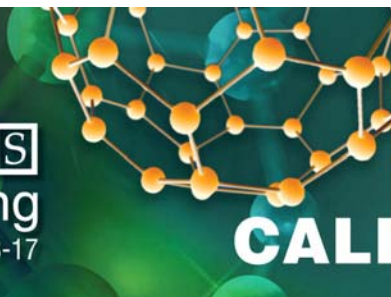




2009 MRS
spring meeting
San Francisco, CA • April 13-17



Abstract Deadline: November 3, 2008

www.mrs.org/spring2009

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

CALL FOR PAPERS

MRS Symposium Y: Nanocrystalline Materials as Precursors for Complex Multifunctional Structures through Chemical Transformations and Self Assembly

Sustained progress in the synthesis of nanostructures has enabled recent use of these materials as the precursors that can be chemically transformed into new complex nanostructures through various approaches, such as addition reactions, Kirkendall process, and substitution reactions, including galvanic displacement. Nanomaterials with new compositions, morphologies, and properties that were previously inaccessible by direct chemical synthesis routes can now be formed. Nanostructures with well-controlled size and shapes have also been used as building blocks for the fabrication of complex superstructures through self-assembly processes.

The aim of this symposium is to bring together a critical mass of researchers to facilitate discussions on how to systematically exploit different chemical reactions for the production of complex multifunctional nanostructures, as well as to develop novel self-organization strategies with high degrees of compositional and structural control.

Topics of interest include:

- Composition control during chemical transformations
- Morphology control during chemical transformations
- Templating grain growth of ceramics
- Self assembly of preformed nanoscale building blocks and properties of self-assembled nanocrystal solids
- Novel properties associated with derivated nanostructures
- Theoretical modeling of chemical transformation and self assembly of nanostructures

Invited speakers include:

A. Paul Alivisatos (Univ. of California-Berkeley), **Amanda Barnard** (Univ. of Melbourne, Australia), **Jinwoo Cheon** (Yonsei Univ., Korea), **Sharon C. Glotzer** (Univ. of Michigan), **Ulrich Goesele** (Max-Planck-Inst. of Microstructure Physics, Germany), **Nicholas A. Kotov** (Univ. of Michigan), **Yadong Li** (Tsinghua Univ., China), **Xiao-Min Lin** (Argonne National Lab), **Christopher B. Murray** (Univ. of Pennsylvania), **Murugappan Muthukumar** (Univ. of Massachusetts), **Steven O'Brian** (Columbia Univ.), **Teri W. Odom** (Northwestern Univ.), **Xiaogang Peng** (Univ. of Arkansas), **John Rogers** (Univ. of Illinois, Urbana-Champaign), **Raymond Schaak** (Pennsylvania State Univ.), **Elena Shevchenko** (Argonne National Lab), **Dong Hee Son** (Texas A&M Univ.), **Shouheng Sun** (Brown Univ.), **Toshihiko Tani** (Toyota Technological Inst., Japan), **Katsuyo Thornton** (Univ. of Michigan), **Horst Weller** (Univ. of Hamburg, Germany), **Younan Xia** (Washington Univ.), **Bing Xu** (Hong Kong Univ. of Science and Technology, China), **Peidong Yang** (Univ. of California-Berkeley), **Shu Yang** (Univ. of Pennsylvania), and **Jackie Ying** (MIT, Inst. of Bioengineering and Nanotechnology, Singapore).

Symposium Organizers

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