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ABSTRACT DEADLINE: NOVEMBER 1, 2005

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

MRS Symposium AA: Molecular Motors, Nanomachines, and Engineered Bio-Hybrid Systems

This symposium will cover the generation of motion at the nano- and micrometer scale, including single- and multimolecule motors of synthetic and biological origin. We will discuss single-motor design and mechanics, and motor application in solution and in engineered systems such as synthetic assemblies, liquid crystal elastomers, engineered muscle, and motor-protein-driven transport systems. This broad forum is meant to promote discussions and collaborations across the molecular-motor field, thereby advancing the development of nanomachines.

Papers of theoretical and experimental science are solicited for, but not limited to, the following areas:

- Biological single-motor mechanics
- Biological motors in engineered systems
- Synthetic molecular machines
- Polymeric actuators
- Micro-organism-driven transport

The symposium will consist of both invited and contributed talks.

Invited speakers include: **Dean Astumian** (Univ. of Maine), **George Bachand** (Sandia National Labs), **Steven Block** (Stanford Univ.), **Alberto Credi** (Univ. of Bologna, Italy), **Robert Dennis** (Univ. of North Carolina), **Marileen Dogterom** (FOM Inst. for Atomic & Molecular Physics, The Netherlands), **Amar Flood** (Univ. of California, Los Angeles), **William A. Goddard III** (California Inst. of Technology), **Zhibin Guan** (Univ. of California, Irvine), **Henry Hess** (Univ. of Florida), **Peter Palfy-Muhoray** (Kent State Univ.), **James Spudich** (Stanford Univ.), and **Rudolf Zentel** (Univ. of Mainz, Germany).

Symposium Organizers

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