

ULTRAPURE WATER[®]

-Micro 2013 Portland, OR

**Technical Conference on
High-Purity Water Treatment**

November 12-13, 2013

Red Lion Hotel—Jantzen Beach (Portland)

EXECUTIVE FORUM

- *Emerging Needs for Semiconductors and PVs*
- *Technology Development/Innovation*
- *Water Management*
- *Metrology*

TABLETOP DISPLAYS

Displays by leading suppliers of water treatment equipment

**For Registrations and
Tabletop reservation forms, visit
www.ultrapurewater.com**

ULTRAPURE WATER[®] Micro 2013

Red Lion Hotel
Portland, Oregon
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Program Sessions (as of October 4, 2013)*:

Moderators: Slava Libman, Ph.D., *Balazs NanoAnalysis*; Marty Burkhart, *Hi Pure Tech, Inc.*; and Rich Riley, *Intel*

Tuesday, November 12

8:15 AM-Conference Introduction

Session 1: Key Business and UPW Technology Trends

8:30 AM- Materials Challenges for Advanced Nodes

Kyle Flanigan, *Linx Consulting*

9:15 AM- Particle Control Challenges in UPW

Abbas Rastegar, Ph.D., *SEMATECH*

10:00-10:15 AM-Networking Break

10:15 AM- SEMI-ITRS Update – 5 (F57)

Slava Libman, Ph.D., *Balazs NanoAnalysis*; David Blackford, Ph.D., *Fluid Measurement Technologies*

10:45 AM-Treatment Processes for the Next Decade of UPW.

Philippe Rychen, D. Gensbittel, Rene Sauer, Malek Salamor, *Ovivo Switzerland AG*

11:15 AM- Inhibition of Copper Corrosion by Removal of H₂O₂ from UPW Using Noble Metal Catalysis

Daisaku Yano, Masami Murayma, Takashi Futatsuki, and Koji Yamanaka, *Organo*

11:45 AM-1:15 PM—Lunch Break

Session 2: Innovations with UPW Design and Water Management

1:15 PM- Designing a UPW System to Optimize for UPW Unit Costs versus Lowest Capital Costs Will Result in a Long-Term Competitive Advantage for the Life of the Plant

Matthew Weglewski, *M&W Group*; and John Morgan, *H2Morgan*

1:45 PM- Water and Wastewater Infrastructure Development for a Semiconductor Manufacturing Campus

Ralph Williams and Annabelle Fonseca, *CH2M Hill*; and Mark Masse, *Genesee County Economic Development Center (Batavia, N.Y.)*

2:15 PM- Advanced Removal Technology of Hydrogen Peroxide Using Nanosize Pt Catalyst Resin

Yoichi Miyazaki, Take Fukui, and Hideki Kobayashi, *Kurita Water Industries*; and Kentaro Yamada, *Nippon Sheet Glass Co. Ltd.*

2:45 PM— Direct Measurement of 185-nm Ultraviolet Light for TOC Reduction

Jay Arling, Oliver Lawal, and Dan Shaver, *Aquionics Inc.*; Bryan Townsend, *Black & Veatch*

3:15 PM-Networking Break

3:45 PM- Direct Osmosis-High Salinity Membrane Cleaning and Restoration: 2013 Update

Hal Stansfield, *Ameren Energy Resources*; and Dick Youmans and David Paul, *David H. Paul, Inc.*

4:15 PM-Dynamic UPW Distribution Modeling to Optimize Supply POU Pressure

Matthew Weglewski, *M&W Group*; and John Morgan, *H2Morgan*

4:45 PM- Roundtable: Role of Cross Industry Collaboration in Support to the Next Generation Semiconductor Industry Needs

5:45 PM-Reception in Tabletop Exhibits

Wednesday, November 13

Session 3: Advances in UPW Metrology

8:15 AM- TOC Screening with LC-OCD: Current Status

Stefan Huber, Ph.D., *DOC-Labor*; Slava Libman, Ph.D., *Balazs NanoAnalysis*

8:45 AM- The Effect of Particle Concentration and Face Velocity on the Removal of Sub-100-nm Particles from Ultrapure Water

Don Grant and Gary Van Schooneveld, *CT Associates, Inc.*; and Uwe Beuscher, *WL Gore and Associates*

9:15 AM- Challenges and Results of sub-40-nm Particle Detection in UPW

Michael Thomas, *Lighthouse Global Solutions*

9:45 AM- Validating the Counting Efficiency of Liquid Optical Particle Counters below 100 nm

Gary Van Schooneveld, Chris Howe, Don Grant, *CT Associates*; David Blackford, Ph.D., *Fluid Measurement Technologies*; and Michael Thomas, *Lighthouse Worldwide Solutions*

10:15 AM- Networking Break

10:45 AM- Acoustic Method for Detecting Nano Particles in UPW

Sameer Madanshetty, *Uncopiers Inc.*

11:15 AM- Extending the Value of Resistivity for Optimizing Microelectronics Water System Performance

David M. Gray, *METTLER-TOLEDO Thornton Inc.*; and Philippe Rychen, *Ovivo Switzerland AG*

11:45 AM-1:15 PM-Lunch Break

Session 4: Advanced Materials in UPW Application
1:15 PM- 30 years of PVDF Fluid Handling Systems for High Purity Water Processes

Rosemary Heinze, *Arkema Inc.*

1:45 PM-Why Are Fluoropolymers the Best Choice for UPW Distribution Systems

Giovanni Biressi, Ph.D., Brigitte Neubauer, Ph.D., and Kris Haggard, *Solvay Specialty Polymers*

2:15 PM- A Study of the Effect of Elastomeric Seals Exposed to Ozone

Katrin Wallheinke, Wolfgang Paul and Jeffrey Sixsmith, *Georg Fischer Piping Systems*; Casey Williamson, *SEMTEC, Inc.* and Marty Burkhart, *Hi Pure Tech, Inc.*

2:45 PM- Impact of Piping System Joining Technologies on UPW

Rina Hoshino, *Georg Fischer Piping Systems*

3:15 PM- Conference Concludes

*Conference updates available at www.ultrapurewater.com.

ULTRAPURE WATER®

-2013

Portland, Oregon
 November 12-13, 2013
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 \$540
- Tuesday Exec Forum \$300
- Wednesday Exec Forum \$300

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

EXHIBITS

Tuesday: 1:00PM-7:00PM; Wednesday: 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. Use this form to order these books. They cannot be ordered online at these special discounted prices.

PAYMENT

- P.O. # _____ PAID by Check # _____

Note: All purchase orders must be paid by conference date.

- Charge my card (VISA, MASTERCARD, AMEX)

Note: Your card will be processed a few days before conference date. **Your statement will show a charge by Tall Oaks Publishing.**

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Phone: 303-973-6700
 60 Golden Eagle Lane
 Littleton, CO 80127

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 return your completed form to Tall Oaks Publishing Inc.

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.*

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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, 2013. **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.