

Sudip Roy



Contact Information

Scientist, Soft Mater Theory Group
H 104, Polymers & Advanced Materials Laboratory
National Chemical Laboratory, Pune – 411008, India.
Phone: 91-20-25902735, Email: s.roy@ncl.res.in

Current Research Interests

- Theoretical and Computational multiscale modeling
- Composite materials
- Biopolymers, membranes, proteins
- Metal organic framework
- Force field development
- Coarse graining

Education

- Ph.D (University of Saarland, Germany)
- B.Sc & M.Sc (Visva Bharati)

Academic/industrial research experience

- Post Doctoral Fellow (Technical University of Darmstadt)

Selected Publication

- P.R.Pandey, **S.Roy***, Head group mediated water insertion in DPPC bilayer, J. Phys. Chem. B 115(2011), 3155–3163
- **S. Roy***, D. Markova, A. Kumar, M. Klapper and F. Mueller-Plathe, Morphology of phosphonic-acid functionalized block copolymers studied by dissipative particle dynamics, Macromolecules, 42(2009), 841-848
- **S. Roy***, T. M. Ataul and F. Mueller-Plathe: Molecular dynamics simulations of heptyl phosphonic acid: a potential polymer component for fuel cell polymer membrane, J. Phys. Chem. B, 112 (2008), 7403-7409
- **S. Roy** and M. Springborg: Structural and Electronic Properties of Indium Phosphide Nanotubes,, J. Phys. Chem C, 113(2009), 81-86
- Arijit Mallick, Subhadeep Saha, Pradip Pachfule, **S. Roy**, Rahul Banerjee, Selective CO₂ and H₂ adsorption in a chiral magnesium-based metal organic framework (Mg-MOF) with open metal sites, J.Mat.Chem., 20(2010), 9073-9078

Hobbies & other interests

- Reading
- High performance computing solution and programming