

Name Dr. Pankaj Poddar
Division Physical & Materials Chemistry
Email p.poddar@ncl.res.in
Phone 020-2590 2580, 0 9823 563 766
Fax 020-2590 2636



Education and experience

- PhD (2000) Jawaharlal Nehru University, New Delhi
- Post Doctoral Fellow (2000-2002) Tel Aviv University, Israel
- Post Doctoral Fellow (2002- March 2005) University of South Florida
- Scientist (April 2005- Continue) National Chemical Laboratory, Pune

Achievements

- CSIR Young Scientist Award 2008
- NCL Scientist of the Year Award 2010

Research subjects: Physical Chemistry, Materials Science

Research areas

- Drug molecule conjugation on nanomaterials, chemical/bio nanosensors.
- Nanomaterial chemistry for thermoelectric devices, solar cells, multiferroics.
- Magnetochemistry in nanomagnets

Recent publications

1. V. Bansal, P. Poddar... "Fungus-mediated biosynthesis of ferroelectric barium titanate nanoparticles", **JACS** **128**, 11958 (2006).
2. "Extracellular Bacterial Synthesis of Protein Functionalized Ferromagnetic Co₃O₄ Nanocrystals and Imaging of Self-Organization of Bacterial Cells under Stress after Exposure to Metal Ions", Umesh Kumar, Ashvini Shete, Arti Harle, Oksana Kasyutich, W. Schwarzacher, Archana Pundle, Pankaj Poddar*, **Chemistry of Materials**, **20**, 1484-1491 (2008).
2. R. Jagannathan,... P. Poddar, "In-situ observation of antibiotic mediated concurrent growth of two distinct homogenous populations of gold nanoparticles in solution phase", **J. Phys. Chem. C**, **113**, 3478 (2009).
3. "Mechanistic Study of Surface Functionalization of Enzyme Synthesized Ag and Au Nanoparticles using Surface Enhanced Raman Spectroscopy Technique", Raja Das, Ramya Jagannathan, Chandrashekhar Sharan, Umesh Kumar, Pankaj Poddar*, **J. Phys. Chem. C**, **113**, 21493-21500, (2009).
4. "Design and In situ Synthesis of Cu-Based Porous Framework Featuring Isolated Double Chain Magnetic Character", Chandan Dey, Raja Das, Binoy Krishna Saha, Pankaj Poddar*, Rahul Banerjee*, **Chem. Comm.**, 2011.