura A. Sowards, Rajesh R. Naik and Morley O. Stone, *J. Am. Chem. Soc.* (2003) 125(2); 580-583
5. "Binding of Discoidin Domain Receptor 2 to Collagen I: an AFM investigation", **Gunjan Agarwal**, Lubomir Kovac, Czeslaw Radzizewski and Steve J. Samuelsson, *Biochemistry* (2002) **41(37)** 11091-11098.

6. "Sickle Hemoglobin Fibers: Mechanisms of Depolymerization", **Gunjan Agarwal**, Jiang Cheng Wang, Suzanne Kwong, Scott Cohen, Frank A. Ferrone and Robin W. Briehl, *J. Mol. Biol.* (2002) **322(2)**, Sep., pp. 395-412.
7. "Microrheology Of Isolated Sickle Cell Hemoglobin Fibers: Bending Moduli And Persistence Length", Jiang Cheng Wang, Mathew S. Turner, **Gunjan Agarwal**, Suzanne Kwong, Frank A. Ferrone and Robin W. Briehl, *J. Mol. Biol.* (2002), Jan 25;**315(4)**:601.
8. "Biomimetic Synthesis And Patterning Of Silver Nanoparticles", Naik, R. R., Stringer, S. J., **Agarwal, G.**, Jones, S. E. & Stone, M. O. *Nature Materials* (2002) **1**, Nov 01, 169-172.
9. "Correlations Between Morphology And Conductivity Properties Of Films Of Polyaniline" **Gunjan Agarwal** and Ratna S. Phadke *Advanced Materials for Optics and Electronics* Volume 9, Issue 4, July/August 1999,151-156
10. "Methods Of Deposition And Characterization Of Thin Films Of Amphiphiles", Ratna S. Phadke and **Gunjan Agarwal**, *Materials Science and Engineering C* (1999) **8-9**, 113-118
11. "Laser Assisted Deposition of Bacteriorhodopsin Assemblies", **Gunjan Agarwal** and Ratna S. Phadke, *Nanotechnology* (1999) **10**, issue 3 September, 336 - 339.
12. "Laser Assisted Deposition Of Supramolecular Assemblies On Solid Surfaces", **Gunjan Agarwal** and Ratna S. Phadke, *Materials Science and Engineering C* (1998) **6(1)** 13-17
13. "Deposition Of Langmuir Monolayers Using Conical Trough", **Gunjan Agarwal** and Ratna S. Phadke, *Thin Solid Films* (1998) **327-329** 9-13
14. "Laser Assisted Deposition Of Preformed Mesoscopic Systems", Ratna S. Phadke and **Gunjan Agarwal**, *Materials Science and Engineering C* (1998) **5 (3-4)** 237-241
15. "A Novel Method For Monolayer Deposition: Water Seepage Method", **Gunjan Agarwal** and Ratna S. Phadke, *Supramolecular Science* (1996) **3** No. 4 183-187
16. "Self-Assembled Organizations Of Thermotropic Amphiphiles In Molecular Electronics (Synthesis, Characterization And Utility)", Ratna S. Phadke and **Gunjan Agarwal**, *Molecular Crystal and Liquid Crystal* (1996) **288** 119-128
17. "Elucidation Of Self-Assembling Properties Of Rbf And Its Derivatives When Interfaced With Solid Support", **Gunjan Agarwal**, Anant B. Patel, P. R. Apte and Ratna S. Phadke, *Materials Science and Engineering C* (1995) **3** 263-266

C. OTHER SUPPORT:

National Science Foundation

"NSEC Proposal for a Center for Affordable Nanoengineering of Polymer Biomedical Devices" (PI: James L. Lee) (10/01/2004 to 09/30/2009)

Role: participating faculty

American Heart Association

Student Scholar Award (\$ 2,000) to my student Mayur Savla (07/01/2004 to 09/30/2004)

Role: advisor