Symposium on "Contemporary Issues in Condensed Matter Systems" June 13-15, 2016

Venue: Indian Institute of Science, Bangalore

Organized By: Department of Physics IISc Bangalore

Organizing Committee Chairman:

Prof. V. Venkataraman, Dept of Physics, IISc Bangalore 560012 Tel: +91 80 2293 2314 or +91 80 2293 3286 Mob: 98867-98515

Email: venki@physics.iisc.ernet.in

June 13th Monday (Venue: Faculty Hall, IISc)

9.15 - 9.30 AM	Inaugural Function
9.30 - 10.20 AM	Inaugural Lecture by Prof. C.N. R. Rao, JNCASR Bangalore Aliovalent Anion Substitution in Oxides with Tunable Properties
10.20 - 10.40 AM	Tea / Coffee break
	Technical Session: I (Chaired by Prof. K.S. Narayan)
10.40 - 11.20 AM	Prof. Ashutosh Sharma, IIT Kanpur and Secretary, DST, Govt of India Harnessing Self-organization in Confined Soft Materials for Micro/Nanofabrication
11.20 - 12.00 noon	Prof. Richard Friend, Cavendish Laboratory UK Excitons and charges in molecular semiconductors
12.00 - 12.40 PM	Prof. T.V. Ramakrishnan, BHU Varanasi Learning About Quantum Spin Liquids
12.40 - 2.00 PM	Lunch at Main Guest House Reception Area, IISc Campus
	Technical Session: II (Chaired by Prof. S. Asokan)
2.00 - 2.40 PM	Prof. Eric Freysz, LOMA France THz nonlinear optics in condensed matter
2.40 - 3.20 PM	Prof. D.D. Sarma, IISc Bangalore Electronic structure of the elusive metastable state in chemically exfoliated few layer MoS ₂
3.20 - 4.00 PM	Prof. Sriram Ramaswamy, TCIS TIFR Hyderabad and IISc Bangalore Flocks with inertia: asymmetric exchange and information transfer
4.00 - 4.30 PM	Tea / Coffee break
4.30 - 5.30 PM	Felicitation program for Prof. A.K. Sood
7.00 PM onwards	Conference Dinner

June 14th Tuesday (Venue: Physics Dept Auditorium, IISc)

	Technical Session: III (Chaired by Prof. Surajit Sengupta)
9.10 - 9.50 AM	Prof. Y.H. Lee, SKKU Korea Towards large-area synthesis of 2D materials
9.50 - 10.30 AM	Prof. Jin Wang, Argonne USA Self-Assembly of Nanoparticle Superlattices and Membranes
10.30 - 11.10 AM	Prof. R.C. Budhani, IIT Kanpur Development of Quantum Metrology in India: a Few Baby Steps
11.10 - 11.30 AM	Tea / Coffee break
	Technical Session: IV (Chaired by Prof. S. Umapathy)
11.30 - 12.10 PM	Prof. S. Dattagupta, IISER Kolkata Quantum Fluctuation Theorem for dissipative Cyclotron Motion
12.10 - 12.50 PM	Prof. G. Ravindra Kumar, TIFR Mumbai Nanostructures, Femtoseconds and Terawatts
12.50 - 1.30 PM	Prof. D. Chowdhury, IIT Kanpur Molecular motor traffic: collective macro-molecular non-equilibrium phenomena in living matter
1.30 - 2.30 PM	Lunch Break
	Technical Session: V (Chaired by Prof. S.V. Bhat)
2.30 - 3.10 PM	Dr. C.S. Sundar, IGCAR Kalpakkam Magneto-transport in the Topological Insulator Bi ₂ Se ₃ : Role of defects and disorder
3.10 - 3.50 PM	Prof. Satyajit Banerjee, IIT Kanpur Jamming - unjamming transition and fluctuation relations associated with the driven vortex matter in 2H-NbS2 single crystals
3.50 - 4.30 PM	Prof. Rahul Nair, University of Manchester UK Science and applications of van der Waals materials assembly
4.30 - 5.10 PM	Dr. B.V.R. Tata, IGCAR Kalpakkam Long-range Attraction between Like-charged Colloids: Simulations and Microgravity Experiments
5.10 - 5.30 PM	Tea / Coffee break
5.30 - 6.15 PM	Evening lecture by Prof. Arun Grover, Panjab University Harbingers of higher education & research and national development in independent india: A selective comprehension
7.30 PM onwards	Banquet

June 15th Wednesday (Venue: Physics Dept Auditorium, IISc)

	Technical Session: VI (Chaired by Prof. V.A. Raghunathan)
9.10 - 9.50 AM	Prof. Prabal K Maiti, IISc Bangalore Structure, dynamics and thermodynamics of water under nano-confinement
9.50 - 10.30 AM	Prof. P.V. Satyam, IOP Bhubaneswar Anisotropy Driven Hetero-Nanostructures (SiGe and AuAg) on High Index Silicon Substrates
10.30 - 11.10 AM	Prof. Rajesh Ganapathy, JNCASR Bangalore Template-directed Self-Assembly of Colloidal Crystals
11.10 - 11.30 AM	Tea / Coffee break
	Technical Session: VII (Chaired by Prof. Anil Kumar)
11.30 - 12.10 PM	Prof. Umesh Waghmare, JNCASR Bangalore Prediction of robust non-centrosymmetric topological Dirac semi- metallic state in ternary half-Heusler compounds
12.10 - 12.50 PM	Prof. Surjeet Singh, IISER Pune The Pyrochlore Oxides: from geometrical frustration to interesting topological properties
12.50 - 1.30 PM	Prof. Rema Krishnaswamy, Azim Premji University, Bangalore Yielding and structural transitions in sheared soft matter
1.30 - 2.30 PM	Concluding session followed by Lunch