

International Conference on

Dynamics of Disordered Materials on the Nanometer Scale

February 23-27, 2004

Daewoo Hotel, Hanoi, Vietnam

<http://www.engconfintl.org/4ah.html>

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- *Invited keynote speakers*
- *Featured talks*
- *Poster sessions*

Second Announcement

This international conference will promote the confluence of ideas and expertise from diverse experimental and theoretical approaches in order to accelerate research on the dynamics of disordered materials on the nanometer scale. The meeting will bring together experimentalists and theorists from the physical and biological sciences and engineering with expertise in synthesis and characterization of materials as well as in their theoretical modeling and computer simulations. . Diverse aspects of the dynamics of disordered systems will be covered including systems both in and out of thermodynamic equilibrium. While theoretical concepts have been developed continuously over the past 50 years, the last decade has witnessed heightened activity in experimental and computational work in disordered materials. For many of the phenomena involved, the length scales of interest are in the nanometer range.

Conference Chairs

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X. Hoang Trinh, Institute of Physics, NCST, Hanoi

Partial list of proposed keynote and invited speakers and topics

Biological nanoscale materials

Pierre-Gilles de Gennes, Institut Curie, Paris, France:

The dynamics of cellular adhesion

Françoise Livolant, Laboratoire de Physique des Solides, Orsay, France:

Dense phases of DNA and nucleosomes

Bilayers and membranes

Michael Klein, University of Pennsylvania, Philadelphia, PA, USA:

Dynamics of lipid bilayers

Antonio Deriu, University of Parma, Italy:

Biomolecular dynamics: from model systems towards complex macromolecular machines

Confinement effects on polymer dynamics

Douglas McFarlane, Monash University, Melbourne, Australia:

Transport in polymer electrolytes

Michel Armand, University of Montreal, Canada:

Nanocomposite polymer electrolytes

Dynamics of nano-confined fluids

Sow-Hsin Chen, MIT, Cambridge, MA, USA:

Dynamics of interfacial water in mesoporous silica matrices

Henry Glyde, University of Delaware, DE, USA:

Dynamics of confined quantum fluids

Nanoclusters and granular materials

Leo Kadanoff, University of Chicago, IL, USA:

Dynamics of granular matter

Marie-Louise Saboungi, CRMD, Orléans, France:

Dynamics of confined semiconductors

Nanostructured materials

Shigehito Deki, Kobe University, Japan:

Nanostructured photonic materials

Marco Fontana, University of Parma, Italy:

Nanoglasses

Dynamical scaling in disordered systems

Kia Ngai, Naval Research Lab., Washington, DC, USA:

Glass transition dynamics and viscoelastic properties of polymer thin films and polymers confined in nanopores

Mo Li, Georgia Institute of Technology, Atlanta, GA, USA:

Temporal and spatial inhomogeneity in metallic glass-forming systems

Mechanical properties on the nanoscale

Elisabeth Bouchaud, CEA, Saclay, France:

Nanoscale damage and crack propagation in glassy materials

Kenji Suzuki, Advanced Institute of Materials Science, Japan:

Crystal-to-amorphous solid state structure transitions in metallic alloys

On-line Registration & Abstract Submission, Information about Lodging & Travel, see <http://www.engconfintl.org/4ah.html>

cover photo: Halong Bay - a point of interest for optional post-conference excursion

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