



Second Annual Conference Green Technologies for the Environment

Remediation, Treatment and Restoration

Stimulating Eco Innovation for the Coming Sustainability Revolution

Sheraton Bradley Airport Hotel, Bradley International Airport
Windsor Locks, CT

October 14, 2009

8:00 A. M. - 6:00 P. M.

Dr. Colin Horwitz - GreenOx Catalysts, Inc.
Dr. Raj Varma - USEPA Risk Management Laboratory
Dr. Stephen Suib - Board of Trustees Distinguished Professor, UConn, Dept. of Chemistry
Dr. George Hoag - Director of Research & Development, VeruTEK Technologies
Dr. Evan Beach - Yale University, Center for Green Chemistry and Green Engineering
Dr. Terry Collins - Thomas Lord Professor of Chemistry, Carnegie Mellon University, Institute for Green Science
Dr. Julie Zimmerman - Yale University, Acting Director, Center for Green Chemistry and Green Engineering
Dr. N. N. Mallikarjuna - Research Scientist, USEPA Risk Management Laboratory
Dr. John Collins - President and CEO, VeruTEK Technologies
Mr. Steven Pierce - Associate Vice President, PBS&J
Mr. Todd Walles - Vice President, Weston Solutions

PRELIMINARY AGENDA

- 7:30-8:00 **REGISTRATION**
- 8:00-8:20 **Inventing a (Green) Technology Industry to Remedy the Environment**
How community, government and industry can stimulate creative solutions
- 8:20-8:40 **Surgical, In-Situ Remediation: Combining Qualitative Spectroscopy with Real-time Injection For Targeted Destruction of Sub-Surface Contamination**
Inventing technologies that simultaneously identify and remedy contaminants
- 8:40-9:00 **Green Technologies for the Destruction of Endocrine Disruptors in Water Treatment**
A model for the destruction of chemicals with direct human impacts, but largely unregulated
- 9:00-9:40 **Bringing the Medical Industry Model to the Environment: Building Green, In-Situ Solutions for Remediation of Toxic Contaminants**
Formulating prescriptive mixtures, coatings, and gels for site-specific and contaminant-specific remedies
- 9:40-10:00 **Remediation of Coal Tar and Creosote in Groundwater Using S-ISCO**
A green and sustainable way to clean the 15,000 coal tar and creosote sites in the U S alone
- BREAK**
- 10:20-10:40 **Zeravalent Fe Nanoparticles for Catalytic Degradation of Carbon Tetrachloride**
Safe Methods for the destruction of a carcinogen commonly found in the environment
- 10:40-11:00 **In Situ Synthesis of Fe, Si and Mn Colloids from Native Soils to Target and Remedy Chlorinated Solvent Contamination**
Using natural colloids for in situ generation of materials that can be used for degradation of chlorinated solvents and other applications

Clean Solutions For a Clean Environment

**"Work for something because it is good,
not just because it stands a chance of success."
-Vaclav Havel**

11:00-11:40 **Natural Products for Water Treatment**
Green Technologies for drinking water, wastewater and groundwater

11:40-12:00 **The Chemistry of Plant-Based Surfactants - The Key to Successful NAPL Remediation, Oil Spill Recovery, and Other Environmental Applications**
Green plant surfactants that are pivotal for physical, chemical and biological processes to work with immiscible organic liquids

LUNCH

12:00-12:30 **The Greening of Corporate America: How Green Technologies Reduce Corporate Financial Reserves for Remediation and Accelerates Cleanup of Communities**
Corporate financial reserves can be reduced and cleanups accelerated with government leadership

12:30-1:00 **Green Chemistry: Sustaining a High Technology Civilization**
Exposure to synthetic contaminants is now adversely affecting society in measurable ways - but there is hope

1:00-1:20 **Development of Model Compounds for Environmental Cleanup: Photocatalytic Degradation of 2, 4, 6- Trichlorophenol**
Modifying photocatalysis with green chemicals to destroy model compounds

1:20-1:40 **Destruction of PCBs on Concrete and Brick Materials**
The first construction materials decontamination process that does not transfer PCBs off site

1:40-2:00 **Reactive Transport in Soil and Groundwater Remediation: Stabilization of Hydrogen Peroxide and Controlled Kinetics of Contaminant Destruction**
The role of green organic chemicals in increasing transport and reactivity of peroxide

2:00-2:20 **Remediation of Chlorinated Solvents and PCBs in Soil and Groundwater - Case Studies**
Safe, low-footprint, in-situ remediation beneath structures and in urban areas

2:20-2:40 **Chitosan Films with Enhanced Properties**
Natural biopolymers for coating materials to control reactive properties

2:40-3:00 **New Methods for Cost-Effective Remediation of Metals and Metalloids**
Integrating green chemistry methods with remediation of inorganic contaminants

BREAK

3:20-3:40 **Laboratory Methods for Determining Reactive Transport in Optimizing Field Remediation Performance**
Advanced laboratory methods to ensure success in the field


3:40-4:00 **Safe Surfactants from C-glycosides**
Green surfactants for the environment

4:00-4:20 **Sustainable Strategies for the Production of Nanomaterials and their Application in Green Environmental Remediation**
Plant polyphenols and other natural materials for nanomaterial production

4:20-4:40 **Free Radical Generation with Green Synthesized Catalysts**
Direct and indirect methods of Free radical production

4:40-5:00 **Applications of Fe-TAML in Environmental Cleanup, Detergents and Water Treatment**
Fe-TAML is a green and sustainable catalyst with remarkable properties

5:00-5:20 **Properties of Plant Oil-Based Nanoemulsions from Light and Dense Non Aqueous Liquids**
Selecting and controlling nanoemulsion properties for optimizing solubilization of NAPLs




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5:20-5:40 **Formation of ZVI In-Situ for the Regeneration of Iron Walls**
Making the old new again!

5:40-6:00 **Green Chemistry and Engineering: The How of Sustainability**

6:00-8:00 **COCKTAILS AND HORS D'OEUVRES**



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DIRECTIONS TO SHERATON BRADLEY HOTEL

From Boston: Take Massachusetts Turnpike (I-90 West) to Exit 4. This will put you on I-91 South, proceed to Exit 40. This will put you on Route 20. When Rt. 20 ends, you are at Bradley Int'l Airport. Stay in the right lane, follow the arrival/departure signs. Still in the right lane, the Sheraton will be directly after Terminal A. Our parking garage is located directly underneath the hotel, the ramp is located in front of hotel.

From Hartford: Take Route I-91 North to Exit 40. This will put you on Route 20. When Rt. 20 ends, you are at Bradley Int'l Airport. Stay in the right lane, follow the arrival/departure signs. Still in the right lane, the Sheraton will be directly after Terminal A. Our parking garage is located directly underneath the hotel, the ramp is located in front of hotel.

From New York: Take Route 95 North to Route I-91 North, proceed to Exit 40. This will put you on Route 20. When Rt. 20 ends, you are at Bradley Int'l Airport. Stay in the right lane, follow the arrival/departure signs. Still in the right lane, the Sheraton will be directly after Terminal A. Our parking garage is located directly underneath the hotel, the ramp is located in front of hotel.

From Springfield: Take Route 91 South, proceed to Exit 40. This will put you on Route 20. When Rt. 20 ends, you are at Bradley Int'l Airport. Stay in the right lane, follow the arrival/departure signs. Still in the right lane, the Sheraton will be directly after Terminal A. Our parking garage is located directly underneath the hotel, the ramp is located in front of hotel.

From Rhode Island: Take Route 6 West to Route 384 West. Follow to Route 291 West and then to Interstate 91 North (I91). Take exit 40 off of I 91 (Bradley International Airport Connector)-Route 20. When Route 20 ends you are at Bradley Int'l Airport. Stay in the right lane, follow departure signs. Still in the right lane, the Sheraton will be directly after Terminal A. Our parking garage is located directly underneath the hotel, the ramp is located in front of hotel.


* Located between Terminals A & B, the hotel is the tallest component of the airport complex, and is immediately visible when entering the airport.

Follow signs for Departures Terminal A.

Parking garage is beneath building. Take ticket to front desk for validation discount (fee \$3).

Please reserve your place by calling Shaaron Syrene at (860) 242-9800 x306 or email ssyrene@verutek.com

Places are reserved on a first come, first serve basis
For more information, see www.verutek.com



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