Monojoy Goswami

Computational Chemical and Materials Sciences
Center for Nanophase Materials Sciences
Oak Ridge National Laboratory
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Education:

Institute for Plasma Research, India	Physics	Ph.D.	2002

Professional Experience :

2011–present   Research Scientist II, University of Tennessee/ Oak Ridge National Labratory
2007–2011   Postdoctoral Research Associate, ORISE/ Oak Ridge National Labratory
2003–2007   Postdoctoral Researcher, Columbia University/Rensselaer Polytechnic
2000–2003   Research Scholar, University of British Columbia, Vancouver, Canada

Honors and Awards:

1994   Research Fellowship, Department of Atomic Energy, India
                Referee of American Chemical Society, Royal Society of Chemistry, American
                Institute of Physics, Institute of Physics and Elsevier Science

Synergistic Activities:

Computational Chemical and Materials Sciences: Large-scale molecular dynamics (MD) simulations to understand the fundamental physics of polymeric materials and help design novel materials, Monte Carlo simulation of charged polymeric materials to understand the self-assembly for the design of materials for energy storage and drug delivery systems, molecular level understanding of nanoparticle self-assembly in polymer matrix, MD/MC simulations of polyelectrolyte-surfactant complexes for the design of better materials to enhance the quality of consumer products (in collaboration with Proctor & Gamble corporate research). Additionally, these simulation approaches are verified with experimental data to understand the basic physics thereby overcoming the difficulties in future experimental processes

Collaborators:

S. P. Gido (University of Massachusetts, Amherst), J. W. Mays (University of Tennessee, Knoxville), A. Bhattacharya (University of Central Florida), Scott Shaw (University of Arizona), S. K. Kumar (Columbia University), Scott Sides (TechX Corporation), Peter Koenig (Proctor & Gamble Corporate Research, Cincinnati).

Graduate and Postdoctoral Advisors:

Graduate Advisor: Prof. Harishankar Ramachandran (Indian Institute of Technology, Madras)
Postdoctoral Advisors: Prof. Sanat Kumar (Columbia University), Bobby G. Sumpter (Oak Ridge National Laboratory)