President’s Column

Achieving Professional Impact: A Journey

By NANCY G. LOVE, UNIVERSITY OF MICHIGAN

As I enter the last year of my first half-century of life (I know that many of you know where I’m coming from!), I find myself asking the question: what impact am I having in my professional life? Am I working on things that will have truly enduring benefits for others? I’m told that such musings are common among fifty-somethings, but perhaps more poignant for this almost fifty-something who is also the mother of a toddler from Guatemala who will live a much more privileged life than the one he was born into. My academic husband snaps me back into reality when he declares his envy for my membership in “that club” we call AEESP. “Your discipline is so unique” he quips. “We [in materials science] have nothing like it.” The sense of professional community among environmental engineering and science academics and practitioners that comes from AEESP is, indeed, unique and there is nothing even close in his materials science world. He reminds me that we should be grateful to the founders of AEESP who had the vision and foresight to see the value in creating the community that AEESP is today. And with the talent encapsulated within the boundaries of AEESP, we are a “club” that truly has tremendous impact on the world, through both our activities as AEESP-ites and through our individual efforts. Indeed, as I begin my nine-month stint as the 44th president of our organization (counting those who served more than once), I am humbled by the people who have preceded me in this role. Can I have that important fifty-something impact on the heels of so many brilliant and talented leaders of our field, with only nine months to do it? While pondering this question, I think back to what drove the founders to start our organization in December, 1963 (I was 2 years old!), and what lingers today such that over 800 people, organizations, and companies claim membership in AEESP. There are common core values that were true then as they are now: a passion for protecting the environment; using our engineering and science know-how to find ways for people to co-exist with the natural environment in harmony rather than in domination; and a passion for educating the next generation of professionals who will carry on our mission and (hopefully) go beyond it.

I have tried to hold these core values at the forefront as I have pondered where to direct my energies in my term as AEESP president. Two of the organization’s four strategic directions are in areas of great importance to me and where I hope to make progress in the next few months: (1) expand AEESP’s global influence, and (2) define the scope and direction for environmental engineering and science curricula. Both are very broad strategic directions and I can only bite off a small piece of each.

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On the first strategic direction, we are not trying to expand ourselves to include international chapters at this time (if ever); however, I do believe that as we live in an increasingly global community that it benefits us, our students, and our discipline if we find ways to collaborate on the international scale as an organization. At this time, we are having preliminary discussions with the International Water Association on areas of common interest as it pertains to environmental engineering education and research. We held the inaugural academic meet-and-greet at the IWA World Congress meeting in Montreal in September, hosted by IWA’s USANC and co-organized by both AEESP and the Environmental Engineering Education (E3) specialty group of IWA. Finding ways for academics across the globe to share ideas and strategies about and to work together on research and educational activities will allow us to train more global environmental engineers and scientists. I welcome your ideas on how to implement this beyond the areas covered by IWA.

On the second strategic direction, my efforts will focus on identifying the complex issue surrounding the needs of people in practice to increase the number of environmental engineering graduates with M.S. and B.S. degrees while still meeting the goals that many of us in research universities face—to put an inordinate amount of our resources into Ph.D. students. Indeed, federal support for anything other than a Ph.D. degree has all but evaporated in our field. An effort is underway to hold a workshop this spring on the Needs & Frontiers of Education in Environmental Engineering (led by Joel Burken, Joe Hughes, Deb Reinhart, and Angela Bielefeldt), with follow-up to occur at the summer AEESP biannual conference (see more about this on the next page). I hope that these discussions can serve to frame a white paper authored by members of AEESP and AAEE that includes specific solutions on how to recruit more M.S. students into environmental engineering who will go into practice, a need identified at the Professional Pipeline workshop that occurred at the 2007 AEESP biannual conference.

Finally, of more pragmatic need, the board is working toward making AEESP a more paperless organization. It is a challenging change that is also inevitable. I’ll be working with the Internet Resources Committee, the AEESP Business Office, and the Board toward this end. Stay tuned!

By the time we get to the end of our biannual conference held July 10–12, 2011 in Tampa, Florida, my term as President will be over and I’ll be less than 3 months away from that very important half century birthday that is driving me to this state of reflection. The tasks I’ve listed will have just begun; however, as is the case with so many of us in this organization, my commitment to AEESP will continue beyond my term to move these tasks to some point of completion. Hopefully, by the time I’m well into being a fifty-something, I’ll feel satisfied that my efforts are, indeed, having an impact.

My best to you and your families for a prosperous and sustainable new year. I hope to see you in Tampa in July!
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 six 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, and

The conference also includes a session on integrating sustainability into engineering practice that is being organized by the American Academy of Environmental Engineers (AAEE).

The University of South Florida sits on the East Side of Tampa on 1,797 acres. Tampa can be accessed by Amtrak train, bus, car, or plane (TPA airport code). Tampa has activities for a wide range of age groups, and for both families and singles. This includes arts, natural recreation, theme parks, and museums. Close to the conference lodging is Busch Gardens, Adventure Island Water Park, Yuengling Brewery, USF Botanical Gardens, USF Riverfront Park, Lettuce Lake Park, and the Museum of Science & Industry (MOSI). The Salvador Dali Museum, state parks, and numerous Gulf Coast Beaches are easily accessible by car (see www.aeesp2011.com/attractions/).

Table 1. AEESP Education and Research Conference Schedule at a Glance

<table>
<thead>
<tr>
<th>Date</th>
<th>Activities</th>
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<tr>
<td>July 10 (Sunday)</td>
<td>Workshops will take place in the morning and afternoon. There will be an NSF Career Workshop for junior faculty members. In the evening, there is a social gathering for participants and their families at the Hilton Clearwater Beach Resort, which is located on the white sands of the Gulf of Mexico (<a href="http://www.clearwaterbeachresort.com/">www.clearwaterbeachresort.com/</a>).</td>
</tr>
<tr>
<td>July 11 (Monday)</td>
<td>Two plenary speakers and technical sessions will fill up the day. We will travel by bus to the Florida Aquarium (<a href="http://www.flaquarium.org/">www.flaquarium.org/</a>; families are invited). After some time touring the aquarium, AEESP will hold the Annual Business Meeting and Awards Ceremony. Dinner and additional socializing follows either next door at Channelside (<a href="http://www.channelsidebay-plaza.com/">www.channelsidebay-plaza.com/</a>) or you can take a short trolley ride to the Latin Quarter called Ybor City (<a href="http://www.ybor.org/">www.ybor.org/</a>), where we will have some designated AEESP gathering places. Buses will bring you back to conference hotels.</td>
</tr>
<tr>
<td>July 12 (Tuesday)</td>
<td>Two more plenary speakers and additional technical sessions will be followed by an afternoon poster session. In the evening, there will be the AEESP Legacy Dinner hosted by Wayne Echelberger and Phil Singer. Our legacies are members who received their doctoral degrees in 1975 or earlier (this was the time EPA provided training grants). Come celebrate the history of our discipline and those members who made it all happen.</td>
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2010 AEESP Awards

The 2010 AEESP Awards were presented to the award recipients at the 2010 AEESP Meet-and-Greet Event at WEFTEC on October 3, 2010, in New Orleans, Louisiana. Below is a list of the recipients of these awards. Congratulations to all award winners!

**CH2M Hill/AEESP Outstanding Doctoral Dissertation Awards**

These awards annually recognize two outstanding doctoral dissertations that contribute to the advancement of environmental science and engineering.

**Elijah Thimsen (advised by Pratim Biswas), Washington University in St. Louis**

“Metal Oxide Semiconductors for Solar Energy Harvesting”

**David Berry (advised by Lutgarde Raskin), University of Michigan**

“Molecular and Ecological Mechanisms of Bacterial Response to the Drinking Water Disinfectant Monochloramine”

**Montgomery-Watson-Harza Consulting Engineers/AEESP Master’s Thesis Award**

This award annually recognizes the first and second most outstanding Master of Science theses that contribute to the advancement of environmental science and engineering.

**First Place: Peter Steen**, University of Minnesota (advised by William Arnold, University of Minnesota and Kristopher McNeill, ETH Zurich)

“Photochemical Formation of Dioxins from Hydroxylated Polybrominated Diphenyl Ethers”

**Second Place: Matthew Donnelly** (advised by Shane Rogers), Clarkson University

“Persistence of Bacterial Pathogens, Fecal Pollution Indicators, and Microbial Source Tracking Markers in Manure Amended Soils”

**McGraw-Hill/AEESP Award for Outstanding Teaching in Environmental Engineering & Science**

This award is given annually to honor a faculty member who has made substantive contributions directly through class-oriented teaching, as enhanced through the development of new pedagogical techniques.

**Jeanine Plummer**, Worcester Polytechnic Institute

**Wiley/AEESP Award for Outstanding Contribution to Environmental Engineering & Science Education**

This award is given annually for excellence in teaching scholarship and/or professional society educational initiatives.

**David Vaccari**, Stevens Institute of Technology

**AEESP Outstanding Publication Award**

This award is given annually to recognize the author(s) of a landmark environmental engineering and science paper that has withstood the test of time and significantly influenced the practice of environmental engineering and science.

**Charles W. Carter**, TestAmerica, Las Vegas, NV and **Irwin H. Suffet**, University of California, Los Angeles

Jennifer G. Becker of Michigan Technological University accepts the Distinguished Service Award for Outstanding Service as Chair of the AEESP Awards Committee from incoming president Nancy Love of the University of Michigan.

Jeanne M. Van Briesen of Carnegie Mellon University accepts the Distinguished Service Award for Outstanding Service as AEESP Secretary and Board Member from outgoing Awards Committee Chair Jennifer Becker (left; Michigan Technological University) and incoming president Nancy Love (center; University of Michigan).

Aarne Vesilind, Emeritus Professor of Bucknell University, accepts the AEESP Founders’ Award from outgoing Awards Committee Chair Jennifer Becker (left; Michigan Technological University) and incoming president Nancy Love (center; University of Michigan).

David Vaccari of Stevens Institute of Technology accepts the Wiley/AEESP Award for Outstanding Contribution to Environmental Engineering & Science Education from outgoing Awards Committee Chair Jennifer Becker (left; Michigan Technological University) and incoming president Nancy Love (center; University of Michigan).

AEESP Founders’ Award
This award is given annually to recognize a member of AEESP who has made “sustained and outstanding contributions to environmental engineering education and practice.”

Aarne Vesilind, Emeritus Professor, Bucknell University

Malcolm Pirnie/AEESP Frontier in Research Award
This award is given annually to recognize a member of AEESP who has advanced the environmental engineering and science field through recognized research leadership and pioneering efforts in a new and innovative research area.

Michelle Scherer, University of Iowa

Frederick George Pohland Medal
This award honors a member of AEESP and/or the American Academy of Environmental Engineers (AAEE) who has made sustained and outstanding efforts to bridge environmental engineering research, education, and practice.

David Jenkins, University of California, Berkeley

Distinguished Service Award for Outstanding Service as Chair of the AEESP Dissertation Award Subcommittee

John M. Regan, Pennsylvania State University

Distinguished Service Award for Outstanding Service as Chair of the AEESP Awards Committee

Jennifer G. Becker, Michigan Technological University

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Charles W. Carter of TestAmerica accepts the AEESP Outstanding Publication Award on behalf of his co-author Irwin H. Suffet (University of California, Los Angeles) from outgoing Awards Committee Chair Jennifer Becker (left; Michigan Technological University) and incoming president Nancy Love (center; University of Michigan).

Jeanine Plummer of Worcester Polytechnic Institute accepts the McGraw-Hill/AEESP Award for Outstanding Teaching in Environmental Engineering and Science from outgoing Awards Committee Chair Jennifer Becker (left; Michigan Technological University) and incoming president Nancy Love (center; University of Michigan).

David Jenkins of the University of California, Berkeley accepts the Frederick George Pohland Medal from incoming president Nancy Love of the University of Michigan.

Shane Rogers of Clarkson University accepts the second-place Montgomery-Watson-Harza consulting Engineers/AEESP Master’s Thesis Award on behalf of his student Matthew Donnelly from outgoing Awards Committee Chair Jennifer Becker (left; Michigan Technological University) and incoming president Nancy Love (center; University of Michigan).

Distinguished Service Award for Outstanding Service as Chair of the AEESP Internet Resources Committee

Syed A. Hashsham, Michigan State University

Distinguished Service Award for Outstanding Service as Chair of the AEESP Education Committee

Michael A. Butkus, United States Military Academy

Distinguished Service Award for Outstanding Service as Chair of the AEESP Student Services Committee

Defne S. Apul, University of Toledo

Distinguished Service Award for Outstanding Service as AEESP President and Board Member

Peter Adriaens, University of Michigan

Distinguished Service Award for Outstanding Service as AEESP Secretary and Board Member

Jeanne M. Van Briesen, Carnegie Mellon University

Distinguished Service Award for Outstanding Service as AEESP Chief Information Officer and Board Member

Daniel B. Oerther, Missouri University of Science and Technology
The AEESP Foundation manages the numerous awards that our community presents for outstanding contributions to environmental engineering and science education and research. We thank the members of the 2010 Awards Committee (Kurt Pennell, Judith Perlinger, Vishal Shah, James Young, Linda Weavers, and Jennifer Becker [Chair]) for their service.

Nominations for the 2011 awards are being accepted until March 15, 2011. Brief award descriptions are presented below. Full instructions and a list of prior award winners are found on the AEESP Foundation webpage (www.aeespfoundation.org/awards.html). All awards will be presented at the 2011 AEESP Education and Research Conference, July 10–12, 2011 in Tampa, Florida.

**Student Awards**

**CH2M Hill/AEESP Outstanding Doctoral Dissertation Awards**

These awards annually recognize two outstanding doctoral dissertations that contribute to the advancement of environmental science and engineering. The awards will each consist of a plaque and a cash prize of $1,500 for the student, and a plaque and a cash prize of $500 for the faculty advisor. CH2M Hill, Inc. also provides $750 as a travel allotment to recipients who attend the awards ceremony.

**Montgomery Watson Harza Consulting Engineers/AEESP Master’s Thesis Awards**

These awards annually recognize the first and second most outstanding M.S. theses that contribute to the advancement of environmental science and engineering. The prize for the first place award consists of a plaque and $1,500 for the student and a plaque for the faculty advisor. The second place award consists of a plaque and cash prize of $500 for the student and a plaque for the faculty advisor. Montgomery Watson Harza also provides $750 as a travel allotment to all recipients who attend the awards ceremony.

**William Brewster Snow Award**

This award, new in 2011, is given annually to recognize an environmental engineering graduate student who has made significant accomplishments in an employment or academic engineering project. The award consists of a plaque and a $250 cash prize. Nominees for this award must be enrolled part or full time in an environmental engineering graduate program pursuing a Master’s degree in Environmental Engineering or a closely related degree program, or have completed a Master’s in Environmental Engineering, or a closely related program, one year or less from January 1 of the year in which the Brewster Snow Award is presented.

**Education, Research, and Practice Awards**

**AEESP Founders’ Award**

This award is given annually to recognize an environmental engineering or science professor who has made "sustained and outstanding contributions to environmental engineering education and practice."

**AEESP Outstanding Publication Award**

This award is given annually to recognize the author(s) of a “landmark environmental engineering and science paper that has withstood the test of time and significantly influenced the practice of environmental engineering and science.” At least one of the authors must be living and previous winners are ineligible for a period of three years.

**Malcolm Pirnie/AEESP Frontier in Research Award**

This award is given annually to recognize an environmental engineering or science professor who has advanced the environmental engineering and science field through recognized research leadership and pioneering efforts in a new and innovative research area. The selected recipient will receive a plaque and a cash prize of $4,000. Malcolm Pirnie, Inc. also provides a $750 travel allotment that may be used by the recipient to attend the awards ceremony.

**AEESP Outstanding Educator Awards**

Two Outstanding Educator Awards are given, one for “Outstanding Teaching in Environmental Engineering and Science” and one for “Outstanding Contribution to Environmental Engineering and Science Education.” These awards are given annually to recognize environmental engineering or science professors who are making outstanding contributions to the teaching of environmental engineering, both at the individual’s home institution and beyond. A cash award of $500 is supported in each category.

The award for “Outstanding Teaching in Environmental Engineering and Science” is given annually to recognize excellence in classroom performance and related activities. Although open to nomination at any rank, the award is intended primarily to recognize a demonstrated commitment to teaching early in a person’s career.

The award for “Outstanding Contribution to Environmental Engineering and Science Education” is given annually to recognize excellence in teaching scholarship and/or professional society educational initiatives.

**The Frederick George Pohland Medal**

This award honors an individual who has made sustained and outstanding efforts to bridge environmental engineering research, practice, and education. Only members of AEESP and/or AAEE are eligible to receive this award. The award will consist of a medal, a $1000 cash award, and reimbursement of travel costs of up to $1,000 for travel to the award ceremony.
Fall 2010 AEESP Board Meeting Highlights

Submitted by Mark Wiesner, DUKE UNIVERSITY

The AEESP Board met in a windowless New Orleans conference room October 5–6 without a beignet in sight. The sobriety of the event was further ensured by Dan Oerther’s absence due to impending fatherhood. This was hardly the Mardi Gras finale that we might have concocted to honor the end of President Peter Adriaens tenure on the AEESP Board. However, the presence of new board members Jennifer Becker and Bob Arnold and the energy of incoming President Nancy Love was consoling. New board member Benito Mariñas was unable to attend due to a previous commitment.

The Board has invested considerable effort under Peter Adriaens’ watch to step back and look at where the organization is going and what our priorities should be. During the New Orleans meeting, the Board revisited the strategic planning activities that had been initiated during our Spring meeting at Duke. A few comments were received from members to date, but not many, and additional efforts will be made to obtain input on possible strategic initiatives for AEESP at the Summer 2011 conference.

One topic that emerged from the earlier strategic planning effort was that of AEESP’s global activities, and this was discussed, in part, within the context of possible coordination of activities with the International Water Association. A second example concerns the possibility of adopting an existing scientific publication as the journal of the AEESP. At our meeting, a subcommittee was designated to further consider this option, focusing on the specific possibility of collaborating with the journal Environmental Engineering Science.

A re-occurring theme regarding strategic positioning of AEESP is that of the relationship between AEESP and other organizations that AEESP members often belong to, such as the American Chemical Society, the American Academy of Environmental Engineers (AAEE), the Water Environment Federation, and the American Society of Civil Engineers, among others. This theme has been a subtext for our organization since it was first established, as detailed in the document AEESP-25 Years, which can be downloaded from the AEESP website at www.aes.org/pdf/publications/AEESP-25%20Years.pdf. AEESP maintains strong relationships with many organizations that impact environmental engineers and scientists, and it has a special relationship with AAEE. In this regard, former AEESP President Jim Mihelcic has been designated as the new representative to the AAEE board, replacing Hector Fuentes who has moved off the AAEE Board after several years of service as the AEESP representative. Also, an agreement between AAEE and AEESP to share newsletter space was approved by the board. In other news regarding relationships with other organizations, the board voted to continue support for the American Association for Aerosol Research (AAAR) lecture for an additional year. Feedback from members active in the air quality area on how relationships should evolve with AAAR would be greatly appreciated.

The AEESP Board also seeks to strengthen the participation of the AEESP members in conferences, workshops, and outreach activities proposed by AEESP members. To this end, the AEESP Board encourages members to request a letter of support from the Board related to activities that members want to have sponsored by AEESP, specifically in the context of requests to NSF which may request prioritization of initiatives on an ad hoc basis. This has been discussed with NSF program officers and they appreciate getting letters from AEESP as part of submitted proposals to formalize such endorsements.

Input from AEESP membership is also sought regarding position statements reflecting the stand that AEESP might take on various topics (e.g., climate change, Gulf oil spill). Are there specific topics that members feel are critical for AEESP to express itself on and if so, what is the best way to produce these statements? We welcome your suggestions for topics that AEESP should consider developing position statements.

The hard work of AEESP’s Awards Committee was recognized by all, and this is perhaps most evident when one thinks about the effort required to read the annual stack of dissertations that are submitted. However, the interest in the competition has grown to the extent that it is nearly overwhelming for the committee. As a result the committee will be implementing a two-tiered approach to the submission process this coming year (see page 7 for more information on this and other award nomination opportunities).
AEESP Welcomes 87 New Members in 2010

The Association was pleased to welcome the following new members in 2010, and looks forward to their participation in AEESP activities in the future.

- Jorge D. Abad, University of Pittsburgh
- Chehrzade Aboukinane, McGill University
- Andrea Achilli, University of Nevada, Reno
- Farrukh Ahmad, Masdar Institute of Science & Technology
- Robert G. Arnold, University of Arizona
- Shahzeen Attari, Carnegie Mellon University
- Jamie Bartram, University of North Carolina at Chapel Hill
- Erik Berliner, San Diego State University
- David Berry, University of Michigan
- Stephanie Bolyard, University of Central Florida
- Douglas F. Call, Penn State University
- Brian Chaplin, Villanova University
- N. Sridhara Chary, National Taiwan University
- Yongjun Chen, Dalian University of Technology
- Kenya Crosson, University of Dayton
- Joseph F. DeCarolis, North Carolina State University
- Marc A. Deshusses, Duke University
- Rosa Dominguez-Faus, Rice University
- Kyle Wesley Doudrick, Arizona State University
- Stephen J. Druschel, Minnesota State University, Mankato
- Brian Ellis, Princeton University
- Soren N. Eustis, Swiss Federal Institute of Technology (ETH)
- Kevin Finneran, Clemson University
- John Fortner, Washington University in St. Louis
- Lauren M. Fry, Michigan Technological University
- Venkatarama Gadhamsetty, Air Force Research Laboratory
- Jacqueline Macdonald Gibson, University of North Carolina Chapel Hill
- Nomana Intekhab Hadi, Carnegie Mellon University
- Ashraf Aly, Hassan, University of Cincinnati
- Ron Hofmann, University of Toronto
- Shama Hoque, Drexel University
- Wen-Che Hou, Arizona State University
- Kiril D. Hristovski, Arizona State University–Polytechnic Campus
- Lanhua Hu, University of Illinois
- He Huang, Pennsylvania State University
- Amanda S. Hughes, Carnegie Mellon University
- Kauser Jahan, Rowan University
- Darryl B. Jones, Arizona State University
- Indra Kalinovich, University at Buffalo
- Masakazu Kanematsu, University of California Davis
- Mohiuddin T. Khan, University of New Mexico
- Vikas Khanna, University of Pittsburgh
- Eun Jung Kim, University of Western Ontario
- Simeon J. Komisar, Florida Gulf Coast University
- Sandeep Kumar, Old Dominion University
- Yin-Ming Kuo, University of Vermont
- Shaik Khaja Lateef, National Taiwan University
- Ke Li, University of Georgia at Athens
- Zhongtian Li, University of Nebraska–Lincoln
- Mary Laura Lind, Arizona State University
- Rachel M. Litton, University of California Irvine
- Alex Mayer, Michigan Technological University
- John E. McCray, Colorado School of Mines
- Jeffrey McCutcheon, University of Connecticut
- Itza Mendoza-Sanchez, Texas A&M University
- Michael Mihittah, University of Florida
- Daisuke Minakata, Georgia Institute of Technology
- Lokesh P. Padhye, Georgia Institute of Technology
- Monica Palomo, California State Polytechnic University
- Wayne J. Parker, University of Waterloo
- Thomas J. Phelan, U.S. Air Force Academy
- Sudeep C. Popat, Arizona State University
- Behnaz Razavi, University of California (Irvine)
- Stephen Richardson, University of North Carolina at Chapel Hill
- Shane Rogers, Clarkson University
- Mohsen Saeedi, Iran University of Science & Technology
- Navid B. Saleh, University of South Carolina
- Prabhakar Sharma, University of Western Ontario
- Danmeng Shuai, University of Illinois
- Jordan L. Spencer, Columbia University
- Springer Publishing Co.

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Environmental engineering is rapidly expanding in scale and in professional scope. The field has evolved from a central seed of water and wastewater treatment, and has grown to encompass much more. Environmental and civil/environmental engineers still have primary responsibility for water and wastewater treatment and conveyance infrastructure that is a large portion of the overall field in terms of workforce and project scale, but the field now encompasses tremendous workforce aspects in water resource management, remediation and protection; air pollution control; solid waste management; industrial/institutional environmental management; and even overall “sustainability” aspects of our greater society. The Grand Challenges in Environmental Education workshop was successful in elucidating some of the issues at the 2009 meetings in Iowa City, but certainly did not lay the groundwork for the field to address these issues nationally and internationally. Much greater work is needed now and over the coming years to help all in the educational arena of environmental engineering, one of the two fastest growing fields of engineering in the United States. To address these issues, a workshop is being planned to help develop working groups and direction for further resource development and sharing among the AEESP members and with the American Society of Engineering Education (ASEE) and the American Academy of Environmental Engineers (AAEE).

The recent solicitation for workshop topics was sent out through the AEESP email list. Specific topics and thought leaders will be selected to offer presentations and lead discussions at the workshop. A total of 50 participants are to be supported to attend the workshop, which is tentatively scheduled for April 20–22, 2011, in Washington, DC. Participant nominations and applications are being sought to generate a diverse workshop roster and broadly reach and impact our field as we tackle future challenges in environmental engineering education. For more information, please contact Joel Burken at Missouri University of Science & Technology (burken@mst.edu).
Contributions to the AEESP Foundation

Submitted by RICHARD G. LUTHY, STANFORD UNIVERSITY

The Board of the AEESP Foundation is very grateful for the generosity shown by many AEESP members through their gifts to the Foundation. Through these gifts, we have been able to fully endow the Virginia Tech Travel Award and are close to endowing the Paul V. Roberts Outstanding Dissertation Award and the Charles R. O’Melia Distinguished Educator Award. To recognize donors to the AEESP Foundation, the Board of the Foundation adopted a number of categories for various levels of giving, as indicated below. For those of you who have made gifts to the Foundation, we thank you and hope that you will continue to do so in the future. For those of you who have not yet given, we hope that you will seriously think about a donation in the near future. If anyone has any ideas for endowing a new award or would like to discuss a major gift to the Foundation, please feel free to contact Dick Luthy, Chair of the Foundation Board, or any of the Board members (Pat Brezonik, Bill Cooper, Steve Dentel, Margaret Lang, and Bruce Rittmann).

Contributors to the AEESP Foundation General Fund between September 2009 and December 2010

Jade Green ($1000–$4999)
Bruce Logan

Forest Green ($100–$999)
Wayne Echelberger
Nancy G. Love
Krishna Pagilla
Mark J. Rood
Jerald Schnoor
Philip C. Singer
Aarne Vesilind

Contributors to the AEESP Foundation for the Charles R. O’Melia Distinguished Educator Award through December 2010

Emerald Green (> $4,999)
James Edzwald
Charles O’Melia

Jade Green ($1000–$4999)
Pedro Alvarez
Wm Brian Arbuckle
William Becker
Menachem Elimelech

Hazen & Sawyer, Inc.
Donald Lauria
Desmond Lawler
Bruce Logan
Greg Lowry
Malcolm Pirnie, Inc.
Philip C. Singer
John Tobiason
Rhodes Trussell
Zhishi Wang
Marc Wiesner
John S. Young

Forest Green ($100–$999)
Robert Arnold
Takashi Asano
Kwok-Keung Au
David Babcock
Mort Barlaz
James Borchardt
Edward Bouwer
George Budd
Cheng-Tyng Chen
Russ Christian
Brian Dempsey
Francis DiGiano
Howard Dunn
David Dzombak
Jose Felix-Filho
Jean Gardner
Mohammad Habibian
Markus Hilpert
Haiou Huang
Kimberly Jones
John Lawler

Sea Green (<$100)
John Higgins

Contributors to the AEESP Foundation for the Paul V. Roberts Outstanding Dissertation Award through December 2010

Emerald Green (> $4,999)
Richard Luthy
Inge Roberts
Scott Summers

Jade Green ($1,000–$4,999)
William Ball
Meredith Durant
John and Lynn Ferguson
Mark Goltz
Arturo Keller
Royal Kopperud
Perry McCarty
Chris Munz
Chris Roberts
Jennifer Roberts
A.P. Robertson
Al Valocchi
Charles Werth

Forest Green ($100–$999)
Pei Chiu
Jeff Cunningham
Kevin Cushman
Michael Dodd
Tom Harmon
Christopher Higgins
Lynn Hildemann
Margaret Lang
Naoko Munakata
Bruce Rittmann
Philip C. Singer

Sea Green (<$100)
Richard Cooper
IN MEMORIAM

Charles R. O’Melia, 1934–2010

By Ed Bouwer, Johns Hopkins University

Charles R. O’Melia, one of the world’s leading water treatment researchers, who also mentored more than 100 environmental engineering graduate students during almost three decades at The Johns Hopkins University, died December 16, 2010, at age 76. Mary O’Melia, his wife of 54 years, said her husband was diagnosed with brain cancer shortly after Thanksgiving and died in his sleep while receiving hospice care at the family’s home in Timonium, Maryland. “It was a very peaceful passing,” she said. In recent weeks, many friends, former students, and professional colleagues had sent postcards sharing favorite memories. “It meant a lot to him,” Mary O’Melia said.

At the time of this death, Charles O’Melia was a professor emeritus in the Department of Geography and Environmental Engineering. O’Melia, known to family and friends as “Charlie,” left behind a highly respected body of work. In 2005, the journal Environmental Science and Technology paid tribute to Charlie in a special issue, calling attention to his studies of how particles behave in water and how best to remove them. A commentary piece in the journal said, “His work has inspired scientists and engineers worldwide and has made a profound impact on the design and operation of water treatment plants.”

Nick Jones, dean of the Whiting School on Engineering at Johns Hopkins, and Ed Bouwer, chair of the department, said, “A true scholar and gentleman, his generosity and warmth of spirit were matched by a terrific dedication to his work as a researcher, educator, and scholar.”

“A true scholar and gentleman, his generosity and warmth of spirit were matched by a terrific dedication to his work as a researcher, educator, and scholar.”

—Nick Jones, Dean of the Whiting School on Engineering at Johns Hopkins, and Ed Bouwer, Chair of the Department

to generations of his colleagues, students, friends, and leaders throughout the water industry and academia.” Bouwer added, “Charlie’s impact on the profession of environmental engineering, especially in the area of water and wastewater treatment, has been immense. He did pioneering work on removal of particles from water. His models and methodology have really stood the test of time and are still being used today.”

Charlie was considered one of the world’s foremost experts in filtration and coagulation. In recognition of his water treatment expertise, he was chosen a decade ago to chair an advisory committee that reviewed the management of New York City’s water supply. His many honors included election in 1989 to the National Academy of Engineering. In December, 2010, he was honored with the Abel Wolman Award of Excellence by the American Water Works Association.

In 2000, Charlie was the recipient of the Athalie Richardson Irvine Clarke prize bestowed by the National Water Research Institute, one of the top awards in the field of water-related research and technology. The Clarke honor came with a gold medallion and a $50,000 prize. Charlie, known for his humble demeanor, said, “I’m going to keep the medal and give away the money. If I’d won the lottery, I wouldn’t give all of that money away. But this was an award associated with some of the work I’ve done, and I didn’t want to profit from it. I wanted to recognize some of the places that have helped my wife and me to get here. It was a team effort.” Charlie donated some of the prize money to Manhattan College, where he received his bachelor’s degree in civil engineering in 1955. The gift was designated for an endowment honoring Donald J. O’Connor, the professor who introduced O’Melia to environmental engineering. The remaining funds were donated to Fontbonne Hall, a New York Catholic girls’ high school that his wife attended.

Charlie was a long-time member of AEESP. In 1995, he was the recipient of the Founders Award, which recognizes sustained and outstanding contributions to environmental engineering education and practice. Just this year, AEESP inaugurated a teaching award in honor of Charlie, the “Charles R. O’Melia AEESP Distinguished Educator Award”—donations for the endowment of this award can be made at www.aeesp.org/donate.
Charlie maintained lifelong ties to New York City. He was born in Manhattan in 1934 to a mother who taught elementary school and a father who was an accountant for a construction company. He grew up in the Bronx and Brooklyn and attended his father’s alma mater, Manhattan College. His fascination with the city’s bridges, tunnels, and tall buildings initially led him to study civil engineering. But gradually he was drawn to the emerging field of environmental engineering. “It just seemed more intellectually challenging at the time,” he said in a 2000 interview. “It also allowed me to do something that involved serving the public.”

In 1956, Charlie earned his master’s degree in environmental engineering at the University of Michigan and returned to New York City, where he took an engineering job with a consulting firm. He married Mary Curley, starting a family that grew to six children. The consulting job was short-lived—Charlie opted to return to Michigan to pursue his doctorate in environmental engineering, which he completed in 1963. Afterward, he taught at Georgia Tech, did further research at Harvard University, and then served on the faculty of the University of North Carolina at Chapel Hill (UNC). During these years, he developed a love of teaching and research that remained with him throughout his career.

At UNC in 1971, Charlie collaborated with his first doctoral student and a third researcher to produce a paper called “Water and Wastewater Filtration: Concepts and Applications.” This important paper detailed particle behavior in the water filtration process: interception, sedimentation, and diffusion. Charlie’s rigorous research on these processes eventually influenced U.S. Environmental Protection Agency filtration rules for removing harmful particles and microbes from water. AEESP honored Charlie and his co-authors in 1991 with the “Outstanding Publication Award” for a landmark environmental engineering and science paper that has withstood the test of time and significantly influenced the practice of environmental engineering and science.

“As a teacher, Charlie was simply extraordinary. He taught his students to always look at problems in terms of first principles, but to also always keep an eye on the big picture.”

—William Becker, Former Doctoral Student, Vice President and Director of Water Process Technology and Research at Hazen and Sawyer

In 1980, Charlie was recruited for a faculty post in the rejuvenated Department of Geography and Environmental Engineering at Johns Hopkins University. He spent 27 years with the department, including two terms as department chair, and mentored numerous master’s and doctoral students, many of whom went on to become prominent professors at other schools and leading figures in government and private engineering posts.

“As a teacher, Charlie was simply extraordinary,” said William Becker, one of Charlie’s former doctoral students who is now vice president and director of water process technology and research at Hazen and Sawyer, a New York consulting firm. “He had a way of explaining very complex material in terms that were understandable. More importantly, he taught his students to always look at problems in terms of first principles, but to also always keep an eye on the big picture. As an advisor, he demonstrated creativity, clear vision, and true excellence.”

Becker also described Charlie as “a phenomenal role model” and “perhaps the most humble person I have ever met, always giving credit to others. In summary, Charlie embodies all of the characteristics of a true mentor.”

During his years on the faculty, he also served on national advisory panels and in water research organization positions, while continuing to conduct important studies in aquatic chemistry, environmental colloid chemistry, water and wastewater treatment, and modeling of natural surface and subsurface waters. In 1999, he was named the Abel Wolman Professor of Environmental Engineering, established in honor of a renowned Johns Hopkins faculty member who pioneered modern water supply chlorination methods.

Charlie also continued to be the subject of tributes for his teaching and his research. One of the most noteworthy events occurred in 2004, when he was honored with a symposium and dinner at a national meeting of the American Chemical Society, held in Philadelphia. Over a three-day period, 44 oral presentations were delivered, and a poster session was held, all in honor of Charlie and his research. Shortly after the event, Charlie said he had been reluctant to be the focus of such attention. But he also said that he had attended every scholarly presentation at the meeting and was delighted by their content. “I was impressed,” he said. “Everyone I talked to felt that the level of research was very high. To me, the good thing was to see more focus on this area of research—particles, pollutants, and interfaces in water.”

Regarding the tribute dinner, he added, “They showed a lot of playful old pictures that neither my wife nor I knew existed. There was a lot of mirth and laughter and camaraderie.”

Outside of the lab and the classroom, Charlie’s favorite avocation was basketball. Until an injury sidelined him at age 60, he was known as a fierce competitor on the court in pickup games with his students and colleagues. He was also devoted to his family. Mary O’Melia said he had a chance to visit with all of his six children and eleven grandchildren in the weeks before his death.

The Department of Geography and Environmental Engineering also is planning a service in honor of O’Melia in the coming months at a time and place not yet determined.
Andrew Whelton to the University of South Alabama

Andrew joined the South Alabama Jaguars Civil Engineering faculty in January 2011, completing his journey down the Eastern seaboard from Boston, Massachusetts. Since receiving his Ph.D. in Civil Engineering at Virginia Tech in 2009, he completed a National Research Council postdoctoral award at the National Institute of Standards and Technology and postdoctoral research at Virginia Tech. His recent work involved developing nanocomposite infrastructure materials and examining their degradation and nanoparticle release. Andrew’s interests focus on sustainable infrastructure materials, water and energy systems, and all things nanotechnology. He is passionate about elucidating the fundamental mechanisms that control polymer degradation/performance, nanocomposite environmental health and safety, and sustainable water and energy systems. Detailed interests and opportunities can be found at www.usace.org/ajwhelton. Andrew is actively seeking collaborations with faculty and corporations with complementary interests. Most importantly, he is forever indebted to his wife Margaret, who has supported him on his journey into the academy.

The University of South Alabama has over 15,000 students and is one of Alabama’s fastest-growing public universities. The University of South Alabama is located in Mobile, whose metropolitan area population is 350,000-plus near the Gulf Coast’s white sandy beaches. The University prides itself on making a difference in Alabama and the nation through teaching, research, service, and health care. South Alabama offers a wide range of undergraduate and graduate programs in engineering, arts and sciences, business, allied health, and nursing.

Krista Wigginton to University of Maryland

Dr. Krista Rule Wigginton recently joined the faculty of the Department of Civil and Environmental Engineering at the University of Maryland at College Park (UMD) as the Pedro E. Wasmer Assistant Professor in Engineering. Dr. Wigginton received her M.S. and Ph.D. in Environmental Engineering at Virginia Tech and her B.S. in Chemistry at the University of Idaho. Prior to joining UMD, she was an NSF international postdoctoral fellow at École Polytechnique Fédérale de Lausanne in Lausanne, Switzerland.

Her research focuses on pathogen disinfection and detection. Specifically, she works toward the development of spectroscopic techniques to detect pathogens at low concentrations and on describing biomolecule degradation in natural and engineered systems. In her most recent work, she used state-of-the-art mass spectrometry techniques to describe the reactions that take place between virus proteins and disinfectants during water treatment.

Yang Deng to Montclair State University

Dr. Yang Deng joined the Department of Earth and Environmental Studies at Montclair State University, New Jersey, in September, 2010. Prior to that, he was an assistant professor in Civil Engineering at University of Puerto Rico, Mayaguez, from 2008 to 2010, an instructor at Georgia Southern University in 2007, and a postdoctoral research associate at the University of Miami from 2006 to 2007. Currently, he is also a Professional Engineer (Environmental Engineering) in the State of Florida. Dr. Deng’s research is primarily focused on physicochemical treatment of water and wastewater, environmental remediation, advanced oxidation process (AOPs), environmental nanotechnology, and landfill leachate management. He earned his Ph.D. in Civil Engineering from the University of Miami in 2006 and obtained his M.S. and B.S. at Tongji University in Shanghai, China, in 2001 and 1998, respectively. More information regarding his research is available at netdrive.montclair.edu/~dengy/.

Vikas Khanna
David Cwiertny and Sharon Walker Earn NSF CAREER Awards

David Cwiertny and Sharon Walker, professors in the Department of Chemical and Environmental Engineering in the Bourns College of Engineering (BCOE) at the University of California, Riverside (UCR), have been named recipients of the National Science Foundation’s CAREER award.

Walker, who is an associate professor and the John Babbage Chair in Environmental Engineering, will use the grant for her project, “Fundamentals of Nanoparticle Behavior in Water Treatment.” She will study the unintended consequences of nanotechnology, including the release and accumulation of engineered nanoparticles in surface and ground waters. Walker will seek to identify the fate and transport of nanoparticles in traditional water treatment facilities and the mechanisms leading to their removal in these critical engineered systems. Nanomaterial manufacturing is on the rise, as demonstrated by production of titanium dioxide (TiO2) reaching 40,000 metric tons per year in the U.S. alone. While many nanomaterials have been shown to be toxic, their adverse effects on organisms will inevitably be governed by their fate and transport in the environment, processes that are still not well understood. In addition to providing insights into best practices for protecting human health and informing practitioners in setting standards for water treatment, Walker will use the grant to work with the local community to engage K–12 and college students in environmental science and engineering. Walker is active in a number of student success and diversity programs, including service as faculty advisor for the UCR chapters of the Society of Women Engineers and the national engineering honor society Tau Beta Pi.

Cwiertny, who is an assistant professor and cooperating member of the faculty in BCOE’s Program in Materials Science and Engineering, will use the CAREER award to support his project, “Hybrid Nanostructures as Catalysts for Advanced Oxidation Processes: An Integrated Research and Education Plan Promoting Water Reuse and Sustainability.” He will fabricate and optimize an innovative, nanomaterial-based technology for advanced water treatment, while promoting diversity in environmental engineering and education initiatives focused on water sustainability and nanotechnology. Cwiertny will utilize a promising class of nanomaterials -- hybrid carbon nanotubes (CNTs) -- to optimize advanced oxidation processes through their catalytic production of hydroxyl radical from ozone. Cwiertny is a faculty advisor for the BCOE student chapters of Tau Beta Pi and Engineers Without Borders, which supports community-driven development programs worldwide through the design and implementation of sustainable engineering projects while fostering responsible leadership. One of the organization’s ongoing projects is to improve water quality in San Lorenzo, Guatemala.

Cwiertny and Walker are co-principal investigators on a three-year project funded by the U.S. Department of Agriculture to investigate the natural processes to disinfect pathogens in water supplies. Through their study, “Photochemical Disinfection of Pathogens: Influence of Extracellular Polymeric Substances on Bactericidal Capacity of Reactive Oxygen Species,” they hope to understand the combination of factors which contribute to the fate of agriculturally-introduced bacteria, such as E. coli, following photochemical disinfection.
SenGupta Receives ACS Astellas Foundation Award

Arup SenGupta, professor and past chair of the Department of Civil and Environmental Engineering at Lehigh University, received the Astellas Foundation Award at the 240th American Chemical Society (ACS) National Meeting in Boston in August, 2010. The award is given each year to individuals or teams that exemplify the criterion of significant contribution to scientific research in the chemical and related sciences that had a significant impact on public health.

SenGupta was recognized for mitigating the arsenic crisis around the world with specific contributions in two areas: (1) development of a method to safely contain arsenic-laden sludge without requiring landfills and hazardous waste sites, and (2) invention of the first polymer-based reusable arsenic-selective adsorbent. The adsorbent is in use in several countries, including the United States. SenGupta is the first engineer to receive this award. SenGupta delivered the Astellas Foundation lecture entitled “Global Arsenic Crisis in Drinking Water: New Findings for Sustainable Solution.” The award consisted of a plaque and $30,000 for continued research toward mitigating the arsenic crisis.

Although unknown nearly 25 years ago, many countries in southeast Asia are faced with elevated arsenic concentrations in groundwater due to natural geochemical soil leaching. According to World Health Organization (WHO), over 150 million people in India, Bangladesh, Cambodia, Vietnam, Nepal, and Myanmar are exposed to arsenic poisoning caused by drinking of contaminated drinking water. SenGupta has been an AEESP member since 1985 and a recipient of research awards from several professional societies, including the 2001 AEESP Frontier Research Award.

Christopher Bellona to Clarkson University

Dr. Christopher Bellona will join the Department of Civil and Environmental Engineering at Clarkson University starting with the spring 2011 semester. He comes from the Colorado School of Mines (CSM), where he worked as a postdoctoral researcher in the Advanced Water Technology Center. He also received his Ph.D. in Environmental Science and Engineering from CSM in 2007 working with Professor Jörg Drewes. Dr. Bellona’s research is focused on potable water reuse. He has studied the transport of organic solutes through reverse osmosis and nanofiltration membranes and is currently developing modeling approaches to predict the removal of wastewater-derived organic contaminants by high-pressure membranes. Other research activities have included studies to better understand membrane fouling and develop more sustainable and energy-efficient membrane treatment systems. In addition to membrane science, Dr. Bellona’s current research interests include using molecular descriptors to predict the fate of contaminants, as well as development of more sustainable water and wastewater treatment processes. Dr. Bellona has been an active volunteer for the Water Research Foundation and the American Water Works Association.

The Department of Civil and Environmental Engineering at Clarkson has 18 tenure track faculty and the newly established Institute for a Sustainable Environment, with over 60 faculty affiliates, which provides research, education, and outreach opportunities for faculty and their graduate students. The range of research expertise among these faculty has resulted in Clarkson being ranked 38th in the country in environmental engineering and health graduate programs in 2010.
Dr. Kelly G. Pennell joined the University of Massachusetts-Dartmouth Civil and Environmental Engineering Department as an Assistant Professor in fall 2010. She received a B.S. in Civil Engineering from Lawrence Technological University in 1997. From 1997 to 2002, she was employed as an environmental consultant, during which time she received her M.S. in Environmental Engineering from Rose-Hulman Institute of Technology. In December 2005, she received her Ph.D. in Civil (Environmental) Engineering from Purdue University. From 2005 until fall 2010, she served as a research faculty member at Brown University and was an integral member of the Superfund Research Program (funded by the National Institutes of Environmental Health Sciences).

Pennell’s research is aimed at better understanding the fate and transport of environmental contaminants. She is particularly interested in connecting research, practice and policy, such that health risks can be better characterized and mitigated. As an example, she is currently conducting a field study related to human exposure of contaminated soil vapors with collaborators from the Boston University School of Public Health. Aside from vapor intrusion, she has published on the efficacy of antimicrobial agents. She was recently awarded funding with collaborators at Brown University to evaluate the fate and transport of nano-silver in the environment.

For the 2010/2011 academic year, she is teaching Water Quality Engineering and Introduction to Environmental Engineering.

A trio of environmental engineers, Angela Bielefeldt (University of Colorado-Boulder; AEESP member), Kurt Paterson (Michigan Technological University), and Christopher Swan (Tufts University), authored a paper, “Measuring the Impacts of Project-Based Service Learning,” that won the 2010 American Society of Engineering Education’s Best Paper Award. The paper previously won the 2009 ASEE Environmental Engineering Division PIC II Best Paper Award. This is the first time that a paper from the ASEE Environmental Engineering Division received such recognition.

The citation for the paper is
Francis L. de los Reyes III Receives Alumni Award from Iowa State University

During its annual Homecoming celebration, the Iowa State University Alumni Association conferred upon Francis L. de los Reyes III, of Cary, North Carolina, the Outstanding Young Alumni Award, one of the most prestigious awards given to alumni by the ISU Alumni Association.

The Outstanding Young Alumni Award was established in 1968 to recognize ISU alumni, age 40 and under, who have excelled in their professions and provided service to their communities.

Francis de los Reyes (MS ‘94 civil engineering) is an associate professor of civil, construction, and environmental engineering at North Carolina State University. He studies drinking water treatment, wastewater treatment management, and environmental microbiology and has used his expertise to help solve water and sanitation issues in developing nations.

Recipients of the 2010 Homecoming awards were honored at the 79th Annual Honors & Awards Ceremony at Ames’ Cornerstone Church on October 29, 2010. For more information on the 2010 Honors & Awards Ceremony, visit www.isualum.org/honorsandawards.

2011 AEESP Education & Research Conference, continued from page 3

Table 2. AEESP Education and Research Conference Upcoming Dates of Importance

<table>
<thead>
<tr>
<th>Date</th>
<th>Item to consider</th>
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<tbody>
<tr>
<td>January</td>
<td>If you have not already, you should reserve lodging for you, your family, or your research group at a great conference rate (see <a href="http://www.aeesp2011.com/hotels/">www.aeesp2011.com/hotels/</a>).</td>
</tr>
<tr>
<td>January 1</td>
<td>Registration is open at <a href="http://www.aeesp2011.com/">www.aeesp2011.com/</a>. Contact the AEESP Business Office to make sure your membership is up to date to receive member rates.</td>
</tr>
<tr>
<td>January 24</td>
<td>This is the deadline to submit your two-page abstract to be considered for a platform presentation. These abstracts will also be considered for poster presentations at this time. Poster-only submissions are also welcome. These extended abstracts will be made available in the conference proceedings (see <a href="http://www.aeesp2011.com/abstracts/">www.aeesp2011.com/abstracts/</a>).</td>
</tr>
<tr>
<td>March 15</td>
<td>Last-minute data just arriving that allows you to finalize a project? Today is the final day to submit a 250-word abstract to be considered only as a poster presentation. These shorter abstracts will also appear in the conference proceedings.</td>
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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 and we will remove you from the mailing list beginning with the May 2011 issue.
In its role as a public servant and industry authority, the American Academy of Environmental Engineers promotes world-class, state-of-the-art advances in environmental engineering through its annual Excellence in Environmental Engineering (E3) Awards. The E3 Awards program elevates outstanding, innovative, modern advances in public health, safety, and welfare to enable humankind to co-exist in harmony with nature in four ways:

- National and international publicity through publications, the media, and events; thus receiving exposure to an audience of thousands,
- Recognition on stage with engraved trophies and presentation opportunities at the prestigious Annual E3 Awards Luncheon and Conference in April, 2011, Washington, DC, traditionally held at the National Press Club,
- First choice consideration for the Academy’s many local and national workshops and seminars both stand alone and at AAEE sponsoring organization conferences,
- Eligibility to enter the International Water Association’s Project Innovation Awards global competition—winning an E3 Award is a prerequisite for entering IW A’s biannual North American competition.

Inaugurated in 1989, the E3 competition is organized around the normal phases of development and implementation of environmental management projects and programs: research, planning, design, and operations and management. The entrants to the competition display a wide range of projects from innovative designs in waste treatment plants to new water treatment technologies to a one-of-a-kind Superfund site cleanup. We also see that today’s engineers are becoming significantly more integrated in a team/project approach, allowing for greater flexibility and efficiency in project management. The application of new technologies combined with experienced environmental engineering practices make these projects award winners.

Entries are accepted in these categories: Design, Environmental Sustainability, Operations/Management, Planning, Research, Small Firms, Small Projects, and University Research. Environmental Sustainability entries demonstrate research, planning, design, or operations and management including renewable resources timely regenerated, timely substitute replacement of nonrenewable resources, and harmful substances absorbed timely or made harmless. The entry deadline is February 1, 2011.

Those chosen for prizes by an independent panel of distinguished experts address the broad range of modern challenges inherent in providing life-nurturing services for humans and protection of the environment. They are but a small percentage of the many projects involving environmental engineers around the world. Nevertheless, their innovations and performance illustrate the essential role of environmental engineers in providing a healthy planet. These award winners testify to the genius of humankind and best exemplify the Excellence in Environmental Engineering criteria. Examples of award winning projects are described at www.aaee.net/Website/E3CompetitionWinners.htm. To obtain complete entry guidelines and reservation and submission forms, visit www.aaee.net/Website/E3Competition.htm.

AAEE W. Wesley Eckenfelder Memorial Fund

Wes Eckenfelder was an innovator and pioneer in our profession, a dedicated life-long educator, learner and mentor, and an internationally acclaimed practitioner. After a distinguished career, he passed away this year at the age of 83. Wes had an impact on many lives, including academics, students, and practicing professionals. You can read more about Wes starting on page 13 in the 2010 Summer issue of Environmental Engineer. In recognition of his multiple contributions and achievements, the WES ECKENFELDER MEMORIAL FUND was established. The Fund will support the recognition of accomplishment among students and young professionals and the lifetime achievements of environmental engineering and science researchers and practitioners. AEESP members are invited to contribute to the Fund.

To make a contribution, do the following: make your check payable to the Environmental Engineering Foundation; in the “memo” space, indicate “Wes Eckenfelder Memorial Fund”; and send your check to the Environmental Engineering Foundation, American Academy of Environmental Engineers, 130 Holiday Court, Suite 100, Annapolis, Maryland 21401.
Water treatment scientist Dr. Johannes (John) J. Rook died on May 23, 2010, at the age of 89. John Rook initiated a revolution in water treatment when he reported in 1974 on the formation of haloforms during chlorination of natural waters.

Just five years earlier, the American Society of Civil Engineers’ design text *Water Treatment Plant Design* stated that “...in the immediate future, drastic changes in the design of water treatment plants are unlikely.” Rook’s discovery of disinfection by-products in drinking water expanded the focus from water treatment disinfection, which had produced great improvements in public health over the first half of the 20th century, to an additional consideration of the possible long-term effects on human health of trace compounds created during drinking water treatment. Concern over the formation of chlorinated by-products during potable water treatment stimulated the search for new, advanced treatment technologies capable of avoiding the formation of these disinfection by-products. A renewed interest in ozonation, filtration on activated carbon, and the development of new membrane processes for water treatment are part of the legacy of Rook’s discovery.

Johannes J. Rook was born in Rotterdam, The Netherlands, on April 23, 1921. His studies in chemistry at Utrecht University began in 1939. Rook’s studies were interrupted when Germany invaded the Netherlands on May 14, 1940. Rook spent much of World War II as a prisoner in a Nazi prison camp in Germany, where he perfected his knowledge of several languages including German, Italian, French and English through interactions with other prisoners. After one failed attempt at escape from the camp, Rook succeeded on a second try during the last year of the war by pretending to be a German fleeing the Russian army. Following the war, Rook continued his studies, receiving a Masters in biochemistry and microbiology in 1950, and worked as an assistant professor in the research group of A.J. Kluyver at Delft University of Technology, The Netherlands. Between the years between 1955 and 1961, he occupied several positions in industry as chemist-microbiologist. In 1961, he was hired as a process engineer with Amstel Brewery in Amsterdam. The production of beer and wine share a rich history with the development of potable water treatment, and Rook’s experience with monitoring volatile products from fermentation at the Amstel Brewery would prove to be an important factor in guiding his future work. He ultimately received his doctorate from Wageningen University in 1978.

When John Rook was hired in 1964 as the Chief Chemist for the Rotterdam Waterworks, he developed methods that were inspired in part by those used to monitor the “head space” over fermenting beer to measure volatile compounds in drinking water. Rotterdam’s raw water supply, the Rhine River, is heavily impacted by industrial domestic waste discharges. Initially, industrial and domestic sources (such as cough syrup) were suspected as the source of chloroform that Rook detected in the treated water. He reported this observation in 1971, but it would be four years and an exhaustive elimination of other possible sources of contamination before Rook published his findings in 1974 that chlorine, added to disinfect the water, was reacting with natural organic matter to form trihalomethanes. Rook’s theory that natural organic matter, as measured by color, was reacting to form chlorinated by-products was particularly interesting to Dr. Jim Symons, a U.S. EPA scientist. Symons was aware of independent measurements of chloroform in Cincinnati and New Orleans drinking water made by EPA scientists and ultimately concluded that Rook’s theory likely explained the source of these volatile compounds. John Rook’s discovery reverberated throughout the United States, Europe, and the world, ultimately stimulating important changes in water treatment practice and drinking water regulation.

During his career Dr. Rook also worked as a consultant on numerous water treatment projects in Europe, the US, and South America. After retiring from the Rotterdam Waterworks in 1984, he served as a consultant for the Lyonnaise des Eaux outside of Paris, France, where he continued his work on water treatment. He subsequently worked as a senior expert for PUM, a Dutch NGO for development aid, and worked on several World Health Organization projects in Honduras and Columbia.
8th Phytotechnologies Conference: Putting Plants to Work for Practical Ecology

International Phytotechnology Society, Sept 13–16, 2011

Phytotechnologies—plant-based strategies to clean water, soil, and air and provide ecosystem services—have an effective power beyond their science when integrated into our managed landscapes. This conference, which will be held in Portland, Oregon, will bring the scientists, designers, engineers, builders, regulators, and users working with phytotechnologies into one conversation to promote successful implementation and operation of plant solutions that build an ecological relationship with the landscapes and communities they serve. Special expertise in the Pacific Northwest will offer additional exploration of urban stormwater management, sustainable built environments, ecosystem services and ES markets, and constructed wetlands.

For more information, contact Renee Stoops (SPROut Director; phone 503-584-7252; email: renee.stoops@chemeketa.edu; web: www.SPROutOregon.org).

Center for Sustainable Engineering Workshops: Application Deadline extended to January 25

Engineering faculty members who wish to modify existing courses or develop new courses to include concepts in sustainability are encouraged to apply to the 2011 Center for Sustainable Engineering (CSE) Workshops. Two workshops will be held, on May 23–24 and May 26–27, 2011, in Syracuse, New York. Each workshop will accommodate thirty participants who will be chosen based on a competitive application process. Participants are expected to pay their own travel costs to the workshop and attend all workshop activities. NSF will cover the expenses of the workshop, including food, lodging, and workshop materials. Full details and an online application can be found at www.csengin.org. Deadline for applications have been extended to January 25, 2011.

The Center for Sustainable Engineering is a partnership of Syracuse University, Carnegie Mellon University, the University of Texas at Austin, Arizona State University, and Georgia Institute of Technology.

Note that a slightly shorter version of the CSE workshop will be presented just after the 2011 IEEE International Symposium on Sustainable Systems and Technology, May 16–19, 2011, in Chicago. Information on this IEEE symposium is available at www.ieee-issst.org/.

Water and Health: Where Science Meets Policy 2011 Conference

October 3-7, 2011
University of North Carolina at Chapel Hill, NC, USA

Water and Health: Where Science Meets Policy 2011 Conference 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.

Registration and abstract submission opens
February 1, 2011

Abstract submission deadline
April 30, 2011

The 2010 conference brought together over 400 people from over 50 countries. You are invited to join individuals and experts from academia, industry, NGOs, government and foundations at this year's conference for a combination of insightful keynote, high-quality research presentations and practical workshops.

2011 theme announcement, keynote speakers, streams, abstract submission and registration coming soon to http://whconference.unc.edu.

http://whconference.unc.edu
**Faculty Position in Environmental Engineering at McGill University**

The Department of Civil Engineering and Applied Mechanics at McGill University invites applications for a tenure-track position in Environmental Engineering, preferably at the Assistant Professor level, but outstanding senior candidates are also encouraged to apply. We are particularly seeking candidates with expertise in one or more of the following areas: environmental engineering, geo-environmental engineering, groundwater engineering, environmental hydrology, design and development of advanced treatment technologies for emerging pollutants, and global and climate change effects on water quality and geo-environment.

Candidates must have a Ph.D., preferably with a first degree in civil engineering, and a strong commitment to excellence in research and teaching. Evidence of outstanding research achievements is indispensable. All qualified applicants are encouraged to apply; however, Canadian and permanent residents will be given priority. McGill University is committed to equity in employment and diversity; it welcomes applications from those who may contribute to further diversification. Membership or willingness to become a member in a Canadian professional engineering association is required.

The closing date for applications is January 31, 2011 and the department will fill the position by May 31, 2011. Candidates should submit applications which include a statement of teaching and research interests, names and addresses of three references, and copies of recent publications to Professor Van-Thanh-Van Nguyen, Chair, Department of Civil Engineering and Applied Mechanics, McGill University, 817 Sherbrooke Street West, Montreal, Quebec, Canada H3A 2K6 or by e-mail to van.tv.nguyen@mcgill.ca.

**Faculty Position at the Air Force Institute of Technology**

The Department of Systems and Engineering Management at the Air Force Institute of Technology (AFIT; [www.afit.edu/en/env/environmentengineeringscience.cfm](http://www.afit.edu/en/env/environmentengineeringscience.cfm)) invites applications for a tenure-track faculty position (rank depending on qualifications) in the Environmental Engineering and Science Program with a start date of October 1, 2011, or earlier. Applicants for the position must have a Ph.D. in environmental engineering or science or closely related discipline by the position start date. Applicants should have a distinguished record in research and teaching, demonstrated an exceptional potential to conduct world-class research, and have the background, commitment, and desire to conduct research and teach graduate classes in the areas of environmental biotechnology, sustainability, and applied environmental microbiology. Preference will be given to applicants with the ability to teach and conduct research in the areas of environmental law, air/land/water quality management, chemical and biological weapons technology, and physiologic effects of weapons of mass destruction.

AFIT’s Environmental Engineering and Science Program is an ABET-accredited graduate program with an emphasis on research. AFIT values campus diversity and particularly encourages members of historically under-represented groups to apply. To apply, submit a letter of application, a professional curriculum vita, and legible copies of your official college transcripts. Your vita must include detailed exposition of professional experience and the names of three references. Applicants must be citizens of the United States and eligible to obtain a security clearance.

For more information, contact Major LeeAnn Racz (phone: 937-255-3636 x4711, email: leeann.racz@afit.edu).
**GK–12 Opportunities for Sustainability PhD students at University of Colorado–Boulder**

The University of Colorado—Boulder (CU) is seeking Ph.D. students interested in incorporating K–12 teaching outreach into their program of study. CU has an NSF-funded GK–12 grant entitled “Engineering for Society -- An Energy and Environmental Sustainability Research Pathway to Cultivate Engineering Leaders and Enrich Education for Disadvantaged Youth.”

The project prepares engineering Ph.D. students to become future engineering leaders while delivering hands-on, engineering-focused science, technology, engineering, and mathematics (STEM) curricula in grades 3–12 classes in specific Colorado schools in Longmont, Lafayette, and Denver. The inquiry-based curriculum exploits engineering to enrich science and math content to help youngsters better understand their everyday world. These K–12 experiences impact the Ph.D. fellows through the pairing of real-world opportunities with their research through the creation and delivery of K–12 STEM curriculum. Female and under-represented minorities are particularly encouraged to apply.

Interested applicants can acquire more information at the GK–12 website: itll.colorado.edu/index.php/k12_engineering/nsf_gk12_fellows_program/. Students must be accepted into the Ph.D. programs in Civil Engineering or Mechanical Engineering at CU to be eligible to participate. For more information on these PhD programs, see: ceae.colorado.edu/dept/?i=grad-disciplines or www.colorado.edu/MCEN/programs/graduate/. Interested students can also contact Prof. Angela Bielefeldt (angela.bielefeldt@colorado.edu).

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**Summer Undergraduate Research Opportunities at the University of Colorado–Boulder**

The University of Colorado–Boulder (CU) is seeking ten undergraduate students to participate in our NSF-funded Research Experience for Undergraduates (REU) site in environmental engineering. The research topics include drinking water treatment, water chemistry, air pollution, air quality, acid mine drainage, stream ecology, and remediation. The program lasts for ten weeks in summer 2011. Students are mentored to work on individual research projects by faculty and graduate student teams. A seminar series also provides training in research methods, a breadth of environmental engineering topics, and graduate school. The students may also tour local governmental research labs including the U.S. Geological Survey and the National Renewable Energy Laboratory. The program provides a stipend of $5,000, and room, board, and travel to CU. Partial support is also available for students to present their REU research at an appropriate technical conference within the following year. Women and under-represented minorities are particularly encouraged to apply. For more details, see our website: spot.colorado.edu/~bielefel/REU.html. Interested students can also contact Professor Angela Bielefeldt (email: angela.bielefeldt@colorado.edu).
Nuclear Engineer Position at Southwest Research Institute

Southwest Research Institute is seeking a nuclear engineer (or closely related field) with a B.S. degree plus five years of experience, a M.S. degree plus three years of experience, or a Ph.D. degree. A background in nuclear engineering and an ability to conduct and review probabilistic risk assessments for nuclear power plants are required. Knowledge and experience in one or more of the following are desirable: nuclear power plant operation safety, aging and reliability analyses of nuclear power plant materials (e.g., pressure vessels, piping), nuclear fuel handling and transportation safety, radiation shielding analyses, and health physics. Experience with PRA software, human reliability analysis, and/or nuclear power plant fire risk analysis is required.

The candidate is expected to work within an interdisciplinary team of engineers and scientists to perform activities related to regulatory compliance reviews for nuclear power plant license applications, nuclear fuel handling and transportation safety, criticality safety, shielding analysis, human reliability analysis, nuclear power plant fire risk analysis, dose/risk assessments, and long-term storage and disposal of radioactive waste. Technical activities may involve: (i) reviewing technical data to evaluate compliance with Nuclear Regulatory Commission regulations and Environmental Protection Agency radiation protection standards; (ii) reviewing or conducting probabilistic risk assessments; (iii) developing computational models to evaluate source terms, shielding, spent fuel composition, and radiologic dose; (iv) supporting licensing nuclear power plants and other nuclear facilities; and (v) providing technical support for inspections of nuclear power plants.

Candidates should apply directly at www.swri.jobs, job code 20-00730. The Southwest Research Institute is an Equal Opportunity/Affirmative Action Employer MF/D/V committed to diversity in the workplace.

Director of the Engineering School of Sustainable Infrastructure and Environment at the University of Florida

Applications are invited for the inaugural Director of the Engineering School of Sustainable Infrastructure and Environment, consisting of the Department of Civil and Coastal Engineering and the Department of Environmental Engineering Sciences. The Director will be responsible for the development and implementation of a strategic plan and vision for the School as well as the maintenance, success, faculty development, and all budgetary matters of the two departments. Current tenure-track faculty total 45 with research expertise in air resources, biogeochemical systems, coastal and ocean processes, construction, ecological systems, environmental nanotechnology, geotechnical, infrastructure materials and pavements, solid and hazardous waste management, sustainability science and engineering, structures and structural mechanics, transportation, water and coastal resources, and water supply and wastewater systems, with total research expenditures of over $20 million in 2009. Current enrollments exceed 950 undergraduate and 450 graduate students.

We are dedicated to the goal of building a culturally diverse and pluralistic faculty committed to teaching and working in a multicultural environment; we strongly encourage applications from women, members of underrepresented groups, individuals with disabilities, and veterans. Candidates are encouraged to highlight activities which have led to enhanced diversification of the student or faculty demographics at their current institutions. The University of Florida is an equal employment opportunity employer. The “government in the sunshine” laws of Florida require that all documents relating to the search process, including letters of application/nomination and reference, be available for public inspection. If an accommodation due to a disability is needed to apply for this position, please call 352-392-2HRS or the Florida Relay System at 800-955-8771 (TDD).

Review of applications will begin on February 1, 2011, and continue until the position is filled. It is expected that the Director will assume duties on July 1, 2011. All applications are to be made electronically. Please submit a cover letter, curriculum vitae and a list of at least three references at sites.eng.ufl.edu/cce-ees-search/position-information/apply-now/. More information about the Departments and School can be found on this site.
**IGERT Fellowships at Tufts University**

With an Integrated Graduate Education and Research Traineeship (IGERT) grant from the National Science Foundation (NSF), Tufts University’s doctoral program in Water Diplomacy will recruit and educate the next generation of water professionals. Beginning in fall 2011, several doctoral traineeship opportunities are available for highly motivated and creative individuals with a strong interest in pursuing interdisciplinary approaches to resolve complex water problems. The traineeship award includes a $30,000 yearly stipend, full tuition waiver, and semester-long fully-paid internship opportunities. Successful applicants will have the opportunity to design their own doctoral program in a department and school of their choice, explore frontier research topics before focusing on a dissertation topic, and perform collaborative research with program faculty, social and natural scientists, and water professionals from around the world on complex water problems of mutual interest.

Applicants must have a masters or bachelors degree in natural sciences, social sciences, or engineering with strong demonstrated interest in water issues. Students will apply and be admitted to a Ph.D.-granting department of their choice (e.g., Biology, Chemistry, Civil and Environmental Engineering, Computer Science, Law and Diplomacy) or to our interdisciplinary doctoral program. Funding for the IGERT program is limited to U.S. citizens and permanent residents due to NSF funding restrictions. Other funding opportunities are available for international students.

For more information and consideration for admission and Water Diplomacy financial assistance, visit [waterdiplomacy.tufts.edu](http://waterdiplomacy.tufts.edu) and fill out the online application and or email shafiqul.islam@tufts.edu.

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**Newsletter policies**

AEESP welcomes AEESP members to submit items such as letters to the editor, letters to the president, news, ads, and announcements to the Newsletter. The decision to publish is subject to the discretion of the Editor and the AEESP Board of Directors. All submissions for the AEESP Newsletter should be sent electronically as an attached file to the Newsletter editor, Joseph Ryan.

**Submissions deadline:** The AEESP Newsletter is published three times a year in January, May, and September. The deadline for Newsletter submissions is one month prior to the publication date (e.g., the deadline for the May Newsletter is April 1). Please keep in mind when submitting items with deadline dates that members receive issues four to six weeks after the submissions deadline.

**Individual member advertising policy:** Any advertisement, including faculty, post-doc, or student ads, or other types of announcements submitted by an AEESP individual member, will be free for the first 250 words (approximately 1/4 page) and then charged at $1 per word for additional content, if formatted to fit in a column. Non-members will be charged at the per word rate for any size column-formatted ad. Full page formatted advertisements will be charged at $500 for members and $1,000 for non-members. All formatted full page ads will be accompanied by a free web ad. Programs will be limited to one full page of ads and/or announcements per issue.

**Photo submissions:** Photo submissions to the AEESP Newsletter are encouraged. Please submit your photos electronically in JPG format at the highest dimension for downsizing to print resolution (preferably less than 750 KB). Also, please include captions with names, locations, and dates.
One of the oldest institutions of higher education in this country, the University of Delaware today combines tradition and innovation, offering students a rich heritage along with the latest in instructional and research technology. The University of Delaware is a Land-Grant, Sea-Grant, and Space-Grant institution with its main campus in Newark, DE, located halfway between Washington, DC and New York City. Please visit our website at www.udel.edu.

Environmental Faculty Positions

As part of its Path to Prominence Strategic Plan, the University of Delaware has launched its Initiative for the Planet. The goals of this initiative are to promote sustainable practices and to support multidisciplinary efforts in research and education needed to develop solutions to significant, time-critical issues in energy, the environment, and resource sustainability. Our overarching objective is to make the University of Delaware a national and international resource for environmental research, technology, education, and policy – today and into the future. To attain this goal, we seek 6-8 outstanding faculty at all academic ranks in environmental science, engineering, and policy. Faculty can have appointments in multiple departments and colleges.

To complement these hires we are conducting a search for the Howard E. Cosgrove Chair in Environment. This internationally renowned scholar will further enhance the prominence of the University’s environmental interdepartmental teaching and research programs, and assist in building the Delaware Environmental Institute (DENIN) to a position of national and international prominence.

The University of Delaware provides an outstanding environmental research base through existing strengths in a number of areas including biogeochemistry, soil and environmental chemistry, environmental engineering, environmental microbiology, environmental genomics and bioinformatics, geomicrobiology, land/coastal dynamics, land use, nutrient management, environmental modeling, hydrology, environmental forecasting and restoration, ecosystem health and sustainability, and environmental policy, economics and education. These activities are carried out across the University’s seven colleges and in a number of well-regarded institutes and research centers. More details on our environmental programs can be found at www.environmentalportal.udel.edu/.

The desire to better utilize the strengths in the colleges, institutes, and centers, and to foster collaboration and enhance competitiveness in attracting outstanding faculty and students, led to the creation of the Delaware Environmental Institute in 2009. DENIN’s goals are to initiate interdisciplinary research projects, support interdisciplinary academic programs, and forge partnerships among government agencies, nonprofits, industry, policymakers, and the public to address environmental challenges and coordinate and sponsor University-based interdisciplinary initiatives. More details on DENIN can be found at www.udel.edu/denin.

Other recent actions which reflect the University’s commitment to the environment and sustainability include an aggressive Climate Action Plan and the creation of new undergraduate majors in Environmental Studies and Energy and Environmental Policy. Successful candidates will have the opportunity to help shape and grow these new majors.

Candidates for the faculty positions are expected to hold a Ph.D. or equivalent degree in their area of expertise and have a demonstrated record of excellence in environmental scholarship commensurate with appointment to a faculty position in one or more departments of the University. Nominations and applications should be submitted electronically to Environmental Cluster Search Committee Chair at environmental-hire@udel.edu. Application materials should include a statement of interest, curriculum vitae, description of research and teaching interests and accomplishments, and the names and contact information of at least four references. Review of applications will begin on December 15, 2010 and will continue until the positions are filled.

The UNIVERSITY OF DELAWARE is an Equal Opportunity Employer which encourages applications from Minority Group Members and Women.
Journals from IWA Publishing

Water Science & Technology
Editor-in-Chief: Helmut Kroiss
ISSN: 0927-1325; Vol. 85-86, 24 issues, 2011
Institutional rate (print + online access):
£1,051 / US$1,649 / €923

Water Science & Technology: Water Supply
Editor-in-Chief: Helmut Kroiss
ISSN: 1066-0749; Vol. 11, 6 issues, 2011
Institutional rate (print + online access):
£787 / US$1,213 / €620

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Official Journal of the World Water Council
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ISSN: 1386-7017; Vol. 13, 4 issues, 2011
Institutional rate (print and online access):
£715 / US$1,163 / €620

Journal of Hydroinformatics
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Associate Editors: Orhan Cagatay, Vincent Guinot, Shu-Yi Lang, Ola Maré, Arthur Myrie, Michael Piascik and Dimitri Sotologianis
ISSN: 1464-7141; Vol. 13, 4 issues, 2011
Institutional rate (print and online access):
£373 / US$537 / €317

Journal of Water Supply: Research & Technology - Aqua
Editors: Rolf Gimbel, Graham Ogden and Yoshinori Watanabe
ISSN: 0003-7214; Vol. 60, 6 issues, 2011
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£602 / US$934 / €530

Journal of Water & Health
Publishing in association with the World Health Organization (WHO)
Editors-in-Chief: Dan Kostergaard and Ian Littlewood
ISSN: 0022-1277; Vol. 42, 6 issues, 2011
Institutional rate (print and online access):
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An International Journal
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New from 2011
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Institutional rate (print and online access):
£599 / US$925 / €599

Journal of Water & Climate Change
Editors: Charles Almgren, Justin Brookes, and Carol Hewitt
ISSN: 2040-2244; Vol. 2, 4 issues, 2011
Institutional rate (print and online access):
£599 / US$925 / €599

Water Research
Editor-in-Chief: Mogens Hendriksen
ISSN: 0040-113 X; Vol. 46, 20 issues, 2011
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Civil, Environmental, and Architectural Engineering
University of Colorado, 428 UCB
Boulder, CO 80309-0428

AEESP Officers

President
Nancy G. Love, Ph.D.
Civil & Environmental Engineering
University of Michigan
2340 GG Brown Lab
2350 Hayward Street
Ann Arbor, MI 48109-2125
Phone: (734) 764-8495
Fax: (734) 764-4292
nglove@umich.edu

President-Elect
Joel G. Burken, Ph.D.
Civil, Architectural, and Environmental Engineering
Room 224
Missouri University of Science & Technology
Rolla, MO 65409
Phone: (573) 341-6547
Fax: (573) 341-4729
burken@mst.edu

Vice-President
Mark R. Wiesner, Ph.D.
Civil and Environmental Engineering
Duke University
120 Hudson Hall
Durham, NC 27708
Phone: (919) 660-5292
Fax: (919) 660-5219
wiesner@duke.edu

Secretary
Steven K. Dentel, Ph.D.
Department of Civil and Environmental Engineering
University of Delaware
301 DuPont Hall
Newark, DE 19716
Phone: (302) 831-8120
Fax: (302) 831-3640
dentel@udel.edu

Treasurer
Margaret Lang, Ph.D.
Environmental Resources Engineering
Humboldt State University
Arcata, CA 95521
Phone: (707) 826-3613
Fax: (707) 826-3616
mml1@humboldt.edu

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