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For Your Information

Hold these Dates!

CUAHSI 2nd Biennial Colloquium, Boulder, CO

July 19-22, 2010—Mark the date on your calendar!

[more information](#)

Calendar of Events

April 25-29, 2010
[National Water Quality Monitoring Council 7th National Monitoring Conference](#) - Denver, CO

May 2-7, 2010
[EGU General Assembly 2010](#) - Vienna, Austria
[special sessions](#)

May 25-29, 2010
[BALWOIS 2010 Conference](#) - Water Observation and Information Systems for Decision Support - Ohrid, Republic of Macedonia

June 6-11, 2010
[2010 Joint Summer Meeting with ASLO & NABS](#) - Santa Fe, NM

June 27-July 1, 2010
[Joint Federal Interagency Conference on Hydrologic Modeling and Sedimentation](#) - Las Vegas, NV

July 10-20, 2010
[International Summer School](#) — Integrated River Basin Management - Beijing, China

July 11-16, 2010
[Gordon Research Conference](#) — Flow & Transport in Permeable Media 2010 - Bates College, Lewiston, ME

July 22, 2010
[DTS down to Earth: Principles, Applications, Operational Factors, and](#)

CUAHSI Awarded Grant to Hold Water Information Briefings on Capitol Hill

The [Johnson Family Foundation](#) has awarded CUAHSI a \$20,000 grant to support a series of regional water briefings on Capitol Hill culminating in a "One-Day University." The target audience for these events is staffers working on water issues in the House of Representatives. These presentations are being hosted by Valentina Valenta, chief staffer of the Water Caucus, which is chaired by Representative John Linder (GA). This is the first grant to CUAHSI from an organization other than the National Science Foundation.

CUAHSI has been working with [Linda Lilienfeld](#), a picture and film researcher, on film and water events called "[Let's Talk about Water](#)." We have held events at [University of California, Irvine](#) and Duke University, with further events scheduled at University of Massachusetts Boston and University of North Carolina this fall.

The formula for these events is simple, yet effective. We typically show a film, such as FLOW, that covers a broad range of topics and some other film (such as "Chinatown" at UCI) the preceding evening with local significance to raise interest in the topic. There is a panel, consisting of local and national experts in water issues to help the audience to determine what's important in their area. For university audiences, we typically add discussion of career opportunities in water in consulting, research, law, and other areas.

The Capitol Hill events will begin with 5 regional discussions (Southeast, Chesapeake Bay, Great Lakes, Ogallala, and California). We hope that this will raise interest in a larger "One-Day University" that will be discussing the information needed for an effective national water assessment. The first two regional events have been scheduled for May 13 and June 9. Subsequent events will be in the fall.

Consistent with our corporate values, CUAHSI is not advocating any policy options in these events, but rather presenting scientific information to enable policy makers to make better informed decisions.

CUAHSI Strategic Planning Underway

As part of the development of a strategic plan for the next five years, the Board of Directors has appointed members to six Standing Committees. These committees will review a Status Report for each program area that CUAHSI is working in and make recommendations to the Board for their consideration. Standing Committees are the formal means of receiving community input about CUAHSI's operations. The current membership of the standing committees and the Board Liaisons are:

Education & Outreach

Thorsten Wagener, Penn State University (**Chair**); David Freyberg, Stanford University (**Board Liaison**); **Members:** Tony Berthelote, Salish Kootenai Tribal College; Diana Dalbotten, University of Minnesota/NCED; Mark Green, Plymouth State University; Laura Lautz, Syracuse University; Brian McGlynn, Montana State; Benjamin Ruddell, Arizona State University - Polytechnic; Christina Tague, UC Santa Barbara.

Informatics



Demonstrations for Environmental Sensing - Univ. of Colorado at Boulder [[more info](#)]
 August 23-27, 2010
[ASCE 2010 Watershed Management Conference](#) - Madison, WI
 December 6-8, 2010
[Global Catchment Initiative](#) - The Global Dimensions of Change in River Basins - University Club Bonn, Germany

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Paul Houser, George Mason University (**Chair**); Carol Johnston, South Dakota State University (**Board Liaison**); **Members:** Kathy Bower, Eastern Illinois University; Ben Domenico, Unidata; Bisher Imam, UCI; Marilyn Kaminski, National Snow and Ice Data Center; Peter Kitanidis, Stanford University; Anton Kruger, Iowa; Scott Peckham, CSDMS; Mark Servilla, LTER Network Office; Peter Williams, IBM. **Agency Reps:** Kristen Gunthardt, EPA; Deborah Hayes, USFS; Doug James, NSF; Katherine Lins, USGS; Russ Vose (Glenn Rutledge alternate), NCDC; Mark Walbridge, ARS.

Instrumentation

Klaus Neumann, Ball State University (**Chair**); Robyn Hannigan, University of Massachusetts-Boston (**Board Liaison**); **Members:** Erich Hester, Virginia Tech; Jasmeet Judge, University of Florida; Todd Scanlon, University of Virginia; Bob Poreda, University of Rochester.

Observations

Dave Chandler, Kansas State University (**Chair**); Jim McNamara, Boise State University (**Board Liaison**); **Members:** William Ball, Johns Hopkins University; Paul Brooks, University of Arizona; Wendy Graham, University of Florida; Miki Hondzo, University of Minnesota; Jan Hopmans, University of California, Davis; Henry Lin, Penn State University; Mark Williams, University of Colorado.

Research Applications

Allen Bradley, University of Iowa (**Chair**); Ken Potter, University of Wisconsin (**Board Liaison**); **Members:** Laura Bowling, Purdue University; Kristie Franz, Iowa State University; Stu Schwartz, University of Maryland, Baltimore County; Rich Vogel, Tufts University; Ralph Wurbs, Texas A&M.

Synthesis

Beth Boyer, Penn State University (**Chair**); Aaron Packman, Northwestern University (**Board Liaison**); **Members:** Kevin Bishop, Swedish University of Agricultural Sciences; Ying Reinfelder, Rutgers University; Charles Vörösmarty (Caroline Hermans alternate), CUNY.

July 2010 CUAHSI Biennial Colloquium

The second CUAHSI Biennial Colloquium will be held on July 19-22, 2010 on the campus of NCAR in Boulder, CO. The following links enable you to [Submit a Poster Abstract \(deadline May 31st\)](#) or [Register for the Colloquium](#).

Highlights include:
 Plenary Speakers

- Keynote: **Chris Milly** (USGS)
- Peter S. Eagleson Lecture: **Ignacio Rodriguez-Iturbe** (Princeton)
- M. Gordon "Reds" Wolman Lecture: **Gordon Grant** (US Forest Service)

[Scheduled sessions](#) include:

- Atmosphere-Land Surface Interface;
- Land Surface-Groundwater Interface;
- Transition Zone Between Hillslope and Channel;
- Groundwater-Surface Water Interface;
- Land Surface-Surface Water Interface;
- Natural System-Human System Interface;
- DTS: Lessons Learned; and
- Catchment Comparison.

[Numerous workshops](#) are planned on the day before and immediately following the Colloquium including • HydroDesktop Training; • Data Publication Using CUAHSI Water Data Services; • Catchment Comparison Exercise 2010; • Near-surface Geophysics; • Professional Development for Students; • Mobile X-band Radar; • Distributed Optical Fiber Temperature Sensing; • Data-Driven Cyberlearning for Geoscience and Hydrology Education. A special program for graduate students is also being planned.

Additional details regarding registration, hotel accommodations, and other logistical matters are available on our [web site](#).

Graduate Student Events at CUAHSI Biennial Science Colloquium

There are a few events at the upcoming colloquium that are being offered specifically for graduate students. Events will include:

1. Reception and graduate student networking on Sunday, July 18th. Business to include organizing a graduate student committee within CUAHSI.
2. Special session by Jeff McDonnell on writing research papers.
3. Tour of NCAR/UCAR Facilities, and meet-and-greet with NCAR/UCAR personnel.
4. Poster sessions throughout the week (open to students and professionals) - abstracts due by May 31st.

Please circulate this among students at your institutions, and feel free to contact Adam Ward at asw178@psu.edu if you are interested in taking a leadership role within the CUAHSI graduate student group.

CUAHSI Spring 2010 Cyberseminars Schedule

April 30, 2010: 3:00pm ET

- **Jim Heffernan, Florida International University & Matt Cohen, University of Florida**

Title: Inferring biogeochemical processes from high-frequency nitrate measurements in flowing waters

Abstract: Recent studies from both freshwater and marine habitats highlight the potential for estimation of biogeochemical processes, particularly autotrophic assimilation, from diel variation in nutrients such as nitrate. However, these approaches have been developed and applied to systems (productive oceans and spring-fed rivers) ideally suited to their use. I will review the findings of these studies to illustrate the kinds of inference that are already being drawn, and then address our efforts to extend the range of systems, solutes, and circumstances under which these approaches can be used. Laboratory experiments demonstrate the capabilities of commercially available nitrate sensors to detect diel variation as small as $7 \mu\text{g NO}_3\text{-N L}^{-1}$, and the minimal interference by colored dissolved organic matter under all but the highest concentrations ($>10 \text{ mg DOC L}^{-1}$). We use these data to bound the ranges of discharge and productivity that should permit estimation of autotrophic assimilation using existing methods in lotic and lentic systems. We also introduce a two-station approach that allows inference of autotrophic assimilation against dynamic inputs from terrestrial systems. Our results suggest that estimation of autotrophic assimilation from diel variation may be possible in a wide range of aquatic environments, but that the strongest inference about biogeochemical processes will require a combination of approaches.

[\[more information\]](#)
