

Emerging Applications in Membrane Science and Technology

240th ACS National Meeting in Boston, MA

August 22-26, 2010

Call for papers closes: March 22, 2010 <http://abstracts.acs.org>

Short Description of the Symposium

Energy, water, affordable healthcare and global warming are four major concerns resulting from resource depletion, record high oil prices, clean water shortages, high costs of pharmaceuticals, and changing climate conditions. Among many potential solutions, advance in membrane technology is one of the most direct, effective and feasible approaches to solve these sophisticated issues.

Scope

This membrane symposium is aimed at presenting cutting-edge membrane research and development for water reuse and desalination, energy development including biofuels, CO₂ capture, pharmaceutical purification and separation, and biomedical applications.

The proposed topics are:

Membranes for water reuse and desalination

- Microfiltration and ultrafiltration
- Membrane bioreactors and fouling
- Nano-filtration and RO
- Emerging membrane technologies (membrane distillation, forward osmosis and others)

Membranes for pharmaceutical separation and biomedical applications

- Protein separation
- Chiral separation
- Biomedical applications

Membranes for energy, gas separation and CO₂ capture

- Hydrogen and natural gas purification
- Bioenergy (biogas and biofuel)
- CO₂ capture

Membrane materials and sciences

- Mixed matrix membranes
- Gas separation
- Pervaporation
- Membrane formation
- Membrane characterization

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