



## Editorial

*Third Oxford Water and Membranes Research Event 12th –15th September 2010.*

A growth in world population, an increase in demand for global resources, a changing global climate, and pollution of available water resources are all exerting unprecedented demands on fresh water supplies around the world. With available sources over-allocated, many regions of the world, including the UK, are turning to alternative supplies such as sea water, brackish ground and surface water, and reclaimed waste-water. Furthermore, rising energy costs and global warming, both linked to use of fossil-fuels, are driving the need for low energy, more sustainable forms of water treatment and reclamation. Lack of water sanitation is associated with tragic levels of infant mortality in the developing world. Along with food and energy, the sustainable treatment and supply of clean water and the treatment and re-use of wastewater thus remain the most significant challenges to face global society in the 21st century.

Membrane technology in water treatment is rapidly establishing itself as one of the most promising future solutions to this challenge at low energy and reasonable price. A consortium of leading international scientists convened once again at the University of Oxford from September 12–15, 2010, to participate in a Research Event on the application of membrane technology in water treatment and desalination. This biannual event was a huge success, and has established the Oxford Research Event as a fixture on the small events calendar for water and membranes research. With the kind support of Miriam Balaban, selected papers from the event are now being published in *Desalination and Water Treatment*.

As with the previous Water and Membranes Research Event at Oxford, it turned out to be a most stimulating and unique experience, in a special intellectual, architectural and social environment. The four-day event explored the full breadth of the field, with sessions on functionalized and modified membranes, nanofiltration, coagulation and pre-treatments, wastewater treatment and planning, membrane fouling, and two sessions each on membrane bioreactors, biofilms, and desalination, including a session on the emerging technology of forward osmosis. There was also an outstanding display of posters. Once again, the 50 or so participants learned much from their colleagues, engaging actively in the sessions, as well as finding new friends and fresh inspiration. In the spirit of the event, plenty of time was also built in for informal discussions and social interaction. We hope you find the papers of interest, and look forward very much to seeing some of you at the next Oxford event.

### *The Editors*

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