



# AEESP Newsletter

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*Need to renew your  
2011 AEESP membership?  
Go to "Join > membership renewal"  
on the AEESP website:  
**AEESP.org***

## AEESP Newsletter Submissions

*Please send news, conference  
announcements, job postings, letters  
to the editor, and other contributions  
to the newsletter to the editor, Joe  
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The next newsletter will appear in  
September, 2011.*

## President's Column

### The Path to Tampa

By NANCY G. LOVE, UNIVERSITY  
OF MICHIGAN

The crocuses are in bloom in Ann Arbor and the red buds are ready to burst onto the spring scene. We're gearing up for the last few classes before final exams, and by the time you see this we will be shaking hands with students as they cross the stage to grab their diplomas.

But springtime in the year of an AEESP conference is not a time of rest and relaxation. Our colleagues in Florida are working hard to ensure that those of us headed to Tampa in July will have a fun, stimulating, and overall good time. At the same time, the Board is working on some key items that will both benefit and engage the membership.

First, we are planning some active exercises to get member feedback on our Strategic Directions at the conference. Posters that describe our focus areas will be set up with opportunities to write comments about each and to discuss in focused discussion groups. The Board wants your feedback on how to focus its time, and it will give Joel Burken some important and useful feedback to inform his 15 months in office as President of AEESP. Beyond the Strategic Directions, we have other important organizational activities underway.

We are in the process of reorganizing e-commerce within AEESP, including the nature of our website. Many of you have long desired a way to be e-connected to AEESP membership information while maintaining "member-only access" to that information. The Internet Resources Committee is looking at this and more, and they will have a focused mini-retreat to identify options and an action plan so that we move forward rapidly toward an



*AEESP President Nancy Love*

improved e-interface with our membership and the world.

We value our long-term members with a membership category titled Emeritus Members. Despite the intent, this title has generated confusion; we've had multiple conversations about what this category means as long as I have been on the board. In an attempt to clarify the intent of the organization to honor those who have been active, paying members for many years, the board has proposed a name change from Emeritus Member to Lifetime Member. This proposed change involves a by-laws change—please take the time to vote on this important change to our by-laws (see your recent membership mailing).

Finally, as we look to enhance our visibility as an organization, we are examining ways to increase our global presence. Two items are being actively discussed by the Board. The first involves a proposal to associate AEESP with an existing journal that has a global reach. The Board has debated this

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**AEESP Membership Application online:**

[www.aeesp.org/membership/AEESP\\_member\\_app.pdf](http://www.aeesp.org/membership/AEESP_member_app.pdf)



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## 2011 AEESP Education & Research Conference

### July 10–12, 2011

**GLOBAL SUSTAINABILITY and ENVIRONMENTAL ENGINEERING & SCIENCE:  
IMPLICATIONS FOR RESEARCH, EDUCATION, and PRACTICE**

Association of Environmental Engineering and Science Professors (AEESP)

**2011 AEESP Education & Research Conference**  
**JULY 10-12, 2011. TAMPA, FLORIDA**

[www.aeesp2011.com](http://www.aeesp2011.com)  
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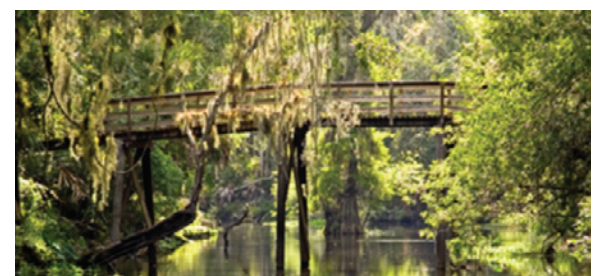
USF  
UNIVERSITY OF SOUTH FLORIDA

*Submitted by* MAYA TROTZ AND JEFFREY CUNNINGHAM (CO-CHAIRS), WAYNE ECHELBERGER, SARINA ERGAS, JAMES MIHELICIC, LINDA PHILLIPS, PETER STROOT, AMY STUART, KALA VAIRAVAMOORTHY, DANIEL YEH, AND QIONG JANE ZHANG

The AEESP Education and Research Conference will be held July 10–12, 2011, in Tampa, Florida, at the University of South Florida (USF). The conference has seven theme areas to accommodate presentations on education, research, and practice:

1. Advances that deal with water depletion and degradation,
2. Advances that assess and improve air quality and waste management,
3. Infrastructure that serves an expanding and urbanizing population,
4. Vulnerability and adaptation to climate change,
5. Global issues in environmental engineering,
6. Energy as a cross-cutting theme, and
7. Integration of sustainability into engineering practice.

Learn more and register at [aeesp2011.com/workshops/](http://aeesp2011.com/workshops/).



## Sunday (July 10) Workshop Topics

Room	1	2	3	4	5
9:00	NSF CAREER proposal workshop	Navigating the Academic Job Search: A Workshop for Graduate Students, Post Docs, and Practitioners	Integrating Sustainable Development into Courses throughout the Engineering Curriculum	Engaging Students in the Classroom Environment—presented by AEESP teaching award winners	Teaching Quantitative Microbial Risk Assessment in Environmental Engineering & Science
10:30				Using Video Lessons to Enhance Learning and Classroom Interactions	Software for Teaching Environmental Chemistry
12:00	Working Lunch				
12:45	Starting off right: Navigating the early years of academia	Frontiers and Challenges in Environmental Education	Giving your students an edge: Efficient strategies for teaching writing skills	Engineering Education Response to Climate Change: Adaptation, Mitigation, and Sustainability	Sustainability—An Integration of Natural And Engineering Systems In the Built Environment
2:15				Integrating Intensive Service Learning into Sustainability Courses	
3:45	Get Ready to go to Clearwater Beach for Social				

## Conference Highlights

- Program includes 13 workshops, 3 keynote speakers, 102 oral presentations, and a poster session with over 120 presentations.
- Full slate of workshops on Sunday followed by an evening Gulf of Mexico beach social
- NSF supported CAREER Proposal Workshop
- AEESP Business Meeting & Awards Ceremony on Monday evening at the Florida Aquarium
- AEESP Legacy Dinner on Tuesday (hosted by Wayne Echelberger and Phil Singer) (i.e., legacies received their doctorate degrees  $\leq 1975$ ). Come honor our legacies and celebrate the history of our discipline and those members who made it all happen.
- Session on integrating sustainability into engineering practice co-organized with the American Academy of Environmental Engineers (AAEE)
- Tampa and the surrounding area provide a vast range of activities, both family-friendly and for single attendees. Many activities are available within walking distance of the USF campus; others are within a short drive.

## Platform Presentations

**Designing Tomorrow.** Dr. Paul Anastas, Assistant Administrator for EPA’s Office of Research and Development and Science Advisor to the Agency.

**Climate Change and Development: Avoiding the Unmanageable and Managing the Unavoidable.** Dr. Rosina Bierbaum, Dean of the School of Natural Resources and Environment at the University of Michigan and co-author and co-director of *World Development Report 2010: Development and Climate Change*.

**The Day After Tomorrow: Changing Our View of Education.** Dr. James R. Mihelcic, Professor and State of Florida 21st Century World Class Scholar, Director of the Peace Corps Master’s International Program, Civil & Environmental Engineering, University of South Florida.

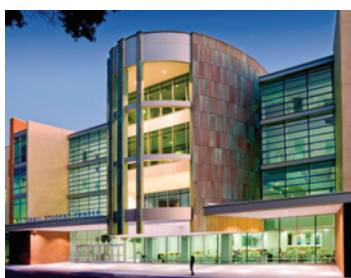
## Information on Conference Registration, Lodging, Travel, and Attractions

Register at [aeesp2011.com/registration/](http://aeesp2011.com/registration/)

Learn about great lodging rates at [aeesp2011.com/hotels/](http://aeesp2011.com/hotels/)

Tampa can be reached by train, bus, automobile, or airplane: [aeesp2011.com/transportation/](http://aeesp2011.com/transportation/)

Stay an extra day and enjoy the Salvador Dali Museum, Busch Gardens, or one of many regional parks and beaches.



*President's Column, continued from page 1*

proposal for years, but we felt it was time to get membership input and come to a “once-and-for-all” decision on this issue. Please see the Board Highlights (this page) for details about the proposal. We will again have time to debate this proposal at the summer conference, and we expect a vote of the membership sometime in the early fall.

Second, we have been discussing ways to create more formal alliances with international organizations, including the International Water Association (IWA, [www.iwahq.org](http://www.iwahq.org)) and the Chinese American Professors of Environmental Engineering and Science (CAPEES, [www.capees.org](http://www.capees.org)). We will be featuring the programmatic elements for our strategic partnership with IWA at the conference in July; please bring your enthusiasm and ideas to our planning meeting. We are just now initiating conversations and expect to discuss the nature of our alliance further with CAPEES members at the summer conference.

As I sign off with my last President's Column, I want to thank Joanne Fetzner and current and former members of the Board for making my time with AEESP so memorable. I look forward to remaining an active member of our “club” (but I am not looking forward to becoming a Lifetime Member anytime soon!). Have a good end of semester and see you in Tampa!

## Spring 2011 AEESP Board Meeting Highlights

*Submitted by* JOEL G. BURKEN, MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY

The AEESP Board of Directors gathered in St. Louis for the Spring 2011 Meeting on March 3–4. We gathered for meetings at Washington University in the fantastic new Brauer Hall. The meeting was productive and many topics centered around the previous strategic planning efforts and moving toward some long-term goals of AEESP. We discussed the planning and coordination of events for activities at the summer 2011 meeting, “Global Sustainability and Environmental Engineering & Science: Implications for Research, Education, & Practice” in Tampa at the University of South Florida. We look forward to the meetings and activities and to advancing the AEESP mission and meeting with friends and colleagues for a few days.

Two topics of particular interest filtered up and generated much discussion and pending bylaws changes up for vote by the entire membership. The first is the generation of a Lifetime Member category of membership. Members will qualify for this status if (1) they are retired with 20 years previous membership or (2) they have been members for at least 35 years. The ballots to vote on this change were sent in the spring mailing. While not in the current bylaws change, we also discussed the generation of an AEESP Fellow membership status. This category will be proposed/created as a recognition of sustained and significant contributions by AEESP members to the field—consistent with AEESP's mission. The proposed changes came from confusion about the current Emeritus Member status and the desire to increase the potential for recognizing the variety of long-term support and contributions to AEESP from our members. The other topic that generated lengthy, and at times passionate, discussion was the potential for AEESP to link with a journal as the official AEESP journal. Discussions with *Environmental Engineering and Science* (EES) have generated a potential linkage that would provide AEESP the opportunity to enter a memorandum of understanding with EES where AEESP would be able to publish in the journal and AEESP members would receive discounted subscriptions. The adoption of EES would provide AEESP with a much broader reach, particularly in the international fields. AEESP would also gain a publication outlet for AEESP members, particularly in fields that do not align with other more specific journals and also for educationally related articles. Mary Leibert, the publisher of EES, would also assist in publishing the AEESP Newsletter, although all content would be from AEESP and not subject to publisher approval. The primary concerns against adoption of the journal stem from the fact that the current impact factor of the journal is lower than that of the top 2–3 journals where environmental scientists and engineers often publish. Some felt that AEESP's adoption of EES might be a misleading endorsement of the journal to junior faculty who might be better served as they advance toward tenure versus publishing in journals with higher impact factors. Many other details were discussed including AEESP involvement in appointments to the Editorial Board and Editor positions. The Board voted to continue the progress, with next steps being to work on the MOU and bring the topic up for discussions at the summer meeting and for a membership bylaws vote in late summer.

In addition to an open discussion and comment session about the adoption of EES, the AEESP Education and Research Conference in Tampa will also include discussion of AEESP Strategic Goals:

1. Expand AEESP's Global Influence,
2. Define the Scope and Direction for Environmental Engineering & Science Curricula,

3. Facilitate Expanded Research Activity, and
4. Promote the Environmental Engineering & Science Community.

The full strategic planning document is posted on the AEESP.org site and on linkedin.com in the AEESP discussions.

Along the lines of the strategic goal of expanding the AEESP global influence, the Board discussed AEESP activities at a number of conferences, particularly of international organizations. We looked at our activities with IWA (International Water Association) as a prime example and Benito Mariñas agreed to head an *ad hoc* committee on global activities in environmental engineering higher education and research.

Many other topics were discussed in the meetings, with some of the more important and interesting topics summarized herein:

1. AEESP memberships were discussed, in particular a drop in renewals over the last year. The board plans to make individual calls to non-renewing members and to make an effort to increase the number of Sustaining Members. The Sustaining Membership dues have been at \$500 for some time, but the idea to increase the membership was changed to a tiered membership to note sustaining members who have for years made a substantially larger contribution. New membership levels are: \$500–Sustaining, \$1,000–Silver, \$2,500–Gold, \$5,000–Platinum, and \$10,000–Diamond. Diamond and Platinum members will of course get to board the buses first as the Tampa Conference.
2. The Board also discussed member dues and proposed a dues structure of: \$15 students, \$50 for Assistant Professors, \$75 for Associate Professors, and \$100 for Full Professors. While the Board is hesitant to change dues, this would be the first dues increase in over a decade and will be discussed again at the July meetings.
3. The Board discussed the AEESP Foundation linkages and looks forward to maturing of some new endowed awards: the CH2M Hill–AEESP Outstanding Dissertation Award, the Paul



*The AEESP Board outside Stephen F. and Camilla T. Brauer Hall, a new building of the School of Engineering at Washington University of St. Louis: (front) Jennifer Becker, Margaret Lang, Bill Cooper, Joanne Fetzner, and Benito Marinas, and (back) Mark Wiesner, Joel Burken, Nancy Love, Steve Dentel, and Bob Arnold.*

- V. Roberts–AEESP Outstanding Dissertation Award, and the Charles R. O’Melia–AEESP Distinguished Educator Award.
4. We all agreed that updating the internet and information resources provided by AEESP is needed. The Internet Resources Committee will be tasked to retain services to improve our internet presence and resources offered. In particular the Education Committee will be involved to help provide content and identify the needs of members as related to education.
5. The Board supported the Education Committee in its effort to present a poster at the EPA’s 7th Annual Sustainable Design Expo (also known as P<sup>3</sup>).
6. The Demographics and Diversity Committee was asked to perform an update of the demographics and diversity report and set plans for regular 5-year updates. The last update was well over 5 years ago and new information is sought.

Overall we had a very productive meeting, looking at the current and long-term needs of AEESP and members. In the end we scrambled to get a quick tour of the new facilities at Wash U and we greatly thank our hosts there, particularly Pratim Biswas and Dan Giammar, for their gracious hospitality and help in setting up a great meeting. We look forward to the summer meetings in Tampa!

## ***The AEESP 2010-2011 Distinguished Lecture Tour: Summary, Reflections, and Observations***

*Submitted by* DAVE DZOMBAK, CARNEGIE MELLON UNIVERSITY

In January 2010, I was very surprised when Cliff Davidson (Syracuse University) of the AEESP Distinguished Lecture Committee contacted me to see if I would be available to do the 2010–2011 lecture tour. Having applied for and hosted many AEESP lectures over the years (always a joint venture of Carnegie Mellon and the University of Pittsburgh), the thought had never occurred to me that I might be the lecturer someday. I was honored to be asked and I didn't hesitate to accept, even though I wasn't quite sure how I would pull it off with respect to scheduling.

Sarina Ergas (University of South Florida), the AEESP Distinguished Lecture Committee chair, was very helpful in explaining the scheduling process and guiding me, doing all the work of advertising the seminars and soliciting applications, and working with the Committee and with me to determine the tour schedule. Her devoted service to AEESP is emblematic of the community spirit among our members which makes AEESP so special an organization.

From the applications submitted, 19 lectures were scheduled for the tour. These included presentations at 18 universities and an additional lecture at the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC), which was open to the environmental engineering community of Chicago. I scheduled seven lectures in the Fall 2010 semester when I was teaching, and 12 lectures in Spring 2011 when I only had a weekly graduate seminar to lead thanks to the kindness of my department in granting me some teaching relief for the semester.

I offered two lectures on topics in which I have been conducting research for the past five years: "The Need and Challenge of Alternative Sources of Water for Use in Electric Power Production," and "Geologic Sequestration of CO<sub>2</sub>: Evaluating and Monitoring Seal Rock Integrity." In the course of the 19 visits, I presented the water-energy lecture 13 times, and the lecture on CO<sub>2</sub> sequestration 7 times (gave both lectures on my visit to USF).

The Fall 2010 tour visits were to northeast and midwest locations that I could reach without long travel and mostly by vehicle. My tour began in late September with a visit to Lafayette College and Lehigh University in Eastern Pennsylvania, and then to the University of Maryland (joined by faculty and students from Johns Hopkins and the University of Maryland Baltimore County). In October, I visited the University of Cincinnati (joined by colleagues from the USEPA Cincinnati research laboratory), Notre Dame (joined by faculty and students from Purdue University), the University of Illinois at Urbana-Champaign, and the University of Buffalo. The last trip of the fall semester was to Stanford University in November.

The Spring 2011 tour began in late January with trips to the Arizona State University, the University of Arizona, and the University of Washington. In February, I visited Duke University (joined by faculty and students from North Carolina State University and UNC-Chapel Hill), University of South Florida (joined by faculty and students from the University of Central Florida and the University of Florida), Louisiana State University, University of Oklahoma, University of Nebraska-Lincoln, and MWRDGC. In March, I visited the University of Iowa and Missouri University of Science and Technology. The tour concluded with a visit to Clarkson University (joined by faculty and students from Syracuse University and the University of Ottawa) on April 1.

I thoroughly enjoyed and was very energized and stimulated by each visit. I learned a great deal from the students, faculty members, and non-academic folks I met with before, during, and after the lectures. I made a lot of notes in hotel rooms and on airplanes after each visit! I don't have space to relate all the details here, but I will share some travel vignettes, reflections, and some general observations.

### ***Travel Log***

I did a lot of driving for the Fall tour, much of it through the farming country of Pennsylvania, Ohio, western New York, Indiana, and Illinois. An impression that stays with me is of the intensity of farming activity during harvest season, including at night, with headlights of large harvesting equipment evident across large expanses of farm fields very late in the evening. My knowledge about the relationship of agricultural activity and environmental quality has expanded quite a bit in the past six years in the course of various professional activities. My repeated encounters with intense agricultural activities during the Fall 2010 harvest season and my missionary travels for environmental engineering caused me to reflect on the growing awareness in environmental engineering and science of the importance of agricultural practices on air, water, and land quality. This will be an important area of research and practice for 21st century environmental engineers.

On my trip to the University of Buffalo in late October, I experienced a memorable rapid transition into an intense micro-climate. My afternoon drive from Pittsburgh to Buffalo was under warm sunshine and blue sky nearly all of the way. As I approached Buffalo, driving along Lake Erie, a well-defined line of low-ceiling, very dark clouds moving across the lake and over parts of Buffalo was apparent. Within five miles of the University of Buffalo, I drove under the line of dark clouds and experienced an abrupt transition to a swirling, cold air mass that was depositing snow. I thus experienced the first snow of the winter on October 21, and in a most interesting way. Lest you



*Dave Dzombak (second from left) at Louisiana State University on February 14, 2011, with AEESP colleagues (left to right) Louis Thibodeaux, Kalliat Valsaraj, and Clint Willson.*

think otherwise, I was delighted to arrive at the University of Buffalo and to the warm company of our hardy AEESP colleagues there. Among other kindnesses, they arranged at my request a personal tour of the famous University of Buffalo earthquake engineering laboratory in which full-scale structures are shaken.

My wife Carolyn joined me for my January trip to the western US. When we left Pittsburgh on Sunday morning, January 23, it was dark, cloudy, and 8°F. When we arrived in Phoenix it was sunny, 75°F, and there wasn't a cloud in the sky. While the energy level in Pittsburgh on that day was high due to the Pittsburgh Steelers-New York Jets AFC championship football game, I have to say that we much preferred being in warm Phoenix. At dinner that evening with ASU friends Paul and Kelly Westerhoff and Peter and Irma Fox, Paul was adept at keeping us updated on the Steelers progress through periodic, long-distance study of a television in the restaurant lounge. The warm welcome of our hosts and the warm January evening made for a great start of the Spring lecture tour. At the University of Arizona, at the end of a most informative day, Carolyn and I joined hosts Bob Arnold and Wendell Ela to visit the impromptu memorial at the University of Arizona Hospital entrance for Congresswoman Giffords and the other victims of the January 8 mass shooting. We saw and felt first-hand the pain and grief of the Tucson community. After we departed Arizona, we visited the University of Washington, which was not quite as sunny and warm as Arizona, but the weather was mild and the mountains were beautiful. Following a great visit at UW, Carolyn and I drove south to Aspen, Oregon for the weekend, to see the end of the Lewis and Clark trail, and to see up-close the violent collision of the discharge of the mighty Columbia River with the Pacific Ocean.

The busiest part of the lecture tour schedule was in February, with visits to various institutions in the South and Great Plains areas. At Louisiana State University, I learned about the leadership of LSU in an interdisciplinary effort to explore options for addressing the very serious problem of loss of coastal wetlands. I also learned a lot from Louis Thibodeaux about the Cajun history of Southern Louisiana, which I found most interesting. Upon my arrival in Oklahoma, Dave Sabatini gave me a tour of Oklahoma City before we drove to Norman, home of the University of Oklahoma. We visited the Oklahoma City stockyards where I got to see real cowboys, some on horses, but more were modern cowboys ... driving quads. Near to the stockyards was a large, authentic Western clothing store, complete with specialized rooms having the largest collection of cowboy hats and cowboy boots I have ever seen, and

large, expensive belt buckles under glass counters. This was definitely a first for me. Dave and I also visited the sobering, but beautiful, Oklahoma City National Memorial, at the site of the 1995 bombing of the Murrah Federal Building. On my visit to the University of Nebraska, Bruce Dvorak arranged for me to visit a modern gas-turbine combined cycle power plant utilizing treated municipal wastewater for cooling purposes, and with several regional water district managers. I was very impressed with the sophistication of water resources management in Nebraska.

In my March visit to the University of Iowa, Michelle Scherer arranged a creative mini-symposium for me to hear short presentations from a number of students and postdocs and engage with them, which I enjoyed very much. I also enjoyed discussions after my lecture and over dinner with Rich Valentine about the fascinating, wide-ranging engineering work and achievements of Thomas Edison (hope the other dinner participants enjoyed learning more about Edison as much as we did). At Missouri University of Science and Technology, I had the opportunity to meet with faculty members in petroleum engineering in addition to my meetings with AEESP colleagues, and to sit in on a class in hydraulic fracturing, a topic of much current interest in Pennsylvania.

My last stop, on April 1, was at Clarkson University in Potsdam, New York. I selected April 1 because I figured that winter in the Adirondacks should be concluded by then. While the weather forecast for Potsdam earlier in the week of the lecture indicated the potential for a late winter storm to deposit 6-12 inches of snow, the storm fortunately stayed to the east, enabling a non-eventful drive from the Syracuse airport north to Potsdam. It was fitting to end the

*continued on next page*

tour at a university for which environmental engineers comprise the leadership: President Tony Collins and Provost Tom Young, both of whom are AEESP members.

The collaborations and good feelings evident in the multiple institution involvement in many of the lectures were inspiring. The multi-institution lectures included Lafayette/Lehigh, Maryland/Johns Hopkins/UMBC, Cincinnati/USEPA, Notre Dame/Purdue, Duke/NCSU/UNC-Chapel Hill, USF/UF/UCF, and Clarkson/Syracuse/Ottawa. I am especially grateful to the faculty and students who travelled long distances to host institutions for the AEESP lecture. For my visits to Notre Dame and the University of South Florida, poster sessions were organized to be held in conjunction with the AEESP lecture, to help build community with partner institutions. These were very successful and enjoyable events. I visited every poster at both of the poster sessions!

## **Reflections and Observations**

The environmental engineering academic community remains a collegial and close-knit group, with excellent community spirit and commitment. AEESP has an important role in this. In the January 2011 AEESP Newsletter, AEESP President Nancy Love mentioned the envy of her academic husband for the unique sense of professional community engendered by AEESP. My visits with AEESP members at many environmental engineering programs over the past academic year confirm that our AEESP community spirit is as strong as ever.

There is a lot of respect for what environmental engineering programs are doing among the engineering deans with whom I spoke. The leaders of university engineering schools that I met recognize the connection of environmental engineering with many other engineering disciplines, and the importance of environmental engineering for society, for their engineering schools.

The diversity of focus areas for graduate research in environmental engineering and science continues to expand, and environmental engineering faculty members are engaging in an increasingly broad range of interdisciplinary collaborations. While in some respects this makes environmental engineering hard to define, it also makes our field versatile and vibrant. We are willing to plunge in on interdisciplinary projects where others in engineering and science are often more reluctant.

There is concern among environmental engineering faculty members about limited funding sources, adequacy of funding, and future funding. Over the course of my career it has always been this way in environmental engineering, and I expect it will remain this way for the foreseeable future. We have never had access to large and long-lived research resource pools. However, over the course of my career I have also observed that environmental engineering faculty members are “scrappy” and creative, pursuing support from a variety of sources. I observed this consistently on my visits to environmental

engineering programs over the past academic year. I found that faculty members are working hard to link to regional environmental engineering and science challenges and to pursue related regional funding sources, while at the same time also pursuing national and international funding opportunities. Our hard work and creativity will ensure our vitality into the future.

I was asked at several schools by junior faculty members about what will be the “next big thing” in environmental engineering and science research. I mentioned some areas of importance from my perspective, like water and energy, nutrient loadings, etc., but noted that it’s unclear what will be funded for research. My main message in response was I didn’t know for sure, but I did know that there will be new “next big things” about every five years, and that it is important for a faculty member to be flexible and willing to move into new research areas.

All universities are feeling pain from the economic recession. Public universities are especially feeling pressure as state legislatures take steps to close budget gaps. From my discussions with faculty members at institutions across the U.S., it is clear that different states are treating higher education in different ways, and value education in different ways. This challenge is obviously not specific to environmental engineering, but it was an issue of discussion at every university I visited.

The current generation of students is strongly motivated by environmental challenges in the developing world. Environmental engineering students have always been motivated by high ideals, but this generation has new sources of such motivation. I am sure that this is evident to all of my AEESP colleagues.

All of the environmental engineering programs I visited have strong numbers of women. This bodes well for the future of our profession.

Overall, I feel very good about the state of our field. As former AEESP lecturer Bruce Rittmann of ASU said when I visited with him in January, his strongest memory of his 2004 lecture tour was how much he was inspired by the commitment, community, and creative work of AEESP members. Bruce’s comment captures my feelings well.

## **Acknowledgements and Thanks**

I thank the membership of AEESP for this unique, wonderful opportunity to represent our organization to a new generation of environmental engineering students via the AEESP Distinguished Lecture tour. It was an experience that I will remember and value forever. I thank Sarina Ergas and the AEESP Distinguished Lecture Committee for selecting me and for their work and guidance in organizing the tour schedule.

I thank the faculty members at all of my lecture tour stops for making time in their schedules to meet with me and for arranging some

very interesting experiences. I also thank them for all the good ideas and comments on the talks I presented, and for their diplomatic, constructive comments when I didn't have something quite right or my understanding was incomplete.

I could not have done the lecture tour without the teaching relief from my department and the support of my department colleagues in filling in for me at faculty, project, and committee meetings during my absences. I am very grateful to Carnegie Mellon CEE Department Head Jim Garrett and all of my CEE colleagues.

### Videos of 2010-2011 AEESP Distinguished Lectures

#### Geologic Sequestration of CO<sub>2</sub>: Evaluating and Monitoring Seal Rock Integrity

October 15, 2010

University of Illinois at Urbana-Champaign

The Water CAMPWS Center

[www.watercampws.org/aeesp/](http://www.watercampws.org/aeesp/)

#### The Need and Challenge of Alternative Water Sources for Use in Electric Power Production

February 23, 2011

University of Nebraska at Lincoln Water Center

[mediahub.unl.edu/media/1908](http://mediahub.unl.edu/media/1908)

## AEESP Foundation News

Submitted by RICHARD G. LUTHY, STANFORD UNIVERSITY

The AEESP Foundation Board is raising funds to endow our various awards. Later this year the Board will announce that two PhD dissertation awards will be fully endowed, one named for CH2M-Hill and one named for Professor Paul V. Roberts. This is a significant accomplishment for our association of which we can all be proud. We are also in the final stages of completing the endowment for the Charles R. O'Melia-AEESP Distinguished Educator Award.

At this time we are pleased to announce another award, the Perry L. McCarty-AEESP Founders' Award. Details about this new award are included in this newsletter (page 10), as are instructions on how to contribute. We encourage the AEESP membership to contribute to the award's endowment.



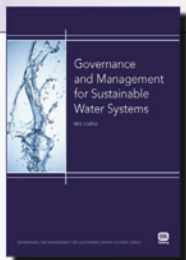
Publishing

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## Perry L. McCarty–AEESP Founders' Award

Submitted by THE AEESP FOUNDATION BOARD OF DIRECTORS and THE STEERING COMMITTEE FOR THE PERRY L. MCCARTY–AEESP FOUNDERS' AWARD

### Dear Colleagues:

We are very pleased to announce that the AEESP has officially established the following new award: **The Perry L. McCarty–AEESP Founders' Award.**

The McCarty Award will be given annually to recognize an environmental engineering and science professor who has made “sustained and outstanding contributions to environmental engineering education, research, and practice.” Perry McCarty defined the fields of environmental engineering and biotechnology. In research, he pioneered the development and application of microbial kinetics and stoichiometry with particular application to methanogenesis and bioremediation. In education, Dr. McCarty had profound impact through his stellar classroom teaching, mentoring of PhD students, and publishing influential textbooks. He promoted good practice with his tireless service on numerous committees, expert panels, and advisory boards. His unparalleled contributions are recognized by many honors, including membership in the National Academy of Engineering, the Tyler Environmental Prize, the Clarke Prize for Outstanding Achievement in Water Science and Technology, and the Stockholm Water Prize.

Nomination packages will include: (1) a cover letter from the nominator; (2) full curriculum vita for the nominee; and (3) at least two, but not more than five supporting letters. Past nominations will be carried over and considered for a total of three years, and the nominator may update them during this period.

To make this award possible, a steering committee of five AEESP members, including Perry's former PhDs from Stanford University, worked with the AEESP Foundation to establish an **Endowment Fund that will support the award in perpetuity.** Now that this fund has established more than 2/3 of the minimum necessary funding (\$62,500), AEESP and the AEESP Foundation have officially endorsed the award's establishment.

At this time, AEESP and the AEESP Foundation ask you to contribute to help make this award happen for the coming academic year.

Your donation will help inspire and reward future generations of environmental engineers while honoring a major contributor to and leader of our profession.

**How to Contribute:** Tax-deductible contributions of any size are solicited for this award in Perry's name. If you feel moved to contribute, please complete the attached form and mail it to the AEESP Foundation at the address indicated. We thank you in advance for your support of this effort to advance the state of environmental engineering and science while honoring Professor Perry L. McCarty, one of the field's outstanding leaders and educators.

## Perry L. McCarty–AEESP Founders’ Award

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**“AEESP Foundation” with “Perry L. McCarty–AEESP Founders’ Award” in the memo line.**

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**\*\*Note:** Unless requested otherwise, the AEESP Foundation periodically acknowledges Foundation donors in the AEESP Newsletter within the following designated categories of annual donation:

<\$100: “Sea Green”	\$1000 to \$4,999: “Jade Green”
\$100 to \$999: “Forest Green”	\$5,000 or more: “Emerald Green”

## Cliff Davidson joins Syracuse University

The Department of Civil and Environmental Engineering at Syracuse University and the Syracuse Center of Excellence welcome Cliff Davidson as the Thomas C. and Colleen L. Wilmot Professor. Cliff received his Ph.D. at California Institute of Technology in Environmental Engineering Science and spent the first part of his career (nearly 33 years) at Carnegie Mellon University, where he was on the faculty in the Departments of Civil & Environmental Engineering and Engineering & Public Policy. While at Carnegie Mellon, he conducted a variety of air quality studies including particle sampling in the air and snow of the Greenland Ice Sheet and the Himalayas, airborne particle sampling in national parks, source apportionment of urban airborne particles, and modeling and measurement of particle deposition onto vegetation, snow, bodies of water, and buildings. He also conducted wind tunnel studies of particle deposition onto surfaces and re-suspension of particles off of surfaces in controlled conditions.



*Cliff Davidson*

In his last several years at CMU, he became interested in sustainable development and engineering and began studying people's perceptions of their energy use and of the environmental impact of their day-to-day activities. He also co-founded the Center for Sustainable Engineering which runs workshops for engineering faculty members and hosts a peer-reviewed website of sustainable engineering education materials. He has published over 100 journal papers and several books. He plans to expand his sustainable engineering research and educational activities at Syracuse University to better understand how people perceive and interact with the built environment and how societal change can be promoted in the interests of sustainability.

## Yale University—Department of Chemical and Environmental Engineering

The Department of Chemical Engineering at Yale University has been renamed as the Department of Chemical and Environmental Engineering, effective for the academic year 2010–2011. The new name more accurately reflects the scope of the research carried out in the department as well as the degree offerings. The merger of the chemical engineering and environmental engineering programs will enable the research in the department to be guided by both sustainability and molecular focus. The department has 14 faculty conducting research in nanomaterials, interfacial phenomena, biomolecular engineering, energy, water, and sustainability. The department offers Ph.D. and B.S. degrees in Chemical Engineering and in Environmental Engineering. According to the 2010 National Research Council S Rankings, the Department's Environmental Engineering was ranked first and Chemical Engineering was ranked twelfth.

## Greg Characklis Named a Leopold Fellow

Greg Characklis, Associate Professor in the Department of Environmental Sciences and Engineering at the University of North Carolina-Chapel Hill, has been named one of twenty Leopold Leadership Fellows for 2011. Leopold Fellows are chosen for their outstanding qualifications as researchers, demonstrated leadership ability and strong interest in communicating beyond traditional academic audiences. Awardees receive intensive leadership and communications training to help them engage effectively with policymakers, journalists, business leaders, and communities confronting complex decisions about sustainability and the environment.



*Greg Characklis*

## Tom Stephenson named Fellow of the Royal Academy of Engineering

Tom Stephenson, Lorch Professor of Water Sciences and Head of the School of Applied Sciences at Cranfield University, has been elected as a Fellow of the Royal Academy of Engineering (FREng). The Royal Academy of Engineering is the United Kingdom's national academy for engineering, bringing together the country's most eminent engineers from all disciplines "to promote excellence in the science, art and practice of engineering." Election is by invitation only and there are fewer than 1,400 Fellows.



Tom Stephenson

Stephenson was elected in recognition of his outstanding achievements in water process engineering. The Royal Academy cited that "his dynamic and entrepreneurial skills have delivered internationally recognised research in wastewater treatment and water re-use together with significant numbers of skilled Masters graduates to the sector and the founding of a spin-out company, Water Innovate, to commercialise research." The company was recently acquired by Bluewater Bio Limited and Stephenson was appointed Chairman.

Cranfield University ([www.cranfield.ac.uk](http://www.cranfield.ac.uk)) is the UK's only wholly postgraduate university specialising in science, technology, engineering, and management. There are over 150 Masters students studying environmental engineering and science subjects and courses which include community water supply, environment management for business, environmental engineering and water and wastewater engineering.

## Qiong Zhang Receives New Faculty Research Award

Qiong Zhang was awarded the American Society of Engineering Education (ASEE) Southeastern Section's 2011 New Faculty Research Award. This award is given to young faculty members who have demonstrated excellence in teaching and research.



Qiong Zhang

Dr. Zhang is an assistant professor in the Department of Civil and Environmental Engineering at the University of South Florida. Her teaching and research interests are in green engineering, sustainability, life cycle assessment, water-energy systems, and water supply and treatment. Her research is supported by the National Science Foundation through grants from their Materials Use: Science, Engineering, and Society, Course, Curriculum, and Laboratory Improvement, and Scholarships in Science, Technology, Engineering, and Mathematics programs, and the Florida Energy Systems Consortium. She was a co-recipient of the 2008 Best Paper Award by the Environmental Engineering Division of the American Society for Engineering Education and has also contributed to development of two engineering textbooks, *Water Treatment: Principles and Design*, 2nd ed. (John Wiley, 2005) and *Environmental Engineering: Fundamentals, Sustainability, and Design* (John Wiley, 2010).

## Menachem Elimelech Receives the Freese Environmental Engineering Award from ASCE

**M**enachem Elimelech, the Roberto Goizueta Professor of Environmental Engineering at Yale University, has been selected as the recipient of the 2011 Simon W. Freese Environmental Engineering Award and Lecture from the American Society of Civil Engineers (ASCE). Elimelech was chosen for his “pioneering research on and outstanding contribution to environmental implications and applications of nanomaterials and membrane separation processes for desalination and water reuse.” He will be presented with the award at the annual ASCE meeting in May.



*Menachem Elimelech*

Elimelech has received numerous awards for his research, including election to the National Academy of Engineering in 2006 and the Athalie Richardson Irvine Clarke Prize in 2005. He has advised 26 Ph.D. students and 15 postdoctoral researchers. In recognition of his contributions to teaching and mentoring, Elimelech received the W.M. Keck Foundation Engineering Teaching Excellence Award in 1994 and the Yale University Graduate Mentor Award in 2004.

The Simon W. Freese Environmental Engineering Award and Lecture is awarded annually to a distinguished environmental engineer whom the ASCE Executive Director invites to deliver a lecture at a given meeting of the Society.

### **AEESP e-Newsletters**

*Want to go paperless for the AEESP Newsletter? If you wish to receive only the link for obtaining an electronic copy of the Newsletter, send a brief message to Joanne Fetzner at [joanne@aeesp.org](mailto:joanne@aeesp.org) and we will remove you from the mailing list beginning with the May 2011 issue.*

## Ashok Shahane Honored by ASCE in Florida

**D**r. Ashok Shahane, an AEESP member for the last 24 years, was recently honored by the American Society of Civil Engineers (ASCE) in Florida at the 2010 Life Member Luncheon for his contributions to the profession. Dr. Shahane has worked for private corporations, governmental agencies and various universities in Florida for the last 37 years. He served in several technical, managerial and teaching positions. He also served on several advisory professional committees and task forces in Florida. He has received numerous awards for his meritorious professional work and service.



*Ashok Shanane presented a Life Member plaque by ASCE District IV Vice President Jason Haeseler.*

Dr. Shahane has developed expertise in planning, design, regulation, and operational aspects of water resources management, environmental engineering, and land development projects. He collaborated in developing extensive mathematical models for Florida river systems, and water quality planning models for the Florida Everglades. Currently, Dr. Shahane is serving as an Herbicide Registration Coordinator for the Florida Department of Agriculture and Consumer Services (FDACS). As an environmental specialist, he serves as state-wide coordinator and manager for pesticide (herbicide) registrations.

Dr. Shahane has published over 150 reports and publications. He is a Distinguished Toastmaster (public speaker) and has published two books of collections of his speeches. Dr. Shahane and his wife Meena have been Tallahassee residents for the last 27 years and are proud parents of one son, Dr. Amit Shahane.

## AAEE Meetings & Activities

The American Academy of Environmental Engineers (AAEE) developed several new activities last year and hosted a number of successful workshops, technical sessions, and even national contests for children in middle school and high school who were challenged to build their “Sustainable Dream House.” The winners were flown to Washington, DC, along with parents and the teacher in charge, where they received their awards and were able to explain their winning design to hundreds of students and parents during the U.S. Science and Engineering Festival.

In 2011, the Academy is offering insightful educational events. These are great opportunities to learn, build your network, and become more involved with the Academy’s activities. Here is what’s in store over the next few months. All events are updated in the monthly electronic *Highpoints* newsletter. Members of AEESP may subscribe to *Highpoints* through the AAEE webpage.

- ♦ **Florida Water Resources Conference, May 1-4.** The 2011 Florida Water Resources Conference at the Gaylord Palms Resort and Convention Center, Kissimmee, Florida, included an AAEE breakfast meeting organized by Dr. Wayne Echelberger, Jr., on Monday, May 2. The topic was “Global Partnerships that Demonstrate the Importance of Service for Engineers” by Dr. James Mihelcic of the University of South Florida.
- ♦ **AAEE Awards Luncheon & Conference, May 4.** This prestigious luncheon at the National Press Club in Washington, DC, celebrated the Gordon Maskew Fair Award winner Hillel I. Shuval, P.E., BCEE; the Stanley E. Kappe Award winner Sandra L. Tripp, P.E., BCEE; the Edward J. Cleary Award winner Richard F. Lanyon, P.E., BCEE; Honorary Member Clifford W. Randall, Ph.D., Dis.M.ASCE, P.E., BCEE; and the Brewster Snow Award winner Alex Maxwell of Clarkson University.
- ♦ **Full-Day AAEE Workshop on Water Treatment in Marcellus Shale Exploration and Production, May 9.** The workshop featured Hunter Nolen, President, Industrial Services Group, CDM, Pete Miller, Director of Water Resources, Range Resources Corporation, Tim Weston, Attorney, K&L Gates, Adam M. Kushner, Director of Civil Enforcement, U.S. Environmental Protection Agency, Bill Muszynski, Coordinator of Special Projects and Programs, Delaware River Basin Commission, Somnath Basu, Executive Director, Water and Urban Development, AECOM, Dr. Terry Engelder, Professor of Geosciences, the Pennsylvania State University, and Bob Kimball, Technical Director of Produced Water Treatment, CDM.
- ♦ **AAEE Eckenfelder Breakfast, May 10.** The breakfast featured William J. Muszynski, PE, Manager, Water Resources Management Program, Delaware River Basin Commission, Marcellus Shale Gas - Water Resource and Quality Protection in the Delaware River Basin (PDHs).
- ♦ **AAEE Short Course: Carbon Footprint Workshop, May 24.** This workshop will be held at the 2011 World Environmental & Water Resources Congress in Palm Springs, CA, and will feature Wayne McFarland, PE, DEE, CEM, CRM, LEED AP; GHD, Inc.
- ♦ **AAEE/AIDIS/AWWA Luncheon at ACE11, June 15.** Register now to hear Washington Aqueduct General Manager Thomas Jacobus discuss “The Success of Washington Aqueduct’s Modernization under the Constraints of the National Historic Preservation Act,” at the ACE11 Conference, Washington, DC.
- ♦ **A&WMA Conference, June 21-24.** AAEE speakers will be present in many sessions, in particular, Tuesday June 21 (T-13-07), Fostering Professional Development Students & Young Professionals; and June 23 (T-07-10), A Sustainable CWA: The Role of Environmental Engineers.
- ♦ **AAEE Half-Day Workshop, Nutrient Management Strategies for the Chesapeake Bay, August 1.** This workshop will be held at the NCER Conference, August 1-5, in Baltimore, Maryland, which will feature Rip Copithorn, PE, BCEE, GHD, Inc.; Richard Batiuk, EPA Chesapeake Bay Program Office; Cy Jones, Water Resources Institute, and others TBA.
- ♦ **AAEE Breakfast, September 20.** A breakfast will be held at the APWA International Public Works Congress & Exposition, September 18-21, in Denver, Colorado. The topic will be “An Approach to Addressing Climate Variability in Roadway and Bridge Design.”
- ♦ **AAEE Dinner and Networking Seminar, September 22.** The seminar will be held at the Orange County Water District and will feature Mike Markus, General Manager, Orange County Water District, and Jim Herbert, Assistant General Manager, Orange County Sanitation District.
- ♦ **AAEE Breakfast, October 17. The breakfast will be held at WEFTEC in Los Angeles featuring Brian P. Flynn, P.E., BCEE, AAEE President of the Board of Trustees.**

## National University of Singapore Postdoctoral Job Announcement

A post-doctoral research fellow position is available at the National University of Singapore (NUS) to develop novel anaerobic respiration techniques to directly convert carbon dioxide to biofuel. The primary responsibilities will involve investigation of carbon dioxide fixation through anaerobic respiration with molecular microbiology techniques and optimization of reactor setup for improved biofuel production.

The candidate must possess a Ph.D. degree in a relevant field such as molecular microbiology, environmental microbiology, or environmental engineering. The candidate should have a record of research productivity and strong communication skills.

Interested candidates should send a PDF file of (1) letter of application summarizing relevant qualifications, (2) curriculum vitae, (3) reprint of one or two recent publications, (4) copy of university transcripts, and (5) contact information of at least two references to Dr. Zhi (George) Zhou (zhou@nus.edu.sg), or mail a hardcopy to Department of Civil and Environmental Engineering, Faculty of Engineering, National University of Singapore, 1 Engineering Drive 2, E1A-02-19, Singapore 117576, phone (65) 6516-8796. NUS is a leading global university centered in Asia. NUS is ranked ninth among the world's best engineering and information technology universities and 31st among the world's best universities by *US News and World Report*.

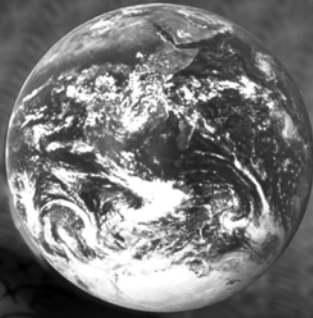
## University of Toronto Faculty Job Announcement

The Department of Civil Engineering at the University of Toronto invites applications for a tenure-stream appointment in the field of Preventive Engineering. The appointment will be at the rank of Assistant Professor and will begin September 1, 2011, or as soon as possible thereafter.

Preventive engineering involves evaluation of the impacts of engineering decisions on society and the biosphere and the development of methods to prevent, or greatly minimize, harmful effects. Preventive engineering requires an understanding of both the engineering and social science disciplines.

The candidate is expected to teach undergraduate and graduate courses in this area, and conduct research that develops preventive engineering in an area of Civil Engineering. Candidates should hold a doctoral degree and must be eligible for registration as a Professional Engineer in Ontario.

All interested parties are encouraged to apply online at [www.jobs.utoronto.ca/faculty.htm](http://www.jobs.utoronto.ca/faculty.htm). If you are unable to apply online, please send your application to Professor Brenda McCabe, Chair, Department of Civil Engineering, University of Toronto, 35 St. George Street, Room GB107, Toronto, Ontario, M5S 1A4. Applications should include detailed curriculum vitae (including publications and evidence of capacity and impact), a description of research, teaching and professional interests, and a list of at least four professional and character referees. The closing date for receipt of applications is **May 31, 2011**. The University of Toronto is strongly committed to diversity within its community. The University especially welcomes applications from visible minority group members, women, Aboriginal persons, persons with disabilities, members of sexual minority groups, and others who may contribute to further diversification of ideas. All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.



## Why not change the world?

*The Department of Civil and Environmental Engineering at Rensselaer Polytechnic Institute invites applications for multiple tenure-track openings, including the endowed*

### **Howard A. Blitman, Jr. Career Development Chair**

Candidates with areas of interest that include Geotechnical/Geoenvironmental Engineering as well as Environmental Engineering are especially sought, though candidates in other areas of Civil and Environmental Engineering may be considered. Interest in innovative learning and teaching strategies, such as problem-based learning, is highly desired.

To be considered in the Civil Engineering area, candidates must have a broad background in structural materials, geotechnical and geoenvironmental engineering, including; cementitious materials, mechanics, foundations, field monitoring, slope stability, soil improvement, subsurface investigation, contaminant transport, geosynthetics, groundwater hydrology, waste disposal, soil remediation, and reuse of waste materials. Candidates' background must include numerical modeling, along with familiarity with software used in these areas.

To be considered in the Environmental Engineering area, candidates who can provide collaborative linkages with current research activity and interests including the physical, chemical and biological aspects of water quality, treatment, and re-use at scales ranging from process to watershed scale. Research approaches adopted may include a combination of fine to intermediate scale laboratory experiments, fieldwork, remote sensing, and mathematical modeling. In addition to continued initiatives in biotechnology, information technology and nanotechnology, the Institute and the School of Engineering are developing new research thrusts in Energy and the Environment.

The successful candidates will enjoy opportunities to collaborate with other researchers through various research centers on campus, including the Geotechnical Centrifuge Center (<http://www.nees.rpi.edu/>), the Scientific Computation Research Center (<http://www.scorec.rpi.edu/>), the Darrin Fresh Water Institute (<http://rpi.edu/dept/DFWI/>), and the Center for Biotechnology and Interdisciplinary Studies (<http://biotech.rpi.edu/>).

The successful candidate(s) must have an earned doctorate or foreign equivalent in Civil or Environmental Engineering, or closely related field. Candidates must demonstrate through past accomplishments promise of future excellence in both research and teaching. The successful candidate will be required to develop a high-quality research program that complements and supplements the existing strengths of the department; to teach graduate and undergraduate courses; advise students; and to serve the department, institute and profession.

Rensselaer Polytechnic Institute is a private, research-oriented university in Troy, NY. The School of Engineering (<http://eng.rpi.edu/soe/>) has approximately 150 faculty and 3000 undergraduate students. The Department of Civil and Environmental Engineering (<https://cee.rpi.edu/>) has 16 faculty, 325 undergraduate students, and 50 masters and Ph.D. students.

Applications will be accepted until the positions are filled. To be considered for any of these openings, applicants must submit a cover letter, curriculum vitae, a statement of research interests, a statement of teaching interests, and contact information for at least four (4) references to: **Dr. Chris Letchford, Howard A. Blitman Career Development Chair Search Committee, Department of Civil and Environmental Engineering, 110 8th Street, Troy, NY 12180-3590, email: [letchc@rpi.edu](mailto:letchc@rpi.edu).**



# Rensselaer

*We welcome candidates who will bring diverse intellectual, geographical, gender and ethnic perspectives to Rensselaer's work and campus communities. Rensselaer Polytechnic Institute is an Affirmative Action/Equal Opportunity Employer.*

## *Synergy at the Interface* OU International WaTER Conference

*October 24-25, 2011*

*Norman, Okla.*

### **University of Oklahoma International WaTER Conference and International Water Prize Award Ceremony**

The conference theme "***Synergy at the Interface: Integrating Technology, Social Entrepreneurship and Behavior Change***" is designed to bring together participants from multiple disciplines responding to the UN Millennium Development Goals of bringing water and sanitation to developing countries.

**Registration and abstract submission** now open at <http://WaTER.ou.edu>

**Abstract deadline** June 15, 2011

#### **Conference highlights include:**

✓ Plenary lecture by, and presentation of the second OU International Water Prize to, Mr. Ben Fawcett, environmental health engineer and book author. His impact has been felt in countries throughout Africa, Asia, and Latin America. During his tenure at Southampton University from 1996-2006 he mentored 130 MSc and Ph.D. students who have continued through their work to impact over 60 countries.



✓ Keynote speakers from the fields of behavior change, social entrepreneurship, water technologies, climate change, and hydro-philanthropy in the developing world

- Ned Breslin, Water for People – Hydrophilanthropy

- Annette Johnson, Swiss Federal Institute of Aquatic Science and Technology - Water Technologies

- Dennis Lettenmaier, University of Washington - Water Resources/Climate Variability

- John Oldfield, Water Advocates - Legislative Update

- Kurt Soderlund, Safe Water Network - Social Entrepreneurship

- Peter Winch, Director, Social and Behavioral Interventions Program, Johns Hopkins Bloomberg School of Public Health - Behavior Change

✓ Oral presentations and posters from experts around the world

✓ Post-conference workshop on well drilling, biosand filters and eco-latrines construction



<http://WaTER.ou.edu>

## 2011 WATER AND HEALTH CONFERENCE: WHERE SCIENCE MEETS POLICY

*Bringing together academic research and professional development workshops*

**October 3-7, 2011**

**University of North Carolina  
at Chapel Hill, NC, USA**

*The Water and Health Conference: Where Science Meets Policy* will consider drinking water supply, sanitation, hygiene and water resources in both the developing and developed worlds with an interdisciplinary perspective spanning science, policy, human rights, practice, financing and economics.

**Early Bird Registration Closes**  
July 31, 2011

**Early Bird Rate:** US\$395  
**Rate After July 31:** US\$450  
**Student Rate:** US\$225



THE UNIVERSITY  
of NORTH CAROLINA  
at CHAPEL HILL

### Main Conference Themes

Freshwater Availability and Climate Change Adaptation; Southeastern U.S. Water Challenges; Human Rights and Ethics; Small Community Water, Sanitation and Hygiene; Peri-urban Water, Sanitation and Hygiene; Hygiene Behaviors and Household Water Treatment

### 2011 Workshop Highlights

- Household Water Treatment and HIV / AIDS
- Evolving Frameworks for Accountability under the Human Right to Water (UNC Parr Center for Ethics)
- WASH in Schools (UNICEF and WASH in Schools Partners)

**Keynote speakers, streams, and program coming soon to website**

<http://whconference.unc.edu>

## AEESP Lecture at AWWA ACE 2011 Conference in June

**Dr. Benito Marinas**

Ivan Racheff Professor of Environmental Engineering  
Department of Civil and Environmental Engineering  
University of Illinois at Urbana-Champaign

### Science and Technology Advances for Safe Global Water

Monday, June 13, 2011, 12:00–12:45 pm  
Walter E. Washington Convention Center  
Room 144C, Street Level–L1

*Sponsored by Black & Veatch*



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Undergraduate and Graduate Summer Studies  
for Resident & Visiting Students



## STANFORD ENVIRONMENTAL & WATER STUDIES SUMMER PROGRAM



June 18 - August 14, 2011  
<http://ewsummer.stanford.edu>  
[ewsummer@stanford.edu](mailto:ewsummer@stanford.edu)



## **Association of Environmental Engineering and Science Professors Newsletter**

Joe Ryan, Editor  
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**Carollo Engineers, P.C.**, Rick L. Chan, Walnut Creek, CA

#### **Silver Level**

**Black & Veatch**, Bruce W. Long, Kansas City, MO  
**Brown and Caldwell**, Marcy Akiyama, Seattle, WA  
**Camp, Dresser & McKee**, Robert L. Matthews, Rancho Cucamonga, CA  
**McGraw-Hill Higher Education**, Bill Stenquist, Boston, MA  
**John Wiley & Sons**, James Harper, Hoboken, NJ

#### **Sustaining Level**

**American Water Works Association**, Roy Martinez, Denver, CO  
**Greeley and Hansen**, John Robak, Chicago, IL  
**Hazen and Sawyer, PC**, William C. Becker, New York, NY  
**HDR Engineering**, J.S. Neethling, Folsom, CA  
**IWA Publishing**, Ian Morgan, London, U.K.  
**LimnoTech**, Joseph V. DePinto, Ann Arbor, MI  
**Sanitation Districts of Los Angeles County**, Grace Chan, Whittier, CA  
**Water Research Foundation**, Rob Renner, Denver, CO  
**Water Environment Federation**, Anthony Krizel, Alexandria, VA  
**Water Environment Research Foundation**, Glenn Reinhardt, Alexandria, VA