

# One-Day Discussion Meeting on Dynamics of Chemical and Biological Systems

Date: January 07, 2018

Venue: PBCEC Lecture room

Time	Speaker	Title of Talk
9:10 – 9:15	Opening Remarks	
<b>Session I: Chairman: A. Chandra</b>		
9:15 - 9:45	K. Tominaga (Kobe University)	Two-dimensional IR spectroscopy on vibrational frequency fluctuations in aqueous solutions
9:45 - 10:15	D. Goswami (IIT Kanpur)	Controlling solvent dynamics at nanoscale using femtosecond optical tweezers and pump-probe spectroscopy
10:15 - 10:45	Rajib Mitra (SNB Centre, Kolkata)	Application of THz Spectroscopy in Chemistry and Biology: Recent Advances and Challenges
<b>10:45 -11:15</b>	<b>TEA + Group Photo</b>	
<b>Session II: Chairman: D.L.V.K. Prasad</b>		
11:15 –11:45	Shinji Saito (IMS, Okazaki)	Effect of ion on collective orientation relaxation of water
11:45 –12:15	Debashree Chakraborty (NIT Karnataka)	Prion aggregation
12:15 -12:35	Abhinav Gupta	Efficient Exploration of High Dimensional Free Energy Landscapes
12:35 -12:55	Saheb Dutta	Aminoacylation reaction catalysed by Aspartyl tRNA Synthetase: A proton hopping mechanism of the charging step through water at the active site"
<b>12:55 - 14:20</b>	<b>LUNCH BREAK</b>	
<b>Session III: Chairman: Vishal Govindrao</b>		
14:20 –14:50	E. Chatani (Kobe University)	Observation of phospholipid membrane disruption associated with the fibrillation of amyloid $\beta$ peptide
14:50 –15:20	M. Chandra	Unveiling the modulating role of extracellular pH in permeation and accumulation of small molecules in subcellular compartments of Gram-negative <i>E. coli</i> using nonlinear spectroscopy
15:20- 15:40	Nidhi Sorout	Effects of boron nitride nanotubes on the secondary structure of Amyloid $\beta$ -peptide: Inhibition of amyloid aggregation via different pathways.
15:40 –16:00	Ramsha Javed	Enhance Sampling of Reaction Pathways
<b>16:00 –16:30</b>	<b>TEA</b>	
<b>Session IV: Chairman: T.G. Gopakumar</b>		
16:30 –17:00	N. Yamamoto	Protein hydration dynamics probed by broadband dielectric spectroscopy and neutron scattering
17:00 –17:30	P. Sen (IIT Kanpur)	Shift of Excitation Spectra at the Blue Edge of Emission (BEEms): A New Methodology to Probe Heterogeneity
17:30 –17:50	Deepika	Terahertz Spectra of Aqueous Systems from Molecular Dynamics Simulations with Polarizable Models
17:50 –18:10	Nilimesh Das	Size-Dependent Macromolecular Crowding Effect on Protein
18:10 –18:15	Concluding Remarks	