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CALL FOR PAPERS

ABSTRACT DEADLINE: JUNE 21, 2005

REMINDER: In fairness to all potential authors, late abstracts will not be accepted.

MRS Symposium N: Dynamics in Small Confining Systems VIII

Interfacial science has rapidly expanded beyond the original realm of chemistry to include physics, mechanical and chemical engineering, biology, materials science, and other specialized subfields. This eighth international symposium in a series sponsored by the MRS will emphasize a wide range of topics covering static and dynamic properties of small confining systems. Participants from various disciplines will share different points of view on the questions of how ultrasmall geometries can force a system to behave in ways significantly different than its behavior in the bulk, how this difference affects molecular properties, and how it is probed. We encourage researchers from all scientific disciplines to present theoretical, experimental, and computational evidence of the effects of confinement on gaseous, liquid, and solid systems.

Both oral and poster presentations will be accepted on topics relating to:

- Confined and **anomalous dynamics** in porous, supramolecular, and biological systems
- New methods to probe **dynamics in confinement** (scattering, NMR, optical probes, and direct-imaging techniques)
- **Diffusion** and **reactions** in confinement
- **Adsorption** and phase transitions of simple and complex fluids at interfaces
- **Microfluidics** and hydrodynamics near solid surfaces
- **Friction** and structural properties of **fluids under shear**
- **Dynamic** force spectroscopy and **manipulation** of individual atoms and molecules
- **Motility** in confined biological and biomimetic systems
- Numerical modeling and **computational techniques** of confined systems
- **Synthesis** and **design** of new confined geometries and **supramolecular** systems

A joint session is anticipated with Symposium NN: *Scanning Probe Microscopy in Materials Research*.

Invited speakers (tentative) include: **P. Barbara** (Univ. of Texas-Austin), **J. Bibette** (ESPCI Paris, France), **L. Bocquet** (Univ. Claude Bernard Lyon 1, France), **R.W. Carpick** (Univ. of Wisconsin-Madison), **D. Dlott** (Univ. of Illinois), **D. English** (Univ. of Maryland), **M. Fayer** (Stanford Univ.), **S. Granick** (Univ. of Illinois, Urbana-Champaign), **F. Julicher** (Max Planck Inst.-Dresden, Germany), **J. Kaerger** (Univ. Leipzig, Germany), **E. Kierlik** (Univ. Paris VI, France), **J. Klafter** (Tel Aviv Univ., Israel), **J. Klein** (Oxford Univ., United Kingdom, and Weizmann Inst., Israel), **R. Kopelman** (Univ. of Michigan), **F. Kremer** (Leipzig Univ., Germany), **D. Kuciauskas** (Virginia Commonwealth Univ.), **B. Ladanyi** (Univ. of Colorado), **U. Landman** (Georgia Inst. of Technology), **F. Livolant** (Paris Sud Univ., France), **A. Meller** (Rowland Inst., Harvard Univ.), **R. Merkel** (Research Center, Jülich, Germany), **E. Meyer** (Univ. Basel, Switzerland), **F. Mugele** (Univ. Twente, The Netherlands), **A.V. Neimark** (TRI, Princeton), **J.B. Pethica** (Trinity College-Dublin, Ireland), **M. Salmeron** (Univ. of California-Berkeley and Lawrence Berkeley National Lab), **S. Sinha** (Univ. of California-San Diego), **W. Thompson** (Univ. of Kansas), and **E. Wolf** (Univ. Grenoble, France).

Symposium Organizers

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For additional meeting information, visit the MRS Web site at www.mrs.org/meetings/ or contact:



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