

# National Water Research Institute

April 17, 2008 E-Newsletter

## Report Available on Global Perspective of Low Pressure Membranes

NWRI is pleased to announce its newest downloadable publication, *A Global Perspective of Low Pressure Membranes*, prepared by David Furukawa, P.E., Ch.E. of Separation Consultants, Inc. Furukawa is an expert on membrane technologies.

Low pressure membrane technology represents a fast-growing industry, and these products will continue to be incorporated into future water and wastewater treatment applications throughout the world. As with reverse osmosis previously, microfiltration, ultrafiltration, and membrane bioreactors underwent a similar development period when they were used for many different niche applications before their broadest applications were recognized.

This 13-page report is a review of the current status of this industry and includes an account of actual installed capacity through the end of the year 2006. The data comprise the results from 13 companies who provided information on their installations (representing more than 90 percent of all installed plants worldwide).

The report includes discussions on industry growth, installed capacity and application, global market and costs, and conclusions. To download this final project report, please visit [www.nwri-usa.org/e-publications](http://www.nwri-usa.org/e-publications).

## Graduate Fellowship Conference Proceedings Available Online

Proceedings are now available from the Second Annual NWRI Graduate Fellowship Research Conference, held on April 4, 2008, in Washington DC. The proceedings include 18 extended abstracts and a CD with conference presentations. Examples of topics include:

- "Biomimetic Membranes for Desalination" by Manish Kumar, University of Illinois at Urbana-Champaign (advisor Dr. Mark Clark)
- "High-Efficiency Hydrogen Gas Production Using a Microbial Electrolysis Cell (MEC)" by Douglas Call, The Pennsylvania State University (advisor Dr. Bruce Logan)
- "Drinking Water Quality and Climate Change: Planning in the Midst of Uncertainty" by Erin Towler, University of Colorado at Boulder (advisors Dr. Balaji Rajagopalan and Dr. R. Scott Summers)
- "Treatment of Produced Water for Beneficial Use Using Novel Integrated Membrane Systems" by Katie Benko, Colorado School of Mines (advisor Dr. Jörg Drewes)

Conference sponsors include the Joan Irvine Smith & Athalie R. Clarke Foundation, American Membrane Technology Association, and NWRI's Corporate Associates:

- Boyle Engineering
- Cargill, Inc
- Carollo Engineers
- CDM
- CH2M Hill
- Kennedy/Jenks Consultants
- MWH

- Malcolm Pirnie, Inc.

The 138-page proceedings are available to download at [www.nwri-usa.org/gradconference](http://www.nwri-usa.org/gradconference).

## **Advanced Membrane Technologies: A One-Day Seminar for Treating Brackish Groundwater, Seawater, and Reclaimed Water**

Registration is now open for a 1-day seminar on "Advanced Membrane Technologies: Treating Brackish Groundwater, Seawater and Reclaimed Water" to be held on Wednesday, May 7, 2008, at Stanford University in Stanford, California. Membrane technologies are rapidly advancing and have become a compelling solution for many water/wastewater treatment, reuse and desalination applications. Presentations will include:

- Basics of Membrane Separation by Dr. Harry Ridgway of AquaMem Consultants.
- Seawater Reverse Osmosis Desalination by Dr. Nikolay Voutchkov of Poseidon Resources Corporation
- Nanotechnology-Based Membranes by Dr. Eric M.V. Hoek of the University of California, Los Angeles
- Organic Contaminant Removal and Membrane Fouling by Dr. Martin Reinhard at Stanford University
- The Water-Energy-Carbon Nexus and Your Membrane Plant by Alan Zelenka of Kennedy/Jenks Consultants
- And more

The seminar is presented by the Department of Civil & Environmental Engineering at Stanford University, Kennedy/Jenks Consultants, and NWRI. For more information or to register, please visit <http://www.stanford.edu/group/ees/rows/>.

## **Register Now for the O.C. Water Summit on May 2, 2008**

Registration is now open for a 1-day O.C. Water Summit to be held on May 2, 2008, at the Westin South Coast Plaza Hotel in Costa Mesa, California.

Constraints on water supplies, such as drought and Delta pumping restrictions, may potentially lead to a water shortage in Southern California. Water supply limitations will affect everyone in Orange County - community groups, businesses, residents, and local government. It will affect business, planning and development, and lifestyle choices.

To minimize the impacts and prepare for the future, we must work together to develop solutions to get us through this water shortage. Leaders from all perspectives in Orange County will meet at the O.C. Water Summit to discuss the current water supply situation and solicit input for viable solutions.

The summit is sponsored by the Municipal Water District of Orange County (MWDOC), Orange County Business Council, and Orange County Water District (OCWD). OCWD is a member agency of NWRI.

For more information or to register, please contact Lorraine Roy of MWDOC at [lroy@mwdoc.com](mailto:lroy@mwdoc.com) or (714) 593-5013.