Name	Dr. K. R. Patil
Division	Center for Materials Characterization
Email	kr.patil@ncl.res.in
Phone	020-25902250
Fax	020-25902642

Education and experience

- M. Sc. Ph. D. (Chemistry), M. Sc. (UK)
- Post-doc: University Rovira I Virgili, Spain and KRICT South Korea
- Formation of Nanomaterials at Liquid-Liquid Interface
- Thin films of Nanomaterials by modified spin coating technique
- Materials characterization by X-ray photoelectron spectroscopy (XPS)

Achievements

- Experimental expertise in exploiting the facility of XPS for research in Physics and Chemistry
- Introduction of the two new techniques namely Liquid Liquid Interface Reaction Technique (LLIRT) and modified spin coating method to grow nanoparticulate thin films of metals, semiconductors etc.

Research subjects:

- Physical Chemistry
- Materials Science

Research Areas

- Growing thin films of nanomaterials at Liquid Liquid Interface
- Nanoparticulate films using modified spin coating method
- Nanofluids for absorption refrigeration technology
- Formation of nanoparticulate thin films of metals, semiconductors, complexes

Recent publications

- V. S. Patil, S. R. Krishna, R. R. Hawaldar, A. B. Gaikwad, S. D. Sathaye, K. R. Patil, " one step insitu synthesis of NHx adsorbed rhodium nanocrystals at liquid-liquid interface for possible electrocatalytic application", Journal of Colloid and Interface Science, 358 (2011), 238-244.
- Ashokrao B. Patil, Kashinath R. Patil, Satish K. Pardeshi "Enhancement of oxygen vacancies and solar photocatalytic activity of zinc oxide by incorporation of nonmetal", Journal of Solid State Chemistry 184 (2011) 3273–3279
- Bharat B. Kale, Jin-Ook Baeg, Ki-jeong Kong, Sang-Jin Moon, Latesh K. Nikam and Kashinath R. Patil, " Self assembled $CdLa_2S_4$ hexagon flowers, nanoprisms and nanowires: novel photocatalysts for solar hydrogen production", J. Mater. Chem., 21(2011) 2624-2631
- V. S. Joshi, S. P. Gokhale, K. R. Patil and S. K. Haram, "Fabrication, characterization and electrochemical performance of single strand carbon fiber prepared by catalytic chemical vapor deposition method", Electrochimica Acta, 55 (2010), 2022.