



Southwest Membrane Operator Association

2012 Annual Symposium

“Five Years of Membrane Fun”

Jan. 30-Feb. 1, 2012

Contact Hours/CEUs

AZ Water & Wastewater-Approved
CA Water-Approved/Wastewater-N/A
NV Water & Wastewater-Approved
NM Water & Wastewater-Approved

Mark Your Calendar Now

Registration is available on the SWMOA Website: www.swmoa.org
or call 888-463-0830



Crowne Plaza

Redondo Beach and Marina Hotel

300 North Harbor Dr.
Redondo Beach, CA 90227

Supporting Affiliation:



WHAT YOU WILL LEARN

Five years. For five years, SWMOA has been dedicated to educating and training owners and operators of membrane systems. But the job is not done, it can never be *done*. SWMOA continues to work tirelessly to bring valuable information to our membership. At the 5th Annual Symposium, the education begins on the very first day, where operators will learn about seawater desalination in California. Attendees can tour a full-scale seawater RO demonstration facility, hear about current seawater desalination pilot investigations, as well as gain insights into the Department of Public Health's perspective on permitting these facilities. Day 2 will focus on wastewater applications, including a look at what some agencies are doing with a variety of membranes for the purposes of water reclamation and recycling. Day 2 also provides a tour of the world-famous West Basin MWD's Edward C. Little WRF, and includes interactive breakout sessions focused on operating and maintaining an RO system. Day 3 offers a little something for everybody, with topics ranging from UF treatment of surface water, RO Energy recovery, and a panel of experts ready to answer any and all questions regarding water chemistry, chemical pretreatment, and membrane cleaning. You will not want to miss this opportunity to obtain real-world knowledge and experience for yourself, and your agency.

Monday, Jan. 30th - DAY ONE

- 9:00 - 12:00** Exhibitor Set-Up
- 9:00 - 5:30** Registration
- 10:00 - 12:00** Open House: West Basin Ocean Desal Demo Plant
- 12:00 - 1:00** On Your Own for Lunch
- 1:00 - 4:00** **Session 1 - Introduction & Seawater Desalination**
Moderator: Mehul Patel, P.E., Orange County Water District
- 1:00 - 1:15** **Introduction & Opening Remarks**
Eric Owens, P.E., Program Chair
- 1:15 - 1:45** **Keynote Speaker: Membrane Technologies Expand Water Supply Portfolios**
Rich Nagel, P.E., West Basin Municipal Water District
- 1:45 - 2:15** **Seawater RO Desalination Regulations**
Oliver Pacifico, P.E., California Dept. of Public Health
- 2:15 - 2:45** Refreshment Break
- 2:45 - 3:15** **South Orange Coastal Ocean Desalination Project - Slant Beach Well Feedwater Supply**
Richard Bell, P.E., Municipal Water District of Orange County
- 3:15 - 3:45** **Progress Update: Proposed Carlsbad Desalination Facility**
Peter MacLaggan, Poseidon Resources Corp.
- 3:45 - 4:00** Membership Meeting
- 4:00 - 4:45** Vendor Spotlight & Door Prizes
Vendor Representatives
- 4:45 - 6:00** Networking Reception in Exhibit Hall

Tuesday, Jan. 31st - DAY TWO

- 8:00 - 8:30** Continental Breakfast
- 8:30 - 12:00** **Session 2 - Wastewater Applications**
Moderator: Gary Witcher, Jr., California Water Service Company
- 8:30 - 9:00** **MBR Piloting, Selection, Design and Construction for Major Plant Expansion Project**
Carl Spangenberg, P.E., Irvine Ranch Water District
- 9:00 - 9:30** **Treating 2^o Effluent Using 3^o MBR and RO for Indirect Potable Reuse**
Tom Knapp, Los Angeles County Sanitation District
- 9:30 - 10:00** **Ozonation of a Non-Nitrified Secondary Effluent to Reduce Organic Fouling of Microfiltration**
Rajen Budhia, P.E., West Basin Municipal Water District, and Fredrick Gerringer, Trussell Technologies, Inc.
- 10:00 - 10:30** Refreshment Break
- 10:30 - 11:00** **Anti-Fouling Microfiltration Membrane Coating**
Christiana Daisy, P.E., West Basin Municipal Water District

- 11:00 - 11:30** **Pilot Operations and Performance of UF for Wastewater Polishing**
Kelly Lange-Haider, P.E., Dow Water & Process Solutions
- 11:30 - 12:00** **The Impact of Changing Influent Water Quality on MF Process Performance - Observations from OCWD's GWRS**
Tom Knoell, Orange County Water District
- 12:00 - 1:30** **Awards Luncheon & 1st Annual SWMOA Games**
- 1:30 - 5:00** **Session 3 - Break-Out Session: Hands-On Training**
Moderator: Christiana Daisy, P.E., West Basin Municipal Water District
- 1:30 - 2:00** **In Route on Bus from Hotel to Facility**
- 2:00 - 2:45** **Edward C. Little WRF Facility Tour**
Shivaji Deshmukh, P.E., Marc Serna, P.E., and Wyatt Won, P.E. West Basin Municipal Water District, and Antoine Vuillermet, United Water Environmental Services
- 2:45 - 3:00** **Refreshment Break**
- 3:00 - 4:30** **Break into Three Hands-On Groups (30 minutes each)**
- **RO Element Characterization**
Dave Faber, CSM (Woongjin Chemical America)
 - **RO Membrane Loading Demonstration**
Rick Galindo, Miguel Marin and Michael Moore, United Water Environmental Services
 - **RO Pressure Vessel Probing**
Chuck Isted, Hydranautics

- 4:30 - 5:00** **In Route on Bus from Facility to Hotel**
- 5:00** **Explore Area - On Your Own for the Evening**

Wednesday, Feb. 1st - DAY THREE

- 8:00 - 8:30** **Continental Breakfast**
- 8:30 - 12:15** **Session 4 - Membrane Potpourri**
Moderator: Scott McClelland, P.E., BCEE, Sweetwater Authority
- 8:30 - 9:00** **AquaSource Ultra-Filtration Membranes in Surface Water Treatment**
Joseph Thaxton, United Water San Antonio
- 9:00 - 9:30** **Treatment of Highly Colored Deep Aquifer Groundwater Using Low Rejection PESNF Membranes at the Colored Water Treatment Facility**
Jerry Vilander, Jr., Mesa Water District
- 9:30 - 10:00** **Process Improvements and Trials at the Chino I Desalter**
Scott Lacy, P.E., Separation Processes, Inc.
- 10:00 - 10:30** **Refreshment Break**
- 10:30 - 11:00** **Ask the Experts - Water Chemistry, RO Pretreatment and Cleaning Chemicals**
Mo Malki, American Water Chemicals,
Dan Comstock, Avista Technologies
Robert Ning, King Lee Technologies
David Russell, Professional Water Technologies
- 11:00 - 11:30** **Implementing Energy Recovery Technology at the North Lee County RO WTP**
Tom Seacord, P.E., Carollo Engineers, Inc.
- 11:30 - 12:00** **Membrane Technology: The Horizon and Beyond**
Brent Alspach, P.E., Malcolm Pirnie/ARCADIS
- 12:00 - 12:15** **Symposium Concluding Remarks**
Eric Owens, P.E., Program Chair
- 12:15 - 5:00** **Exhibitor Teardown**
- 12:45 - 4:00** **SWMOA Board Meeting**

TABLE TOP EXHIBITS (Table Top Backdrops Only)

Reach key decision makers in the membrane technology industry in a short amount of time. This Symposium offers great opportunities. Exhibitors will receive a list of attendees two weeks prior to event (sent via email). Each Table Top Booth will cost \$650.

ALL EXHIBIT SPACES WILL BE SELECTED ON-SITE ON A FIRST COME/FIRST SERVED BASIS

All Table Top Exhibitors will receive:

- One 6' Table (Chairs are available upon request)
- One full attendee registration to the Symposium
- Electricity is available from the Hotel for an additional fee

SPONSORSHIP OPPORTUNITIES...

All sponsorship is available on a first-come, first-serve basis and recorded based upon receipt of registration form and full payment.

- **Platinum Level...available at \$1,200**
Includes 1 Exhibit Space or 2 Full Registrants, and recognition at Welcome Reception and Lunch Events
- **Gold Level...available at \$900**
Includes 1 Exhibit Space or 2 Full Registrants, and recognition at Lunch Events
- **Silver Level...available at \$600**
Includes recognition at Refreshment Breaks
- **Bronze Level...available at \$300**
Includes recognition at Interactive Break-Out Sessions

All sponsors and exhibitors will receive:

- List of attendees sent via e-mail two weeks prior
- Acknowledgement in the materials - 100-word company description
- Sign recognition during the program

Thank You Platinum Sponsors:



Crowne Plaza Beach & Marina Hotel

300 North Harbor Dr., Redondo Beach, CA 90277



A group rate for **single/double** of **\$189** has been negotiated for reservations made by **Jan. 09, 2012** (subject to availability). Make your lodging arrangements directly with the resort: **888-233-9527** and refer to SWMOA for the discounted room rate. All reservations require a deposit for first night's room and tax. Discounted Parking has been arranged at the following rates: Self at \$10/day and Valet at \$15/day.



The Crowne Plaza Redondo Beach and Marina Hotel in Southern California offers distinct amenities and visitor-friendly location. Redondo Beach is along the Pacific Ocean and only 7 miles from Los Angeles International Airport.



From the LAX Airport: Head South on World Way toward West Way (approx. .7 mi). Keep right at the fork and merge onto CA-1 S/Pacific Hwy (6.6 mi). Turn right onto Beryl St. (.4 mi). Turn Left onto N. Harbor Dr.

From the 405: Take Exit 40 Artesia Blvd. and head West. Take Artesia Blvd. for approx. 3.1 miles. Turn Left onto CA-1 S/Pacific Coast Hwy (1.7 mi).. Head South on World Way toward West Way (approx. .7 mi). Turn right onto Beryl St. (.4 mi). Turn Left onto N. Harbor Dr.

Each Participant Receives

Conference materials, cooler, welcome reception, refreshment breaks, lunch each day and certificate of attendance. Registration fee does not include lodging or other meals. Registration fees must be paid by January 30, 2012. On-site registration will be accepted with payment.

Cancellations and Refunds

Written cancellation requests received by SWMOA on or before Jan. 7, 2012 will receive a refund, less a \$50 processing fee. Full payment is required if cancellation is received on or after Jan. 8, 2012 - no refunds and no credits for future events will be granted. However, substitutions may be made at any time. SWMOA reserves the right to make changes in programs and speakers, or to cancel programs when conditions beyond its control prevail. Every effort will be made to contact each enrollee if a program is cancelled. If a program is not held, SWMOA's liability is limited to the refund of the program fee only.

HOW TO REGISTER

Phone: 888-463-0830

Fax: 772-463-0860

Email: admin@swmoa.org

Website: www.swmoa.org

Thank You Sponsors:

Gold Sponsors:



Silver Sponsors:



Bronze Sponsor:



Cooler/Bag Sponsor:



Pen Sponsor:



JAN. '12 - REG. FORM

Southwest Membrane Operator Association (SWMOA)

PH: 888-463-0830 ♦ **FAX:** 772-463-0860 ♦ **Email:** admin@swmoa.org
 1035 E. Vista Way, #103 ♦ Vista, CA 92084 ♦ www.swmoa.org

Name: _____ Title: _____

Company: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

Ph: _____ Cell: _____ Fax: _____

E-mail: _____ Website: _____

Member (check all that apply): SWMOA AMTA

Annual Symposium: (See Program Information Page) **Amount:**

Registration Rates if your Payment is received: by 1/7 on 1/8 or after

Full Symposium - Members/Affiliates (must be from the list above)	\$400	\$450	_____
Full Symposium - Non-Members	\$500	\$550	_____
One Day Only (Select Day ___ Mon ___ Tue ___ Wed)	\$300	\$350	_____
Speaker/Full-Time Student/Retired (student must submit id)	\$300	\$350	_____
Guest/Spouse Welcome Receptions:	\$35	\$45	_____
Guest/Spouse Awards Lunch:	\$50	\$60	_____
Cannot Attend - Purchase CD Only:	\$30	\$30	_____
Need Contact Hours Certification:	\$25	\$25	_____

License Type: _____ License (i.e., Grade 1-5): _____

State: _____ License #: _____

Exhibit-Table Top: \$650 _____

Spaces are selected onsite - first come, first served

Sponsor: Platinum \$1,200 Gold: \$900 Silver: \$600 Bronze: \$300

Total Registration Fee \$ _____

Check Enclosed Invoice Visa M/C AX
 Card # _____ + _____

(16 #'s + 3 #'s listed in signature area on back of Visa/MC or + 4 #'s on front of AX)

Name on CC: _____

Exp. Date: _____

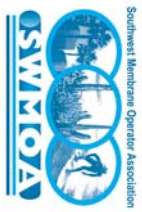
CC Mailing Address: _____

CC Mailing Zip: _____

Signature _____

Special Needs:
<input type="checkbox"/> Wheelchair Access
<input type="checkbox"/> Visually Impaired
<input type="checkbox"/> Hearing Impaired
<input type="checkbox"/> Vegetarian Meals
<input type="checkbox"/> Other _____

I will attend the following functions, which are included in the registration fee:			
Open House: West Basin Desal Demo Plant	Mon. Jan. 30 - 10:00 am-12:00 pm	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Welcome Reception in Exhibit Hall	Mon. Jan. 30 - 5:00-6:00 pm	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Awards Luncheon & SWMOA Games	Tue. Jan. 31 - 12:00-1:30 pm	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Edward C. Little WRF Facility Tour	Tue. Jan. 31 - 1:30-5:00 pm	<input type="checkbox"/> Yes	<input type="checkbox"/> No



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