



## 2<sup>nd</sup> International Workshop, Kiel, Germany 29. - 31. August 2007

# Smart Materials and Structures

Smart, multifunctional materials have been gaining an ever increasing importance in all kinds of devices and machines.

This 2<sup>nd</sup> International Workshop on Smart Materials & Structures aims to be the platform for presenting the state of the art and new developments in the broad area of smart materials and their applications.

### Program

Over 20 keynotes and invited talks cover new developments in this exciting field. Including:

- M. Fiebig, *Visualizing magnetoelectric coupling in multiferroics: New developments*
- S. Mátéfi-Tempfli, *Fabrication of nanowires and nanostructures. Measurements and applications*
- J. F. Scott, *Combining nano-ferroelectrics with magnetoelectricity*
- Nava Setter, *2D piezoelectric structures*
- N. D. Mathur, *Giant sharp and persistent converse magnetoelectric effects in multiferroic epitaxial heterostructures*
- W. Prellier, *Design of multiferroic superlattices*
- R. Bennett, *Nonstoichiometric oxide and metal interfaces and reactions*
- H.-G. Rubahn, *Organic nanosensors: development and implementation*

The workshop also aims to be a forum for initiating research cooperation between academia and industry, particularly in the event of the new thematic calls of the EU 7th Framework Program.

The workshop will consist of two symposia on multifunctional materials and on nanocomposites. The proceedings will appear with a respective division as special issues of the Journal of Electroceramics and of Applied Physics A.

### Scope

- Piezoelectric and electrostrictive materials and devices: processing, characterization, domain engineering, submicrometer probing, device applications, including single crystals, ceramics, relaxors, lead-free piezoelectrics, and composites
- Thin and thick film ferroelectrics and their applications in MEMS (processing, characterization, microfabrication, integration, applications)
- Multiferroic materials and composites: thin films and bulk materials, magnetoelectric coupling mechanisms and modelling, spintronics, applications
- Ferroelastic materials and composites: emerging new materials (negative stiffness, negative CTE materials, modelling, applications)
- Other nano- and microstructured materials: processing, characterization, integration, etc.
- Thermoelectric materials and their applications

[www.workshop-smartmaterials.com](http://www.workshop-smartmaterials.com)

**Deadline for abstract submission:**  
May 31, 2007