

Programme for NMR Meets Materials
5th-6th May 2017
TCIS, Hyderabad

5 th May 2017		
Time	Speaker	Title
9.45 – 10.00	Dr. Polshettiwar TIFR, Mumbai /Dr. Vipin Agarwal, TCIS, Hyderabad	Introduction
Session Chair: Prof K.V.R. Chary		
10.00 – 10.30	Prof. P. Selvam, IIT, Chennai	Applications of solid state NMR in catalysis
10.30 – 11.00	Dr. C.S. Gopinath, NCL, Pune	Solar hydrogen generation through artificial photosynthesis Issues.
11:00 – 11:30	Tea Break	
Session Chair: Anusha Gopalan		
11.00 – 11.30	Dr. S. Ganapathy, NCL, Pune	Methods and applications of solid state NMR spectroscopy in materials characterization
11.30 – 12.00	Prof. P. K. Madhu, TIFR, Mumbai/TCIS, Hyderabad	NMR of materials: spins, nuclei, information, and grey issues
12.30 – 14.00	Lunch Break	
Session Chair: Kshama Sharma		
14.00 – 14.30	Dr. Abhijit Patra, IISER, Bhopal	Multifunctional porous organic polymers
14.30 – 15.00	Dr. Shubhangi, NCL, Pune	Need of multinuclear NMR in homogeneous/heterogeneous catalysis - Study of mechanism and catalyst deactivation
15.00 – 15.30	Dr. T.G. Ajithkumar, NCL Pune	Insights into polymers, magnetic materials and catalysts from solid-state NMR investigation
15.30 – 16.00	Tea Break	
Session Chair: Mukul Jain		
16.00 – 16.30	Dr. Sebastian C. Peter, JNC SAR, Bangalore	Design and development of non-Pt based compounds as efficient catalysts for the green energy production in fuel cell: The role of ordering, defects, substitution, dealloying and phase transition in improving the activity
16.30 – 17.00	Dr. Vipin Agarwal	Structure and properties of polyolefinic polymers
17.00 – 17.30	Dr. Vivek Polshettiwar	Morphology controlled nanomaterials: formation mechanism, catalysis and CO ₂ capture
17.30 – 18.00	Tea Break	
18:00 – 18:15	Dr Chandrakala Gowda, TCIS,	Solid-state NMR structures of conducting polymers



	Hyderabad	
18.15 – 19.15	Round table discussion (Prof P.K. Madhu, Dr. C.S. Gopinath, Prof. P. Selvam and Dr. S. Ganapathy)	
19.15- 22.00	Dinner	
6th May 2017		
Time	Speaker	Title
Session Chair: Rajalakshmi		
9.30 – 10.00	Dr. Sudhanshu Sharma, IIT, Ghandinagar	Oxidation state and catalysis: a case study of platinum
10.00 – 10.30	Dr. Tapas Mandal, IIT, Roorkee	Layered titanates, vanadates and phosphates: applications in photocatalysis and energy storage
10.30 – 11.00	Dr. Kaustubh Mote, TCIS, Hyderabad	Proton detection at slow-moderate MAS frequencies for analysis of materials and material surfaces
11.00 – 11.30	Tea Break	
Session Chair: Sumit Bawari		
11.30 – 12.00	Dr. S. Jayanthi, IIST, Thiruvananthapuram	Restricted dynamics of Molecules in mesopores - a dynamic model using deuterium MAS NMR and molecular dynamics
12.00 – 12.15	Dr. Anand and Dr. Sreekanth, TCIS, Hyderabad	Possibilities of NMR studies on the mechanisms of ion transport, membranes and electrochemical reactions
12.15 – 12.45	Prof. J. Bera, IIT, Kanpur	Water as reagent in organometallic catalysis
12.45 – 14.00	Lunch Break	
14.00 – 14.30	Conclusions: Prof. J. Bera, Dr. Polshettiwar and Dr. Vipin Agarwal	