

Name **Dr Satyanarayana Chilukuri**
Senior principal Scientist



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Subjects Catalysis, Inorganic chemistry, Physical chemistry

Educational qualifications and experience Ph.D Indian Institute of Technology, Bombay.
M.Sc Physical Chemistry, Andhra University, Waltair

1998-todate Scientist, Catalysis Division, NCL
1991- 1998 Research Scientist, IIT Powai, Mumbai-76

- Achievements
- Developed zeolite based applications for green chemical synthesis and petrochemical conversions
 - H₂ generation catalysts for fuel cells through steam reforming, autothermal reforming and water gas shift reactions.
 - Carbon dioxide utilization through CO₂ reforming of methane.
 - Selective oxidation of hydrocarbons using mixed oxide catalysts
- Research Areas of Interest
- Utilization of Biomass to produce chemicals and fuels
 - Development of catalysts for Green chemical processes.
 - Catalysts for selective oxidation and oxydehydrogenation of hydrocarbons.
 - Synthesis gas generation through steam reforming, CO₂ reforming, Catalytic partial oxidation and ATR.
- Relevant publications
1. Incorporation of Zr in medium-pore aluminophosphate molecular sieves with AFO Framework. Microporous and Mesoporous Materials 137 (2010) 65-71
 2. Copper-based catalysts for water gas shift reaction: Influence of support on their catalytic activity. Catal Today 141 (2009) 72-76
 3. Cu-Ce mixed oxides supported on Al-Pillared clay: Effect of preparation on catalytic activity in the preferential oxidation of carbon monoxide. Appl catal B: Envi 84 (2008) 21
 4. Selective ortho-methylation of phenol with methanol over copper manganese mixed oxide spinel catalysts. J Catal **243** 278 (2006).
 5. Oxidative dehydrogenation of ethylbenzene using nitrous oxide over vanadia–magnesia catalysts. Catal. Sci. Technol., **1** (2011) 1262