

**32<sup>nd</sup> Annual Electric Utility Chemistry Workshop**  
**University of Illinois at Urbana-Champaign, Online & Continuing Education**  
**June 5–7, 2012**

**Tuesday, June 5**

**1:30 PM**      **Welcome**—K. Anthony Selby, Workshop Chair  
Elaine Wolff, University of Illinois at Urbana-Champaign

*Session Moderators: Rob Grabarczyk, We Energies, and Scott Reeves, Dominion*

**1:40 PM**      **Hayden Station Boiler Feed Water Metal Transport Study**  
Steven Dunn, Xcel Energy—Hayden Station

**2:10 PM**      **Protective Coatings for Use on Surface Condensers and BOP Heat Exchangers**  
James Mitchell, Plastocor, Inc.

**2:40 PM**      **Water Research and Management Technology for Electrical Power Generation**  
Richard Breckenridge, EPRI Electric Power Research Institute

**3:10 PM**      **Break**

**3:30 PM**      **RO Membrane Operations and Failures**  
Ken Robinson, Avista Technologies

**4:00 PM**      **Advanced Gray Water Treatment System for Power Plant Makeup Produces Ultrapure Water**  
Michael Reyes, Veolia Water Solutions & Technologies

**4:30 PM**      **High Purity Boiler Water Production using Municipal Wastewater at a Combined Cycle Gas Fired Generating Station**  
Geoff Hong, Eco-Tec Inc.

**5:00 PM**      **Reception and Vendor Display**

**Wednesday, June 6**

**8:00 AM**      **Morning Session—Announcements**  
K. Anthony Selby, Workshop Chair

*Session Moderators: Prentiss Carter, Ameren, and Chuck Curtiss, Illinois State Water Survey*

**8:05 AM**      **NIPSCO Boiler Contamination Event Root Cause Analysis**  
Keven Peres and Steve Barnes, Northern Indiana Public Service Company (NIPSCO)

**8:35 AM**      **Dry CFB and NID FGD Technology: An Alternative to WFGD and SDA**  
Brad Buecker, Kiewit Power Engineers

**9:05 AM**      **The Environmental Avalanche Continues**  
Bert Valenkamph, Northern Indiana Public Service Company (NIPSCO)

- 9:35 AM**      **Start-up and Operation of Boron Processes from FGD Waste Water and Update on Mercury Removal**  
Michael Pudvay, Infilco Degremont
- 10:05 AM**      **Break**
- 10:30 AM**      **Modern Materials—Are They Better or Worse?**  
George J. Licina, Structural Integrity Associates
- 11:00 AM**      **Optimized Plant Efficiency Using Performance-Based Monitoring and Control**  
Kai Rondum, Ashland Water Technologies
- 11:30 AM**      **New Source Review Settlement Impacts on Northern Indiana Public Service Company**  
Bert Valenkamph, Northern Indiana Public Service Company (NIPSCO)
- 12:00 Noon**    **Lunch** (provided)

*Session Moderators: Warren Gilbert, Consultant, and Scott Reeves, Dominion*

- 1:00 PM**      **Spatiotemporal Trends in Mercury Wet Deposition in the Great Lakes Region: 2002–2008**  
David Gay, Illinois State Water Survey, National Atmospheric Deposition Program, University of Illinois at Urbana-Champaign
- 1:30 PM**      **Effects of Dissolved Oxygen on FAC and Corrosion Product Transfer**  
Kenneth Kuruc, Hach Company
- 2:00 PM**      **Chemistry Data Collection for Statistical Analysis: Characterizing Plant Waters for Scope Documents**  
Matthew Heermann, Sargent & Lundy LLC
- 2:30 PM**      **Break**
- 3:00 PM**      **How to Control Dissolved Oxygen in the Steam/Water Cycle**  
Robert Bartholomew, Sheppard T. Powell Associates, LLC
- 3:30 PM**      **Do Organic Amines Have a Role in the Treatment of High Purity Boiler Feedwater?**  
James Robinson, GE Water and Process Technologies
- 4:00 PM**      **Low Level Oxygen Detection in Power Plants—What Really Matters**  
Randy Turner, Swan Analytical USA
- 4:30 PM**      **Validation of a TGA Method for Routine Monitoring of Wet Limestone Forced Oxidation Scrubbers with Emphasis on  $\text{CaSO}_3 \cdot 0.5 \text{H}_2\text{O}$  Detection**  
Christopher J. Strahler, Siemens Environmental Systems & Services
- 5:00 PM**      **Adjourn**

**Thursday, June 7**

**8:00 AM**      **Closing Session—Announcements**  
K. Anthony Selby, Workshop Chair

*Session Moderators: Chris Taylor, Ameren Missouri, and Bob Mitzel, Ameren*

**8:05 AM**      **Corrosion Rate Data from Two Chilled Water Systems**  
K. Anthony Selby, Water Technology Consultants, Inc.

**8:35 AM**      **Utility and Boiler MACTS—Operational Implications**  
Rich Trzupek, Trinity Consultants Inc.

**9:05 AM**      **Reduction of Hazardous Waste Generation by Obtaining a Chromium Exclusion Ruling on Boiler Cleaning Waste**  
Rob Grabarczyk, We Energies

**9:35 AM**      **Break**

**10:00 AM**     **Proper Care and Maintenance of pH Sensors Used in Power Generation**  
Fred Kohlmann, Endress + Hauser

**10:30 AM**     **Sodium and Silica Measurement In Power Applications**  
Peggy Banarhall, Mettler-Toledo Thornton

**11:00 AM**     **Condenser Performance: Improvement through Better Instrumentation**  
Kevin Boudreaux, Nalco

**11:30 AM**     **Cation Conductivity Monitoring in Cycling Plants—A New Approach**  
Randy Turner, Swan Analytical USA

**12:00 PM**     **Adjourn**

**Please return your evaluations to the workshop registration table  
before you leave.**