Name: **Dr. V. H. Rane** 

Division: Chemical Engineering & Process Development

Division (High Pressure Laboratory)

Email: vh.rane@ncl.res.in

Phone: 020-2590-2357

Fax: 020-2590-2621

Education and experience

PhD

AvH Fellow, Germany

• Postdoc fellow, Belgium

More than 20 years in the field of homogeneous and

heterogeneous catalysis

Achievements

• US Patent: 10

• Received 5 silver medals for US patents

Research subjects:

Catalysis

Materials Science

Research Areas

- Oxidation of lower and higher alkanes to value added chemicals
- Hydrogenation (in liquid and gas phase) and dehydrogenation reactions
- Bio-glycerol conversion, transesterification reactions, High pressure reactions

Recent publications

- Munshi, M.K., Lomate, S.T., Deshpande, R.M., Rane, V.H. and Kelkar, A.A.: Synthesis of acrolein by gas-phase dehydration of glycerol over silica supported bronsted acidic ionic liquid catalysts. J. Chem. Tech. Biotechnol, 85, (2010) 1319.
- Chaudhari, C.S., Sable, S.S., Gurav, H., Kelkar, A.A. and Rane, V.H.: Oxidation of propane to acrylic acid and acetic acid over alkaline earth doped Mo-V-Sb-Ox catalysts. *J.Natural Gas Chem.*, 19 (2010) 593.
- Rane, V.H., Chaudhari, S. T. and Choudhary, V.R.: Influence of alkali metal doping on surface properties and catalytic activity/selectivity of CaO catalysts in oxidative coupling of methane. *J.Natural Gas Chem.*, 17 (2008) 313.
- Rane, V.H., Rodemerck, U. and Baerns, M.: Oxidation of propane to acrylic acid over Mo-V-Sb-La-Ox catalysts: Influence of catalyst preparation and calcination conditions. *J.Mol.Catal.A:Chemical*, 245 (2006) 161.
- Choudhary, V.R., Rane, V.H. and Rajput, A.M.: Beneficial effects of addition of cobalt to Ni-catalysts on their catalytic performanace in oxidative conversion of methane to syngas. *Appl.Catal.* (*Lett.*) *A: General*, 162 (1997) 235.

