

# The Second International Symposium on Protein Folding and Dynamics

November 05-07, 2014

## Program

Wednesday, November 5, 2014

8.00 - 8.50 am	<b>Registration</b>
8.50 - 9.00 am	<b>Welcome</b> <b>Devarajan Thirumalai, University of Maryland, USA</b>
<b>Session 1</b> <b>Chair: Biman Bagchi, Indian Institute of Science, India</b>	
9.00-9.40 am	Hydrodynamic radii and internal friction in end states across the folding equilibrium <b>Abani K Bhuyan, University of Hyderabad, India</b>
9.40-10.20 am	Topology-dependent internal friction in protein folding <b>Robert Best, National Institutes of Health, USA</b>
10.20-11.00 am	Searching for transition paths <b>Henri Orland, CEA, France</b>
11.00 - 11.30 am	<b>Coffee/Tea</b>
<b>Session 2</b> <b>Chair: Athi Naganathan, Indian Institute of Technology, Madras, India</b>	
11.30 -12.10 pm	Protein folding transition paths: single molecule experiments, theory and simulations <b>William A Eaton, National Institutes of Health, USA</b>
12.10 - 12.40 pm	Dry molten globular states and the mechanism of solvent denaturation of proteins <b>Santosh Kumar Jha, National Chemical Laboratory, India</b>
12.40 - 1.00 pm	Characterization of protein unfolding under native-like conditions <b>Pooja Malhotra, National Centre for Biological Sciences, India</b>
1.00-2.00 pm	<b>Lunch</b>
2.00 - 4.00 pm	<b>Poster Session</b>
3.30 - 4.00 pm	<b>Coffee/Tea</b>

<b>Session 3</b> <b>Chair: Shachi Gosavi, National Centre for Biological Sciences, India</b>	
4.00 - 4.40 pm	Probing free energy surfaces and conformational motions in fast-folding proteins by single molecule fluorescence <b>Victor Muñoz, CNB, Spain</b>
4.40 - 5.20 pm	Determinants of fast folding, super slow unfolding and function in the symmetric $\beta$ -trefoil superfold <b>Elizabeth Meiering, University of Waterloo, Canada</b>
5.20 – 5:40 pm	Protein and RNA structure prediction by integration of co-evolutionary contact information into molecular simulation <b>Alexander Schug, Karlsruhe Institute for Technology, Germany</b>
6.30 - 8.00 pm	<b>Mixer and Dinner</b>

**Thursday, November 6, 2014**

<b>Session 4</b> <b>Chair: R. Mahalakshmi, IISER Bhopal, India</b>	
9.00-9.40 am	Cooperativity, non-native interactions, desolvation effects and barriers in protein folding <b>Hue-Sun Chan, University of Toronto, Canada</b>
9.40-10.20 am	Parallel tuning of activation and repression in disorder- mediated allostery <b>Vincent J Hilser, Johns Hopkins University, USA</b>
10.20-11.00 am	New sequence motifs that stabilize the cis – conformation of peptidyl – prolyl bonds <b>Gautam Basu, Bose Institute, India</b>
11.00 - 11.30 am	<b>Coffee/Tea</b>
<b>Session 5</b> <b>Chair: ASR Koti, Tata Institute of Fundamental Research, India</b>	
11.30 -12.10 pm	Manipulating protein stability by modifications <b>Yaakov Koby Levy, Weizmann Institute of Science, Israel</b>
12.10 - 12.40 pm	Thermodynamics of ubiquitin folding <b>Govardhan Reddy, Indian Institute of Science, India</b>
12.40 - 1.00 pm	Mechanistic insight into surfactant-mediated amyloid induction in diverse classes of proteins: unveiling the role of charge and hydrophobicity of surfactants on amyloid induction <b>Rizwan Hasan Khan, Aligarh Muslim University, India</b>
1.00 - 2.00 pm	<b>Lunch</b>
2.00-4.00 pm	<b>Poster Session</b>
3.30-4.00 pm	<b>Coffee/Tea</b>

<b>Session 6</b> <b>Chair: Samrat Mukhopadhyay, IISER, Mohali, India</b>	
4.00-4.40 pm	The problem of protein folding and its relationship to bioscience <b>Kunihiro Kuwajima, CPIS, Japan</b>
4.40-5.20 pm	<b>José Onuchic, Rice University, USA</b>
5.20-5.40 pm	Delineating a non-native ensemble of an obligate GroEL substrate <b>Lipi Thukral, Institute of Genomics and Integrative Biology, India</b>
5.40-6.00 pm	Domain insertion promotes cooperative folding while accommodating function at domain interfaces <b>Hemanth Giri Rao, National Centre for Biological Sciences, India</b>
6.30-8.00 pm	<b>Mixer and Dinner</b>

**Friday, November 7, 2014**

<b>Session 7</b> <b>Chair: Patrick D'Silva, Indian Institute of Science, India</b>	
9.00-9.40 am	Optimizing protein folding with a parallel processing, iterative annealing machine <b>George Lorimer, University of Maryland, USA</b>
9.40-10.20 am	Mechanism of the Hsp70 chaperone network in protein disaggregation <b>Bernd Bukau, University of Heidelberg, Germany</b>
10.20-11.00 am	Some mechanisms for optimizing multi-domain protein folding <b>Amnon Horovitz, Weizmann Institute, Israel</b>
11.00 - 11.30 am	<b>Coffee/Tea</b>
<b>Session 8</b> <b>Chair: Kanchan Garai, Tata Institute of Fundamental Research, India</b>	
11.30 -12.10 pm	NMR investigations of protein folding on the ribosome <b>John Christodoulou, University College London, UK</b>
12.10 - 12.40 pm	Chemical chaperones and their mechanism of action <b>KausikChakraborty, Institute of Genomics and Integrative Biology,India</b>
12.40 - 1.00 pm	How chaperone GroEL modulate the folding process of aggregation prone proteins? <b>Tapan K Chaudhuri, Indian Institute of Technology Delhi, India</b>
1.00 - 2.00 pm	<b>Lunch</b>
2.00-4.00 pm	<b>Poster Session</b>
3.30-4.00 pm	<b>Coffee/Tea</b>
<b>Session 9</b> <b>Chair: Krishnananda Chattopadhyay, Indian Institute of Chemical Biology, India</b>	
4.00-4.20 pm	Folding-oligomerization of fibrin using all atom simulations <b>Meher Kiran Prakash, J Nehru Centre for Advanced Scientific Research, India</b>

4.20-4.40 pm	Local stiffness and damping coefficient measurements on a single unfolding protein using small-amplitude atomic force microscopy <b>Shivprasad Patil, IISER Pune, India</b>
4.40 -5.00 pm	Rational stabilization of helix 2 of the prion protein prevents its misfolding <b>Jogender Singh, National Centre for Biological Sciences, India</b>
5.00-5.05 pm	<b>Farewell</b> <b>Jayant Udgaonkar, National Centre for Biological Sciences, India</b>
6.30-8.00 pm	<b>Mixer and Dinner</b>