

**239th ACS National Meeting & Exposition
March 21-25, 2010
San Francisco, CA**

Symposium on

Nanotechnology: Enabling Sustainable Solutions for Potable Water

CALL FOR PAPERS

Engineered nanomaterials are expected to provide major societal benefits, improving our quality of life. Major areas in which such benefits are expected include medical therapies and diagnoses, environmental restoration and protection, renewable energy production, energy storage and transmission, and increased water quantity and improved water quality. The United Nations has as one of its eight Millennium Goals that of achieving environmental sustainability and one of the targets that should be pursued in attainment of this goal is Target 3: Halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation. Improving access to clean, potable water is vital to the development of a sustainable society. Treating saline water sources and remediating contaminated water sources will be required to substantially improve water supplies. Nanotechnology enabled tools and solutions will also positively impact water quality and quantity.

This symposium will feature papers (both invited and contributed) of technological advances, both those in the exploratory research stage as well as those in the later pilot/field demonstration stage, that have the potential to increase the supply of drinking water and water useful for irrigation, sanitation and other critical purposes. The symposium will include (i) mechanistic aspects of the development and evaluation of nanomaterials, nanodevices, active nanosystems, and complete nanotechnology-based processes for sustainable water production, treatment, and purification, (ii) environmental chemistry phenomena that take place in such systems, (iii) current and future applications of promising nanotechnologies that have the potential to sustainably increase water supply and enhance water quality in both industrialized nations and the developing world, and (iv) the use of sustainable energy sources to drive nanotechnologies applied for drinking water production. Providing enough and good quality drinking water and sufficient water for other uses for all people is a challenge but it is one of the ultimate goals and a condition to achieve prosperity and sustainability in the world.

Symposium Organizers:

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