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ABSTRACT DEADLINE: NOVEMBER 1, 2005

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

MRS Symposium R: Nanostructured Materials and Hybrid Composites for Gas Sensors and Biomedical Applications

In the past few years, progress has been achieved in the synthesis as well as structural, physical, and chemical characterization of materials with structural scales in the range of 1-100nm that exhibit size-dependent properties. Among the newly developed materials, nanobelts, nanowires, and nanorings of metal oxides, hybrid inorganic-organic composites and biodoped materials have been tested as gas-sensing devices. These materials are the focus of this symposium. Leading experts from the fields of nanomaterials, chemical, and biochemical sensors will get together to discuss the state of the art and to define future research directions.

The proposed symposium will cover the following areas:

- Synthesis and characterization of gas-sensing materials
- Gas-nanophase interactions
- Interaction of inorganic and biological materials in composites
- Nanostructures
- Sensor devices, and electronic noses and tongues
- DNA detection
- Immunosensors
- Biochemical sensors

Invited speakers (partial list) include: **B.S. Dunn** (Univ. of California-Los Angeles), **C.A. Grimes** (Pennsylvania State Univ.), **C.G. Granqvist** (Uppsala University, Sweden), **A. Kolmakov** (Carbondale Univ.), **J.R. Morante** (Univ. of Barcelona, Italy), **K.S. Suslick** (Univ. of Illinois-Urbana), and **Z.L. Wang** (Georgia Inst. of Technology).

Symposium Organizers

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