**UPMC/IISc/JNCASR workshop on Advances in Chemistry and Physics of Materials**

*(Organized by International Centre for Materials Science (ICMS) - 7th and 8th of November 2016 in AMRL Conference Hall, JNCASR)*

This is the second in series after the first workshop held in UPMC, Paris on 26-27, October 2015. This two days workshop will establish and reinforce scientific and academic contacts between laboratories of the Sorbonne Universités and MATISSE Consortia in Paris and Indian institutions in Bangalore, namely, Jawaharlal Nehru Centre for Advanced Scientific Research and Indian Institute of Science, in the field of Materials Science.

The workshop will consist of scientific presentations in the domains of Chemistry, Physics, Material Science as well as brief presentations of the Indian institutions and their research facilities.

**PROGRAM**

**Monday 7 November 2016**

08:55-09:00 **Welcome**

09:00 - 10:30 **(25+5 minute talks)** *Chair: Sebastian C. Peter, NCU, JNCASR*

* Bernard Perrin, Directeur de Recherche *‘Picosecond and terahertz acoustics in materials science’*
* D D Sarma SSCU, IISc, 'Properties *of CH3NH3PbX3 (X = I, Br, Cl) hybrid perovskites*'
* Rajesh Ganapathy ICMS, JNCASR, '*Crystals of colliodal crystals*'

10:30 - 10:45 **Coffee Break**

10:45 - 13:15 **(25+5 minute talks)** *Chair: Shobhana Narashiman, TSU, JNCASR*

* Michele Casula, Chargé de Recherche *‘Strong spin-orbit coupling in low-Z materials: avenues of spintronic applications in BaNiS2’*
* P S Anil Kumar, Physics, IISc, '*Spin hall effect mediated magnetization reversal'*
* Abhay Shukla, Professeur *‘2D materials: Spectroscopy and Applications’*
* Ranjani Viswanatha NCU, JNCASR  *'Magnetism in Quantum Dots'*

13:15 - 14:30 **Lunch break and Poster Session**

14:30 - 16:30 **(25+5 minute talks)** *Chair: Sridhar Rajaram, NCU, JNCASR*

* Florence Babonneau, Directrice de Recherche *‘Advanced solid-state NMR methods for the characterization of sol-gel materials’*
* T. Govindaraju NCU, JNCASR  *'DNA Nano-architectonics*'
* Claire-Marie Pradier, Directrice de Recherhe *‘Surface reactivity for catalysts and bio-interfaces’*
* Tapas K. Maji, CPMU, JNCASR, '*Nano/Mesoscale MOFs: Interplay between Size/Morphology and Functionality'*

16:30 - 16:45 **Coffee Break**

16:45 - 18:45 **(25+5 minutes talks)** *Chair: Vidhyadhiraja, TSU, JNCASR*

* Anshu Pandey, SSCU, IISc, 'Chemistry with bigger atoms'
* Mathieu Salanne, Professeur ‘*Computer simulations of energy storage materials*’
* S. Balasubramanian, CPMU, JNCASR, '*Modelling Supramolecular Polymers'*
* Rodolphe Vuilleumier, Professeur, *‘First-principles simulations of geological fluids: hydrothermal sources and carbon rich fluids of the upper mantle’*

**Tuesday 8 November 2016**

09:00 - 10:30 **(25+5 minutes talks)** *Chair K.S. Narayan, CPMU, JNCASR*

* Tristan Cren, Chargé de Recherche *‘Observation of Majorana fermions in nanoscale topological superconductors’*
* Ajay K. Sood, Physics, IISc, '*Raman Signatures of Quantum Spin Liquid State in Iridates*'

10:30 - 10:45 **Coffee Break**

10:45 - 13:15 **(25+5 minutes talks)** *Chair Srikanth Sastry,TSU, JNCASR*

* C.N.R. Rao, National Research Professor, Linus Pauling Research Professor (TBA)
* Livia Bove, Chargée de Recherche*‘Salty ice and clathrates under planetary conditions’*
* N. Ravishankar, MRC, IISc, *'Some Insights into Nucleation and Growth of Nanostructures and Hybrids*'
* Guillaume Fiquet, Directeur de Recherche *‘Earth and Planetary Interiors : challenges for static and dynamic pressures experiments’*

13:15 - 14:30 **Lunch and Poster Session**

14:30 - 16:00 **(25+5 minutes talks)**

* Nadine Witkowski, Professeur *‘Investigating surfaces and interfaces of organic and hybrid systems’*
* Subi J. George, NCU, JNCASR, *'Supra molecular Approach to Function Organic Materials*'
* S.M. Shivaprasad, ICMS, JNCASR, *'Confinement effects observed in GaN nanowall network'*

16:00 **Concluding remarks followed by Coffee Break and JNCASR Laboratory tour**

**Wednesday 09 November 2016** **Visit to IISc campus in the forenoon**