

## Special Issue on Nanomaterials Based Energy Sources

### Call for Papers

The most advanced nanomaterials projects related to energy are: storage, conversion, manufacturing improvements by reducing materials and process rates, energy saving (by better thermal insulation for example), and enhanced renewable energy sources.

#### Increasing the efficiency of energy production

The degree of efficiency of the internal combustion engine is about 30-40% at present. Nanotechnology could improve combustion by designing specific catalysts with maximized surface area. In 2005, scientists at the University of Toronto developed a spray-on nanoparticle substance that, when applied to a surface, instantly transforms it into a solar collector.

#### Nuclear Accident Cleanup and Waste Storage

Nanomaterials deployed by swarm robotics may be helpful for decontaminating a site of a nuclear accident which poses hazards to humans because of high levels of radiation and radioactive particles. Hot nuclear compounds such as Corium or melting fuel rods may be contained in "bubbles" made from nanomaterials that are designed to isolate the harmful effects of nuclear activity occurring inside of them from the outside environment that organisms inhabit.

In this special issue, we intend to invite front-line researchers and authors to submit original research and review articles on exploring **Nanomaterials Based Energy Sources**.

Authors should read over the journal's [Author's Guidelines](#) carefully before submission, Prospective authors should submit an electronic copy of their complete manuscript through the journal [Paper Submission System](#).

Please kindly notice that the "**Special Issue**" under your manuscript title is supposed to be specified and the research field "**Special Issue-Nanomaterials Based Energy Sources**" should be chosen during your submission.

According to the following timetable:

Manuscript Due	January 25th, 2013
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