

**31<sup>st</sup> Annual Electric Utility Chemistry Workshop**  
**University of Illinois at Urbana-Champaign, Online & Continuing Education**  
**June 7–9, 2011**

**Tuesday, June 7**

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

*Session Moderators: Chris Skates, Electric Energy Inc., and Chris Taylor, Ameren UE*

**1:40 PM**      **Applying Proper Cycle Chemistry Programs to a Newly Constructed Coal Fired Supercritical Unit**  
Rob Grabarczyk, We Energies

**2:10 PM**      **Waterwall Tube Failure Analysis**  
George J. Licina, Structural Integrity Associates

**2:40 PM**      **NIPSCO Whole Plant Layup Experience**  
Steve Barnes, NIPSCO

**3:10 PM**      **Break**

**3:30 PM**      **Power Industry Experience Using Micro Media Filtration and Short Bed Ion Exchange**  
Geoff Hong, Eco-Tec Inc.  
(IN wastewater operator technical credit =.50)

**4:00 PM**      **RO Pretreatment**  
Ken Robinson, Avista Technologies  
(IN wastewater operator technical credit =.50)

**4:30 PM**      **Outsourced Water Treatment Provides Lower TOC and Higher Purity for Nuclear Power Plant**  
Michael Reyes, Crown Solutions

**5:00 PM**      **The Use of Monochloramine for Microbiological Control in High Demand Systems**  
Richard Clark, Buckman International INC  
(IN wastewater operator technical credit =.50)

**5:30 PM**      **Vendor Displays and Reception**

**Wednesday, June 8**

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

*Session Moderators: Prentiss Carter, Ameren, and Mary Polk, NextEra Energy*

**8:05 AM**      **A New Approach to On-line Sodium Measurement**  
David Gray, Mettler-Toledo Thornton, Inc.

- 8:35 AM**      **Comparison of Dissolved Oxygen Technologies**  
Kenneth Kuruc, Hach Company  
(IN wastewater operator technical credit =.50)
- 9:05 AM**      **Using *in-situ* Feedwater ORP Control to Improve Boiler System Operation**  
Daniel Cicero, Nalco Company
- 9:35 AM**      **Get the Copper Out! - Results of Copper Reduction Implementation Activities at NIPSCO Michigan City Station**  
Dave Stamp, NIPSCO
- 10:05 AM**      **Break**
- 10:30 AM**      **Buried Piping Integrity Management at Fossil Power Plants**  
Stephen J. Shulder, Structural Integrity Associates, Inc.  
(IN wastewater operator technical credit =.50)
- 11:00 AM**      **Taum Sauk Storage Dam Failure, Lessons Learned, and the Rebuild**  
Thomas Hollenkamp, Ameren Missouri
- 11:30 AM**      **Monitoring Long-Term Trends of Acidic Wet Deposition in US Precipitation: Results from the National Atmospheric Deposition Program**  
Christopher Lehmann and David Gay, Illinois State Water Survey, University of Illinois at Urbana-Champaign
- 12:00 noon**      **Lunch (Provided)**
- Session Moderators: Rob Grabarczyk, We Energies, and Bob Mitzel, Ameren*
- 1:00 PM**      **Reverse Osmosis Pretreatment Optimization Using Particle Monitor/Counter Technology**  
Randy Turner, Southern Company  
(IN wastewater operator technical credit =.50)
- 1:30 PM**      **Development and Application of Phosphorus Free Cooling Water Treatment Technology**  
Raymond M. Post, ChemTreat, Inc.  
(IN wastewater operator technical credit =.50)
- 2:00 PM**      **Fundamentals of Cooling Tower Heat Transfer**  
Brad Buecker, Kiewit Power Engineers  
(IN wastewater operator technical credit =.50)
- 2:30 PM**      **Break**
- 3:00 PM**      **The Environmental Avalanche: Environmental Issues Facing Utilities Today**  
Bert Valenkamph, NIPSCO  
(IN wastewater operator general credit =.50)

- 3:30 PM**      **Corrosion of Alloy 2205 in Wet Flue Gas Desulfurization Systems**  
 Rob Grabarczyk, We Energies  
 (IN wastewater operator technical credit =.50)
- 4:00 PM**      **Innovative Ion Exchange Technology to Conserve Water and Reduce Costs of Evaporator-Crystallizer ZLD Systems in Power Generation**  
 Max Nodwell, BioteQ Environmental Technologies and Dave Dally, LANXESS Sybron
- 4:30 PM**      **Cooling Systems Microbiological Control and Monitoring**  
 K. Anthony Selby, Water Technology Consultants, Inc.  
 (IN wastewater operator technical credit =.50)
- 5:00 PM**      **Adjourn**

**Thursday, June 9**

- 8:00 AM**      **Closing Session – Announcements** – K. Anthony Selby, Workshop Chair  
*Session Moderators: Dave Stamp, NIPSCO, and Chuck Curtiss, Illinois State Water Survey*
- 8:05 AM**      **Corrosion Product Sampling**  
 Jeff McKinney, Sentry Equipment Corp
- 8:35 AM**      **Emerging Environmental Regulations and Their Impacts on the Electric Utility Industry**  
 Steven C. Whitworth, Ameren Services  
 (IN wastewater operator general credit =.50)
- 9:05 AM**      **Particle Characterization and Counting at High Temperature and Pressure**  
 Chip Westaby, Turner Designs Hydrocarbon Instruments, Inc.  
 (IN wastewater operator technical credit =.50)
- 9:35 AM**      **Break**
- 10:00 AM**      **On-Line Water Chemistry Measurements for Power Plants**  
 Fred Kohlmann, Endress+Hauser INC
- 10:30 AM**      **The Influence of Man on Climate Change**  
 Atul Jain, University of Illinois at Urbana-Champaign
- 11:00 AM**      **Climate Change: Revisiting the Scientific Consensus**  
 Chris Skates, Author
- 11:30 AM**      **Panel Discussion, Jain and Skates**
- 12:00 noon**      **Adjourn**

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