



Materials Science and Technology
2010 Conference and Exhibition

October 17-21 | 2010 Houston, Texas

Call For Papers!

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forum for materials science and engineering.*

Bioinspired Materials Engineering

Scope

The purpose of this symposium is to present the results of current basic and applied research work, with emphasis on multidisciplinary methods adopted from biological processes and their potential applications. We are encouraging contributions from research groups working in the fields of: molecular recognition and self-assembly, hierarchical patterning; structure/properties relationships, biotemplating; materials synthesis mediated by microorganisms (bacteria, virus, fungi, algae), biopolymer/ceramic composites. Microstructure pattern formation for functional materials by bioinspired techniques leads to hierarchically structured functional materials with improved and designed (piezo-)electrical, magnetic and catalytic properties. Assembly of periodical patterns with local control of materials composition is of particular interest for optical and photonic devices. The vision for bio-inspired materials provides potential applications as novel light-weight structural materials, high-efficiency catalysts and improved biomedical materials with stimuli-adaptive, self-assembly and self-repairing properties. Presentations including patterning procedures such as biomineralization, self-assembly, sol-gel procedures, solid state synthesis soft lithographic methods and layer-by-layer deposition with the focus on materials functions and properties are welcome.

Organizers

PD Dr. Cordt Zollfrank, Department of Materials Science, University of Erlangen-Nuremberg, Germany

Professor Dr. Ilhan A. Aksay, Chemical Engineering, Princeton University, United States

Professor Dr. Di Zhang, State Key Lab of Metal Matrix Composites Shanghai Jiao Tong University, China

Dr. Simon R. Hall, Centre for Organized Matter Chemistry, University of Bristol, United Kingdom

To Submit an Abstract

Submit a 150-word abstract by March 15, 2010. Visit www.matscitech.org and follow the instructions for submission. Conference organizers will receive electronic notification of all submitted abstracts. Should you have questions concerning the online abstract system, please contact the programming administrator at (724) 776-9000, ext. 227 or by e-mail at programming@programmester.org.

Conference Information

MS&T annual conferences are hosted by four leading materials societies: ACerS, AIST, ASM and TMS. This partnership brings together scientists, engineers, students and suppliers to discuss current research & applications, and to shape the future of materials science and technology. Since corrosion has become a very relevant topic to materials, NACE International will co-sponsor MS&T'10. For further details, please visit www.matscitech.org