

Special Issue on Current Trends in Smart Material Applications for Engineering and Science

Call for Papers

According to a survey, the global market for smart materials in 2010 was \$19.6 billion. It is expected to approach \$40 billion by 2016, with an annual growth rate (CAGR) of 12.8%. Smart materials have found its niche applications in various fields of engineering and science. In the present, the applications of smart materials range from noise and vibrations controls to structural health monitoring (SHM) of engineering structures. The smart materials like piezo-ceramic sensors, shape memory alloys, and fiber optical sensors have proved to be significant alternatives to various conventional methods for engineering and science. The main focus of this special issue will be on the new and existing smart material applications including commercial, industrial, medical, research, and military applications.

We invite authors to submit original research articles as well as review articles that will summarize the most recent developments and current trends/ideas in the field of smart materials for engineering and science with a special emphasis given to the technical and observational results obtained within the last 5 years. Potential topics include, but are not limited to:

- Actuators and sensors
- Smart material applications (civil, mechanical, and aerospace industry)
- Smart materials for medicine, food, heritage, colour change, and solar radiation control (e.g., electrochromic materials)
- Sensor network (wireless applications)
- Structural health monitoring/nondestructive evaluation
- Fiber optical sensors/magnetostrictive materials
- Microfiber composites/piezoceramic materials
- Self-healing materials/self-diagnostic sensors
- Shape memory alloys/temperature responsive materials
- Polymers, polyvinylidene fluoride patches
- Energy harvesting of sensors
- Emerging trends of smart materials

- Market survey of smart materials (any type) for the next decade
- Future strategies in development of smart materials

Before submission authors should carefully read over the journal's Author Guidelines, which are located at <http://www.hindawi.com/journals/smr/guidelines/>. Prospective authors should submit an electronic copy of their complete manuscript through the journal Manuscript Tracking System at <http://mts.hindawi.com/> according to the following timetable:

Manuscript Due	Friday, 6 July 2012
First Round of Reviews	Friday, 28 September 2012
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Lead Guest Editor

Venu Gopal Madhav Annamdas, Nanyang Technological University, 50 Nanyang Avenue, Singapore 639798; anna0002@e.ntu.edu.sg

Guest Editors

Yaowen Yang, School of Civil and Environmental Engineering, Nanyang Technological University, 50 Nanyang Avenue, Singapore 639798; cywyang@ntu.edu.sg

Seunghee Park, Department of Civil and Environmental Engineering, Sungkyunkwan University, 300 Cheoncheondong Jangangu, Gyeonggi Suwon, 440-746, Republic of Korea; shparkpc@skku.edu

Kiran Kishore Kumar H. Annamdas, Stratford University, 7777 Leesburg Pike, Falls Church, VA 22043, USA; kannamdas1528@mymail.stratford.edu

Kevin Kuang Sze Chiang, Department of Civil Engineering, National University of Singapore, Singapore; ceeksck@nus.edu.sg