

# ULTRAPURE WATER<sup>®</sup> Micro 2011

Portland, Oregon

November 2-3, 2011

Program (as of 10/7/11)

Moderators: Slava Libman, Ph.D., *Air Liquide Balazs*; and Rich Riley, *Intel*

Wednesday, November 2

*Morning Session: UPW Roadmap, Microelectronics Industry Needs/Risks*

9:00 AM—Session Introduction

9:15 AM—ITRS Update

Slava Libman, Ph.D., *Air Liquide Balazs*

9:45 AM—SEMI Filter Performance Validation Task Force Report

David Blackford, Ph.D., *Fluid Measurement Technologies, Inc.*;

10:15 AM-10:45 AM—Coffee Break

10:45 AM—Organic Contamination in UPW

Dan Wilcox, *Spanion Inc.*

11:15 AM—Analytical Methods and Data of Organics Speciation in Ultrapure Water

Hugh Gotts and Slava Libman, Ph.D., *Air Liquide Balazs*, Stefan Huber, *DOC-Labor*

11:45 AM-1:15 PM—Lunch Break

*Afternoon Session: Technology Development/Optimization*

1:15 PM—Effect of Polish Ion Exchange Resin Selection to UPW System Performance

Alan Knapp, *Siemens*; and Slava Libman, Ph.D., *Air Liquide Balazs*

1:45 PM—Reverse Osmosis Design Best Practices for UPW Make-Up

Jane Kucera, *Nalco*

2:15 PM—Trace Urea Removal Technology for Ultrapure Water Quality Improvement

Nobukazu Arai, Shigeki Fujishima, Taro Iizumi, and Ikunori Yokoi, *Kurita Water Industries Ltd.*

2:45-3:15 PM—Coffee Break

3:15 PM—Minimizing Particle and Metal Ion Contamination for Discrete Components

George Drazinakis and Edward Cellucci, *Plasto-O-Matic Valves Inc.*

3:45 PM—Suspension-Polymerized PVDF: Effects of Steam and Ozone Sterilization on Pipes and Fittings Joined by Infrared and Electrofusion Welding

Trevor Spense, *Solvay Solexis*

5:00-6:30 PM—Reception in Exhibits Area

Thursday, November 3

*Morning Session: Metrology, Analytical Methods*

8:45 AM—UPW Water Business Opportunities in Microelectronics/Photovoltaics

David McBain, *Veolia Water Solutions & Technologies*

9:15 AM—Digital Sensor Technology Advances Resistivity Measurement Accuracy

David Gray, Anthony Bevilacqua, Ph.D., and James Cannon, *Mettler-Toledo Thornton*

9:45 AM—The Effect of Particle Composition on Filter Removal of Sub-30-nm particles from UPW

Don Grant, *CT Associates*

10:15-10:30 AM—Coffee Break

10:30 AM—Monitoring and Controlling UPW Organic Nitrogen Contamination to Improve Immersion Photolithography Process Control

Richard Godec, *GE Instruments*

11:00 AM—New Developments in Measuring TOC in Semiconductor Applications

Roger Schmid, *SWAN Analytical*

11:30 AM—New Automation and Monitoring Technology to Improve Operation of Membrane Installations

Danny Blagojevich, Barry Carroll, Anders Hallsby, and Brian Jenkins, *Nalco Co.*

Noon-1:00 PM—Lunch Break in Tabletops Area

*Afternoon Session: Water Management (Conservation)*

1:00 PM—Preventing the Release of Nano Materials from Depleting Ion Exchange Beds by Using an On-line Boron Analyzer

Richard Godec, *GE Instruments*

1:30 PM—Benefits of Regular UPW Operational Data and Trend Review

Brad Herbert, *ON Semiconductor*; John Morgan, *H2Morgan*

2:00 PM—Strategic Development and Implementation of Sustainable Water Management Programs for High Volume Manufacturing Using Ultrapure Water

Ralph Williams, James Lozier, and Kyle Poole, *CH2M Hill*

2:30 PM—Black and Gold and Green: A Progress Report on UPW Recovery at Purdue University's Birck Nanotechnology Center

Tim Miller, *Purdue University*

3:00 PM—Economics Benefits of Processing RO Reject with Additional RO for Additional Water Recovery

Brad Herbert, *ON Semiconductor*; Alan Knapp, *Siemens*; John Morgan, *H2Morgan*; Wayne Bates, *Hydranautics*

Program updates available at [www.ultrapurewater.com](http://www.ultrapurewater.com).

# ULTRAPURE WATER®

## -2011

Portland, Oregon  
November 2-3, 2011

**Red Lion Inn-Jantzen Beach**  
Hotel reservations: 503-283-4466 Fax: 503-283-4743  
For special rates mention *Ultrapure Water Conference*

Please **DO NOT** Fax this form to the hotel

### EXECUTIVE FORUM

#### Microelectronic Industry Water Treatment Technology and Business Developments

- 2-day Exec Forum Registration      \$520
- Wednesday Exec Forum                      \$300
- Thursday Exec Forum                          \$300

Name \_\_\_\_\_  
Company \_\_\_\_\_  
Street \_\_\_\_\_  
City \_\_\_\_\_  
State \_\_\_\_\_ Zip \_\_\_\_\_ Country \_\_\_\_\_  
Phone \_\_\_\_\_  
Fax: \_\_\_\_\_  
E-mail: \_\_\_\_\_

### EXHIBITS

Wednesday: 1:00PM-7:00PM; Thursday: 10:00AM-3:00PM;  
**Free for all Forum Registrants**

### Special Offers

*Electronics Grade Water Preparation*

by Avijit Dey, Ph.D., and Gareth Thomas, 973 pages  
hard cover. \$115. Regular price \$150.

*Optimizing a High-Purity Water System*

by Paul Tan, 281 pages, hard cover. \$50. Regular price \$60.

Books ordered by October 25 will be delivered to conference for pick-up. Books ordered after this date will be delivered by UPS. Shipping charges will apply

### PAYMENT

- P.O. # \_\_\_\_\_       PAID by Check # \_\_\_\_\_

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*info@ultrapurewater.com*

# How to Register

## REGISTRATION INFORMATION

Use the registration form on the previous page. Please photocopy the form for additional registrations. To save time, simply scan and email your completed form to [info@tlrapurewater.com](mailto:info@tlrapurewater.com).

When registering by phone, please fill out the form before you call, have your credit card number ready, and be ready to provide a hard-copy of your registration. *We cannot charge your credit card without your written permission to do so.*

**Phone/Fax:** 303-973-6700

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Littleton, CO 80127

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## HOTEL LOCATION

All ULTRAPURE WATER--Portland activities are held at the Red Lion Inn--Jantzen Beach. For your convenience, we recommend that you stay at this hotel for the duration of the conference. The Red Lion is located close to Portland's International Airport. A courtesy shuttle bus to the hotel from the airport is available.

**FROM PORTLAND INTERNATIONAL AIRPORT:** Take I-205 North approximately 2 miles to SR 14. Take SR 14 West approximately 7 miles to I-5. Take I-5 South over the bridge to Jantzen Beach Exit. (Exit #308). At the stoplight turn right. Go through one stop light to the STOP sign at Hayden Island Drive. Turn right, go under the bridge and the hotel is on the left hand side.

**FROM DOWNTOWN PORTLAND AND POINTS SOUTH:** Take I-5 North to Jantzen Beach Exit (Exit #308). At the stoplight turn right. At the second stoplight (which is Hayden Island Drive) turns left, and then take an immediate right into the hotel parking lot.

**FROM VANCOUVER, WA AND POINTS NORTH:** Take I-5 South over the bridge to Jantzen Beach Exit (Exit # 308). At the stoplight turn right. Go through one stop light to the STOP sign at Hayden Island Drive. Turn right, go under the bridge and the hotel is on the left hand side.

**FROM MOUNT HOOD AND POINTS EAST:** Take I-84 West to I-5. Take I-5 North to Jantzen Beach Exit (Exit #308). At the stoplight turn right. At the second stoplight (which is Hayden Island Drive) turn left, and then right immediately into the hotel parking lot.

## ROOM RATES

Single or Double-\$119(All rates subject to additional Portland city taxes.)

When making hotel reservations, it is important that you mention the ULTRAPURE WATER--Portland conference. These special rates, as well as a block of rooms, are guaranteed only through October 12, 2011. **Don't miss out** — phone in your reservations today at 503-283-4466 (FAX at 503-283-4743). or mail reservation directly to:

Red Lion--Jantzen Beach  
909 N. Hayden Island Dr.  
Portland, OR 97217

All reservations must be guaranteed by either enclosing first night deposit, or by credit card.

If registering on-line please use the conference code: 1029ULTR in order to obtain the special room rate.

## LOCAL TRAVEL

The hotel is just off I-5, and is just a few miles from the Portland airport. Free hotel parking is available to guests and visitors.

## ON-SITE REGISTRATION

You may register for the Executive Forum at the Conference. However, we encourage you to register in advance to save time and to insure your seat availability.

## CONFIRMATION

All registrations will be confirmed by email. You must be registered for admission to any session. Pre-registered attendees must pick up their badges at the Registration Desk. **Badges will not be mailed.** Please pick up your badges at least 30 minutes before the start of your session.

## TAX DEDUCTION

Conference expenses may be tax deductible. Treasury regulation 1.1625 permits an income tax deduction for educational expenses (registration fees, cost of travel, meals lodging), undertaken to maintain or improve skills required in one's employment, or to meet express requirements of an employer.

## PHOTO RELEASE

We occasionally use photographs of show participants in our promotional material. By virtue of your attendance, you automatically agree to usage of your likeness in such material.

## CANCELLATIONS/REFUNDS

Refunds cannot be granted on cancellations received after October 27, 2011. Cancellations prior to this date are allowed without penalty. There will be a \$30 processing fee on all refunds by check or credit card. If you need to change your plans to attend you may transfer your registration to another person at any time without incurring any penalty.

## UNAUTHORIZED EVENTS

Unauthorized exhibitions, seminars, conferences or other functions held at or in close proximity to and during the ULTRAPURE WATER--Micro conference that could detract from, conflict, or interfere with ULTRAPURE WATER--Portland, are strictly prohibited. The Red Lion Hotel will assign suites for entertainment only with the written authorization of Tall Oaks Publishing Inc.