

# **New Technology for Environmental Solutions Collaborating for Results**

## **U.S. EPA ETV and SBIR Programs Regional Workshop**

U.S. Environmental Protection Agency, Region 6  
1445 Ross Avenue, 12th Floor  
Dallas, Texas 75202

**May 8, 2007**

### **Agenda**

- 8:00 a.m. Registration**  
**Exhibits (Arkansas/Louisiana Conference Rooms)**
- 8:30 a.m. Welcome (Oklahoma/Texas Conference Rooms)**  
Sally Gutierrez, Director, EPA National Risk Management Research Laboratory  
Carl Edlund, Director of the Multi-Media Planning and Permitting Division, EPA Region 6

#### **Plenary Session - Oklahoma/Texas Conference Rooms**

- 8:50 a.m. Region 6 Technology Information Needs and Priorities**  
Myron Knudson, Regional Technology Advocate, EPA Region 6
- 9:05 a.m. Environmental Technology Verification Program**  
Teresa Harten, Director, EPA ETV Program
- 9:15 a.m. Small Business Innovation Research Program**  
April Richards, Deputy Director, EPA SBIR Program
- 9:25 a.m. Discussion**
- 9:40 a.m. Break - Exhibits (Arkansas/Louisiana Conference Rooms)**

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#### **Morning Session A: ETV for Water - Oklahoma Conference Room**

- 10:00 a.m. ETV Drinking Water Systems Center**  
Bruce Bartley, ETV Center Manager, NSF International  
*Technology Areas: Small Systems Arsenic Treatment Technologies  
Mobile Drinking Water Treatment for Emergency Relief  
Point-of-Use/Point-of-Entry Devices for Water Security*

**10:30 a.m. ETV Water Quality Protection Center**

Tom Stevens, ETV Center Manager, NSF International

*Technology Areas:* Stormwater Treatment Technologies  
Residential or On-Site Nutrient Reduction  
Ultraviolet (UV) Disinfection for Secondary Wastewater Treatment and Reuse Applications  
Urban Infrastructure Rehabilitation  
Ship Ballast Water Treatment

*ETV Collaborations:*

Dr. C. Vipulanandan, Director of Center for Innovative Grouting Materials and Technology, Department of Civil and Environmental Engineering, University of Houston (urban infrastructure)  
Gail E. Roderick, Project Manager, U.S. Coast Guard Research and Development Center (ballast water treatment)

**11:00 a.m. Break - Exhibits (Arkansas/Louisiana Conference Rooms)**

**11:20 a.m. ETV Advanced Monitoring Systems Center**

Karen Riggs, Product Line Manager, Battelle

*Technology Areas:* Immunoassay Test Kits for Atrazine  
Ballast Water Exchange Screening Technologies  
Multi-Parameter Water Quality Monitors  
Site Monitoring Technologies  
Immunoassay Test Kits for Microcystins  
Chemical Oxygen Demand Technologies

*ETV Collaborations:*

Alan Cherepon, Geologist, Texas Commission on Environmental Quality (atrazine test kits)  
Gail E. Roderick, Project Manager, U.S. Coast Guard Research and Development Center (ballast water screening)

**11:45 a.m. ETV Environmental and Sustainable Technology Evaluations (ESTE) Project - Anaerobic Digestion of Animal Manure**

John Haines, ETV Project Manager, EPA

**11:55 p.m. Discussion**

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**Morning Session B: SBIR for Air and Energy - Texas Conference Room**

**10:00 a.m. Emissions Reductions via Air Separation Membranes**

Donald Stookey, Director of Industrial Technology, Compact Membrane Systems, Inc. (Wilmington, Delaware)

**10:30 a.m. Diesel Retrofits and Other Innovative Technologies**

Duncan Hitchens, Vice President, Lynntech, Inc. (College Station, Texas)

**11:00 a.m. Break - Exhibits (Arkansas/Louisiana Conference Rooms)**

**11:20 a.m. Low-Cost Biodiesel Production Process Using Meat Rendering Wastes, Recycled Greases and Unrefined Vegetable Oil Feedstocks**

Brian Elliott, Principal Investigator, TDA Research, Inc. (Wheat Ridge, Colorado)

**11:50 a.m. Discussion**

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**12:15 p.m. LUNCH**

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**Collaboration Panel: ETV and SBIR - Oklahoma Conference Room**

**1:30 p.m. Diesel/Nitrogen Oxide (NO<sub>x</sub>) Reduction – EPA Coordination With the Texas Commission on Environmental Quality**

Sandra Rennie, Mobile Source Team Leader, EPA Region 6

Joe Walton, Team Leader for Grant Management and Monitoring, TERP Section, Texas Commission on Environmental Quality

Rudy Smaling, Senior Research Scientist, Houston Advanced Research Center

April Richards, Deputy Director, EPA SBIR Program

Andrew Trenholm, ETV Center Manager, RTI International

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**Afternoon Session A: ETV for Air and Energy - Oklahoma Conference Room**

**2:00 p.m. ETV Air Pollution Control Technology Center**

Andrew Trenholm, ETV Center Manager, RTI International

*Technology Areas: Mobile Sources Devices*

*Baghouse Filtration Products*

*Nitrogen Oxide (NO<sub>x</sub>) Control Technologies for Stationary Sources*

**2:30 p.m. ETV Greenhouse Gas Technology Center**

Tim Hansen, ETV Center Manager, Southern Research Institute

*Technology Areas: Energy Efficient Technologies*

*Distributed Generation/Combined Heat and Power Technologies*

*Fuel Efficient Transportation Technologies (diesel fuel additives)*

*Oil and Gas Technologies*

**3:00 p.m. Break - Exhibits (Arkansas/Louisiana Conference Rooms)**

**3:25 p.m. ETV Advanced Monitoring Systems Center**

Karen Riggs, Product Line Manager, Battelle

*Technology Areas: Personal Cascade Impactor Samplers*

*Mercury Emission Monitoring Systems*

*Dioxin Emission Monitoring Systems*

*Ambient Ozone Monitors*

*ETV Collaborations:*

Lata Shirname-More, Ph.D., Research Director, Mickey Leland National Urban Air Toxics Research Center (personal cascade impactor samplers)

**3:50 p.m. ETV Pollution Prevention Coatings and Coating Equipment Pilot**

Robert Fisher, ETV Pilot Manager, Concurrent Technologies Corporation

*Technology Areas: High Transfer-Efficiency Paint Spray Guns*

*High-Volume Low-Pressure Spray Guns*

**4:00 p.m. Panel: ETV Environmental Sustainable and Technology Evaluation (ESTE) Projects**

*Pesticide Drift Reduction Technologies*

Kerry Bullock, Environmental Engineer, EPA

*Microbial Resistant Building Materials: Gypsum Wallboard*

Timothy Dean, ETV Project Manager, EPA

*Fuel Characteristics and Emissions from Biomass-Fired Boilers*

Tim Hansen, Contractor, Southern Research Institute

*Radio-Frequency Identification (RFID) Tracking of Hazardous Waste Across International Borders*

Katrina Varner, ETV Project Manager, EPA

*Portable Optical and Thermal Imaging Devices for Leak Detection at Petroleum Refineries and Chemical Plants*

David Williams, ETV Project Manager, EPA

**4:50 p.m. Discussion**

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**Afternoon Session B: SBIR for Water - Texas Conference Room**

**2:00 p.m. Rapid Test Kit for Quantifying Hormonal Activity in Animal Feeding Operation (AFO) Wastewater**

Douglas Fort, President, Fort Environmental Laboratories (Stillwater, Oklahoma)

**2:30 p.m. Handheld FRET-Aptamer Sensor to Satisfy the Beaches Act**

John Bruno, Senior Scientist, Operational Technologies Corporation (San Antonio, Texas)

**3:00 p.m. Break - Exhibits (Arkansas/Louisiana Conference Rooms)**

**3:25 p.m. A Hybrid Pathogen Detection System**

Zoraida Aguilar, Principal Investigator, Vegrandis LLC (Fayetteville, Arkansas)

**Afternoon Session C: SBIR for Nanotechnology Applications - Texas Conference Room**

**3:55 p.m. Affordable, Large-Scale Manufacturing of High Surface Area Iron Powder**

John Freim, Principal Investigator, OnMaterials, LLC (San Diego, California)

**4:25 p.m. Non-Toxic Nanocrystals for Solid State Lighting**

David Goorskey, Principal Investigator, Nanomaterials & Nanofabrication Laboratories (Fayetteville, Arkansas)

**4:55 p.m. Discussion**

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**5:30 p.m. Workshop Adjourns**

## **WORKSHOP EXHIBITORS**

Houston Advanced Research Center (*Invited*)

New Mexico State University, WERC Environmental Design Contest (*Invited*)

Texas Commission on Environmental Quality (*Invited*)

U.S. EPA Environmental Technology Verification (ETV) Program

U.S. EPA Region 6

U.S. EPA Small Business Innovation Research (SBIR) Program

## **WORKSHOP EXHIBITORS – Technology Developers**

Compact Membrane Systems, Inc. (SBIR vendor)

International Wastewater Systems, Inc. (ETV-verified vendor)

Nanomaterials & Nanofabrications Laboratories (SBIR vendor)

OnMaterials, LLC (SBIR vendor)