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Institute kicks off Earth Day and 2011 events with sensor talk

Beacon Institute's 2011 event schedule announced

Beacon, NY — Beacon Institute for Rivers and Estuaries kicks off an exciting 2011 events season with an engaging talk by its own Chief Research and Education Officer, [James S. Bonner, Ph.D., P.E.](#), a nationally recognized expert in real-time water monitoring technologies and oil spill remediation. Scheduled for the eve of Earth Day, this kick-off event in the Institute's 2011 season will take place [Thursday, April 21 at 7 pm](#) at the Center for Environmental Innovation & Education (CEIE) at 199 Dennings Avenue in Beacon.

Bonner's talk, "REON Technology: Smaller, Faster, Cheaper," expands upon his very popular presentation at CEIE last year at the height of the Gulf oil crisis. He and his REON research team have developed exciting new methods of monitoring the Hudson (and rivers worldwide) in real time. Bonner will unveil data from the research team's mobile monitoring tours of the Hudson, discuss the movement of sediment particles in the river near Fort Edward and offer a glimpse into new sensor technologies currently in development.

"Sensors are all around us – from the ice-maker in the fridge, to the instruments we are developing to detect micro-organisms in our water," remarks Bonner, who leads the development and implementation of the [River and Estuary Observatory Network \(REON\)](#), a partnership between Beacon Institute, Clarkson University and IBM to create the first technology-based monitoring and forecasting network for rivers and estuaries. "Ninety-eight percent of the changes in the environment happen only two percent of the time. Real-time sampling allows us to observe these changes in the environment as they happen, and that is transforming our understanding of environmental science. We're part of that revolution."

Bonner holds a joint appointment with Beacon Institute and at [Clarkson University](#) as a professor of civil and environmental engineering and Shipley Fellow. He earned his M.S. in civil engineering and Ph.D. in civil and environmental engineering from Clarkson University, and a B.A. in biology from SUNY Plattsburgh.

In the early 1990s, Bonner spearheaded an effort with colleagues from Texas A&M University to pursue a long-term research project to improve understanding of modern oil spill remediation and countermeasure technologies. He established the Shoreline Environmental Research Facility in Corpus Christi, TX, where he developed and implemented technologies that use high-frequency radar to map surface water along the Texas coastline. He has developed new technologies that provide real-time continuous monitoring with in-situ sensing ("sensing in place") to measure important water parameters. With funding from the National Science Foundation, Bonner has undertaken a national effort to create a cyber-collaboratory framework, enabling collection and circulation of real-time data and data analysis in the study of oxygen depletion in water.

Beacon Institute's 2011 Events Season

Beacon Institute is proud to announce [an exciting 2011 schedule](#) of environmentally themed events featuring regional experts at its Center for Environmental Innovation & Education at Denning's Point and the Gallery at 199 Main Street in Beacon.

Third Thursdays, all at 7 pm at CEIE:

- **April 21: REON Technology: Smaller, Faster Cheaper**
with James S. Bonner, Ph.D., P.E.
- **May 19: Building Inspiration: Newer "green" thinking from the ground up**
with Oliver Schaper and Lily Zand of School of Jellyfish
- **June 16: IBM Centennial Keynote: Smarter Rivers for a Smarter Planet**
with Harry R. Kolar, Ph.D., IBM
- **July 21: Spirituality and the Environment, Part 1: Christianity and Judaism**
with Brigid Driscoll, Ph.D., RSHM, former President of Marymount College, and Rabbi Lawrence Troster, Rabbinic Scholar-in-Residence for GreenFaith, moderated by John Cronin.
- **August 18: Liquid Assets: The Story of Our Water Infrastructure**
Documentary film addressing our aging water infrastructure system
- **September 15: Spirituality and the Environment, Part 2: Buddhism and Islam**
with the Venerable Bhikku Bohdi of Chuang Yen Monastery and Faraz Khan, a wetland scientist and Muslim Chaplain at Rutgers University, moderated by John Cronin.

Walk & Talk series, all Saturdays at 10 am at CEIE unless otherwise noted:

- **April 16: History & Dig Walk** with Jim Heron, author of *Denning's Point: A Hudson River History* & anthropologist Lucy Johnson, Ph.D. of Vassar College
- **April 30 at 9 am: Bird Walk** with Eric Lind of Constitution Marsh
- **May 14: History Walk** with Jim Heron
- **June 4: History Walk** with Jim Heron
- **June 11 at 1 pm: Sliders & Snappers Turtle Walk** with Erik Kiviat of Hudsonia
- **June 25: Restorative Environments Walk** with Naomi Sachs of Therapeutic Landscapes Network
- **July 9: Geology Walk** with hydrogeologist Bill Prehoda
- **July 30: History Walk** with Jim Heron
- **August 13: Tree Walk** with forester Paul Blaszak
- **September 10: Restorative Environments Walk** with Naomi Sachs of Therapeutic Landscapes Network
- **September 24: History Walk** with Jim Heron
- **October 15: History & Dig Walk** with Jim Heron and Lucy Johnson, Ph.D.
- **October 29: Geology Walk** with hydrogeologist Bill Prehoda
- **November 19: History Walk** with Jim Heron

Sunday Author Series, all at 4 pm at the Gallery at 199 Main Street in Beacon

- **May 1: David A. Steinberg:** *Hiking the Road to Ruins*
- **May 15: Barbara & Wesley Gottlock:** *Lost Towns of the Hudson Valley*
- **May 22: Jessica Dulong:** *My River Chronicles*

- **October 23: Ted Spiegel:** *Hudson Valley Voyages: Through the Seasons, Through the Years*
- **November 6: Jim Heron:** *Denning's Point: A Hudson River History*
- **November 13: Thomas Locker:** *Hudson, Story of a River*

All events are free and open to the public. Online registration is suggested. www.bire.org/events.

About Beacon Institute for Rivers and Estuaries

Beacon Institute for Rivers and Estuaries, with offices in Beacon and Troy, New York, is a not-for-profit environmental research organization engaging scientists, engineers, educators and policy experts in collaborative work focusing on real-time monitoring of river ecosystems. It aims to make the Hudson Valley a global center for scientific and technological innovation that advances research, education and public policy regarding rivers and estuaries. www.bire.org

Editor's Note: High resolution color images are available for publication upon request. Please contact Kathleen Hickey at 845-838-1600 x15.

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