AEESP Newsletter

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Need to renew your 2015 AEESP membership? Go to "Membership > Online Renewal" on the AEESP Website: AEESP.org

AEESP Newsletter Submissions

Please send news, conference announcements, job postings, letters to the editor, and other contributions to the newlsetter to Steve Mylon at mylons@lafayette.edu. The next newsletter will appear in January 2016

President's Letter

by GREG CHARACKLIS

Dear AEESP Members:

The summer has now officially come to an end, but I still find myself thinking back fondly on the outstanding AEESP Conference hosted by Yale University in June. The unprecedented size and scope of the conference presented many logistical and organizational challenges, but the organizing committee made it all look easy. So, on behalf of the AEESP Board and the entire membership, I'd like to offer my sincerest thanks to the faculty of Yale's Department of Chemical and Environmental Engineering, and especially to Conference Co-Chairs Jaehong Kim and Meny Elimelech, for their flawless execution and untiring attention to detail. None of you should ever have to pay for another drink at an AEESP event.

The number of participants at the Conference (over 600), in combination with a growing membership (nearly 1,000), suggest that AEESP is a healthy and thriving organization, and my hope as President is to play some small role in ensuring that this continues. In thinking about how I might contribute, I took inspiration from the Yale Conference, much of which was dedicated to identifying the new challenges that will carry our profession into the future. Nowhere was this more apparent than in the opening workshop, an NSF-sponsored effort to explore "Grand Challenges in Environmental Engineering and Science in the 21st Century" that was masterfully orchestrated by Bill Cooper and Bruce Logan. This all-day event drew a "standing room only" crowd of over 200, on a Saturday no less, and centered on identifying opportunities for expanding the scope of our discipline going forward. There is a growing demand for this type of discussion, influenced at least partially by the stagnant or declining funding levels in some of our more traditional research areas, and growing societal and student interest in environmental issues (e.g., renewable energy) that have often been peripheral to our core themes. Consequently, this would seem to be an opportune time to initiate a community dialogue.

Toward that end, a committee composed of former AEESP President Amy Childress, AEESP President-elect Peter Vikesland and myself, has been organized to develop a set of national workshops to advance this discussion. These will be designed to engage the AEESP community in a conversation that will address, among other topics, future research and teaching agendas, an increased alignment between research and current funding mechanisms, future workforce needs and more rapid expansion into high growth research areas. Workshops will be held at times and in locations intended to facilitate maximum participation from the AEESP membership, with the first scheduled for January 7-8, 2016, on the University of Southern California's campus in Los Angeles (more detail to follow shortly via the AEESP listserv). Two additional workshops will be held in the Spring of 2016, one in Washington, D.C. and the other in Houston, with the latter sponsored by a consortium of five institutions including Texas A&M, Texas Tech, Rice University (host), University of Houston and the University of Texas at Austin. Primary funding for these workshops is being provided by NSF's Environmental Engineering program with some matching funds coming from AEESP and the participating institutions. Beyond serving as a forum for community discussion and deliberation, the output from these workshops will be used to inform the National Research Council (NRC) Committee being formed by the Water Science and Technology Board next year, a group that will seek to describe a path forward for Environmental Engineering and Science.

Both the workshops and the NRC initiative should provide valuable insights into how we can better position ourselves for a future in which we continue to conduct research, train students and impact public policy in ways that will aid society in solving its most vexing environmental problems. The workshops, in particular, will benefit tremendously from the input of the AEESP membership, so I encourage as many of you as possible to participate.

Finally, in closing I would like to thank our outgoing Board members, Andrea Ferro, Jean MacRae and John Tobiason, for their invaluable service to AEESP over the course of their terms.

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Newsletter submissions, comments, and letters to the editor may be sent to:

Steven Mylon, AEESP Newsletter Editor
Department of Chemistry
Lafayette College
Hugel Science Center
Easton, PA 18042
Phone: 610-330-5825
mylons@lafayette.edu

Letters to the president may be sent to:

Gregory Characklis
Environmental Science and Engineering
University of North Carolina
School of Public Health
CB 7431 Rosenau Hall
Chapel Hill, NC 27599-7431
Phone: (919) 843-5545
Fax: (919) 966-7911
charack@email.unc.edu

Please send address changes to:

Brian Schorr
AEESP Business Office
1211 Connecticut Ave NW, Suite 650
Washington, DC 20036
phone: (202) 640-6591
email: bschorr@aeesp.org

AEESP Membership Application online:

www.aeesp.org/membership

I have enjoyed serving with all of them, and am especially grateful to John Tobiason for his tremendous efforts to reengage with our Sustaining Members during his term as President, an effort that will pay dividends for many years to come.

Best of luck to everyone at the start of another academic year, and I hope to see you at an AEESP event sometime soon.

All the best,

Greg

Highlights of the AEESP Board of Directors Summer 2015 Meeting

Submitted by LINDA WEAVERS
(The Ohio State University,
AEESP Vice-President)

The AEESP Board of Directors met on June 17 & 18 immediately following the 2015 AEESP Research and Education Conference at Yale University. The Board was joined by Brian Schorr and Jeff Serfass from Technology Transition Corporation (TTC). Brian Schorr of Technology Transition Corporation is AEESP's manager of business operations. The following is a summary of highlights from the board of directors meeting:

New Board Members: The Board welcomed newly elected members from the 2015 board elections. The new members of the board are:

Greg Lowry, Carnegie Mellon University

Jeanine Plummer, Worcester Polytechnic Institute

Maya Trotz, University of South Florida

Membership: AEESP has 189 new members this year. AEESP also has 31 new lifetime members out of about 100 lifetime members. However, some current members have not yet paid dues. More reminders will be sent for members in arrears. The Board encourages members to renew his/her membership and consider multi-year renewal.

Activities of Committees: A number of committees are in place that serve the AEESP community in a variety of ways. The Board discussed the activities of these wonderful groups of volunteers. For example, riding on the coattails of a successful 2015 AEESP Research and Education Conference, the conference site selection committee is issuing an RFP for the 2017 AEESP Research and Education Conference.

AEESP Journal: The Board discussed the AEESP journal, Environmental Engineering Science, and ways to improve the relationship between the journal and AEESP to enhance its value to AEESP members.

New Committee Formation: The Board approved the formation of the Environmental Engineering Program Leaders Committee. This new committee will address issues related to environmental engineering programs and leading those programs. The Board also approved the formation of a Sustaining Members Engagement Committee. The committee will work to improve interactions between AEESP and sustaining members.

Grand Challenges and Opportunities in Environmental Engineering and Science in the 21st Century: The Board is excited that AEESP Research and Education Conference was the host of the Grand Challenges workshop. The Board discussed AEESP's continued involvement in this important process, including more workshops in the planning stages.

New AEESP Officers: Greg Characklis (University of North Carolina at Chapel Hill) assumed the role of President. Board elections were conducted for the vacant officer positions. The following new officers were installed:

President-elect: Peter Vikesland, Virginia Tech

Vice President: Linda Weavers, Ohio State

Treasurer: Cindy Lee, Clemson

Chief Technology Officer, Dion Dionysiou, University of Cincinnati

The Board is grateful for the service of outgoing Board members: John Tobiason, Andrea Ferro, and Jean MacRae. Their inputs during their time on the board were thoughtful and insightful and will be missed. We look forward to their continued service to AEESP.

Association of Environmental Engineering and Science Professors (AEESP)

Request for Proposals for the 2017 AEESP Research and Education Conference

Deadline: 5:00 pm EST 2/1/16

Introduction

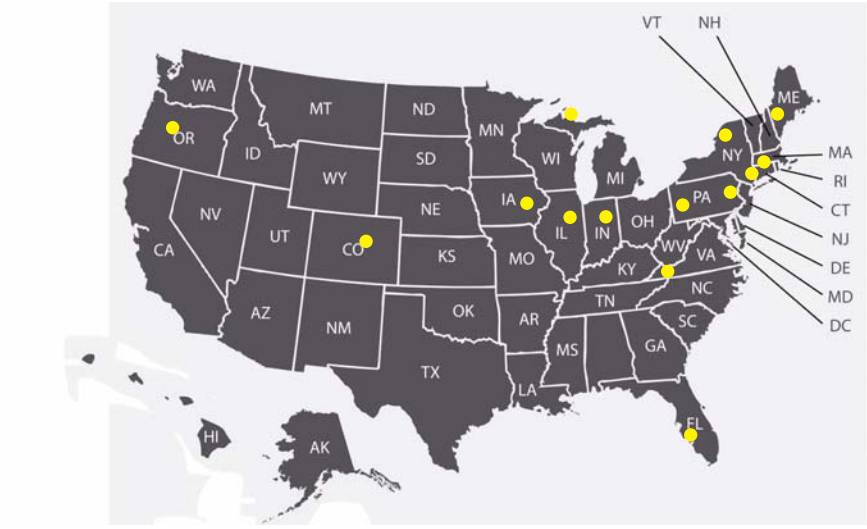
The AEESP Research and Education Conference is the flagship event for members to exchange information on novel research and educational activities, as well as develop professional competencies. It serves as a venue for the exchange of information among academics and practitioners, particularly relating to the advancement of innovative research, pedagogy, and the preparation of students for professional practice in environmental engineering and science. AEESP Conferences are held biennially on odd-numbered years, and are balanced with respect to content on research and education.

Proposals are now being accepted from universities to host the AEESP Research and Education Conference to be held summer 2017. We encourage geographic diversity relative to recent prior locations.

Past AEESP Conference Locations (contact person):

Harvard; Massachusetts, 1960
Northwestern University, 1967
Drexel University, 1973
Purdue University, 1980
Michigan Technological University, 1986
Oregon State University, 1991
University of Maine, 1996
Penn State University, 1999
University of Toronto, 2003

Clarkson University, 2005 (Susan Powers: sep@clarkson.edu; Amy Zander: zander@clarkson.edu)
Virginia Tech University, 2007 (Marc Edwards: edwardsm@vt.edu)
University of Iowa, 2009 (Michelle Scherer: michelle-scherer@uiowa.edu)
University of South Florida, 2011 (Maya Trotz: matrotz@usf.edu; Jeff Cunningham: cunning@usf.edu)
Colorado School of Mines, 2013 (Linda Figueroa: lfiguero@mines.edu)
Yale University, 2015 (Jaehong Kim: jaehong.kim@yale.edu)



Procedure

Responders to this RFP should do so with the intent to host the conference in 2017. Responses should include a projected budget, as detailed below, and narrative responses to enable the 2017 Conference Site Selection Committee to evaluate the attributes detailed in the next section. The responses should be transmitted to the Committee Chair (Junko Munakata Marr at Colorado School of Mines) as a single pdf file—send to junko@mines.edu.

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The proposals must be submitted no later than **5 pm ET on February 1, 2016.** The Conference Committee will make a recommendation to the AEESP Board by March 1, 2016. The AEESP Board will notify proposers on the site selection in April 2016.

Attributes for Selection

The narrative portion of the proposal should provide details on the content of the conference so that the committee can evaluate the following attributes:

- Strength of the proposal's commitment to both education and research
- Relevance of the conference theme to environmental engineering and science education and research
- Competency, commitment, and depth of the local planning team

The following items could be considered when developing proposals (in no order of priority)

- method of selecting plenary speakers and review process for submitted abstracts
- plans for publication of papers in a special issue of Environmental Engineering Science
- innovative approaches to involvement of students/student organizations (e.g., pre-conference workshops, essay contests, photo competitions, poster awards…)
- innovative approaches to engage new AEESP members, first time conference attendees, sustaining members (companies and organizations that pay a membership fee and often provide support for special events), fellows, and lifetime members (PhDs before 1975).
- overall marketing plan, including use of free media, paid media, social media and AEESP database
- adequacy of conference venue (meeting rooms, space for posters, etc.) and venues for evening receptions and activities
- estimated registration fee (tied to budget, which is discussed below)
- array of housing choices with affordable choices for student attendees (including university dormitories, lodges, motels and hotels at reasonable fees and distances from the venue. Group discounts are also usually available from some hotels). The conference organizers should be willing to assist the conference attendees in housing choice selection.
- accessibility of conference and lodging to major airport(s), typical cost of airfare, and other modes of public transit
- amenities for people with disabilities
- availability of Wi-Fi for participants
- development of a functional and user-friendly conference website
- linkage to other events that might be of interest to attendees (other conferences)
- availability of tourism activities and family-friendly services (e.g., childcare, housing with kitchenettes, onsite child-friendly recreational amenities)
- level of institutional support (financial, facilities, administrative, and other)
- potential contributions from external sponsors1 (tied to budget discussed below)
- strategy for outreach to local, regional, national, and international communities of practice that might attend
- use of sustainable practices at the conference with an effort to minimize the "carbon footprint" of the conference itself (e.g. reduced paper use for program & proceedings, reuse of banners, use of recycled paper for printed materials, limited use of disposable utensils at events, carbon offsets)
- inclusion of international engagement with groups such as CAPEES®, The Chinese-American Professors in Environmental Engineering and Science in the program (www.capees.org)
- consideration given to allocating time and space for AEESP Board, AEESP Foundation Board and Committee meetings to be held during or before/after the technical portion of the conference

In selecting the conference dates, proposers should avoid conflicts with events that are attended by many AEESP members (e.g., ASEE Annual Conference, International Water Association (IWA) World Water Congress, AWWA specialty and annual conference, Gordon Conferences, WEF specialty and annual conferences, AAAR conferences, IWA events, AWMA Annual Conference, American Chemical Society, American Society for Microbiology, EWRI Conference, North American Membrane Society Conference, ASM Biofilm Conference). Additionally, AEESP makes its own annual Awards For Excellence within the discipline. Nominations for these awards are typically due on March 15, and the awards committee usually selects these awardees by June. Proposers should keep this schedule in mind when choosing dates for their proposed conference so that award winners can be notified and awards can be presented at the event. In the past, proposers have received funding from NSF for a CAREER Workshop at the AEESP Conference. In selecting a date for the conference, proposers should be aware of the NSF CAREER proposal deadline (check nsf.gov) and develop their NSF CAREER workshop grant to predate that proposal deadline. Within these constraints, each proposer should suggest dates that would work at their venue.

The proposers should suggest particular themes that would be appropriate for their venue. It is not the intention that the conference exclusively focuses on these themes; however the themes can provide a particular "flavor" to the conference and/or selected sessions. Conference themes should show a balance between research and education sessions, and each theme should cover a wide range of specific topics so that more quality papers will have an opportunity to be reviewed.

The 2017 Conference Planning Committee will develop the ultimate program with input from the AEESP Board.

In the past, AEESP has received funding for its conferences from the National Science Foundation and from US EPA. The Board will work with the selected organizers in submitting proposals for support from these agencies. Examples of previous NSF proposals will be provided to potential hosts. However, it is ultimately the responsibility of the host to write and submit the NSF and/or US EPA proposals.

Specific Budget Elements

The budget projection should be prepared using the following outline. Two scenarios regarding attendance should be used as indicated below. The registration fee needed to produce a breakeven budget under either scenario should be indicated.

Scenario I: 175 student attendees, 225 regular attendees, 25 accompanying guests (consume all meals)
Scenario II: 250 student attendees, 300 regular attendees, 50 accompanying guests (consume all meals)

	Scenario I	Scenario II
Revenue		
Registration Fees (total)		
Early Registration Fee (by category, including complimentary *(Work with AEESP board early to determine these categories, especially those that are discounted or complimentary (e.g. lifetime))*		
Regular Registration Fee (by category, including complimentary)		
Sponsorships:		
External		
Internal (Host)		
Grant from NSF/EPA or other:		
Total Revenue		
Expenses		
Personnel costs:		
Admin. Assistant, Conference Planner		
Other staff costs (graphic artist, web site, helpers, benefits)		
Supplies, Printing, Marketing		
Transportation (tours and misc.)		
Facilities and audio-visual services		
Hospitality less guest meal fees:		
Breaks, Breakfasts, Lunch		
Welcome Function		
Luncheon		
Banquet		
Meetings		
Total Expenses		
Net Projected Surplus (Loss)		

AEESP expects the conference to run on a "breakeven" basis. Accordingly, proposers should assume that any financial gains (or losses) are the responsibility of the host organization.

Data on attendance numbers and revenues are included below. Proposers are encouraged to contact the prior conference host committees for their full proposal, information about expenses, overall organizational procedure, etc.

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Data from previous AEESP conferences

	2009 Iowa	2011 Tampa	2013 Colorado	2015 Yale
Total Attendees	400	426	463	621
Student Attendees	150	168	190	268
Faculty Attendees		212	224	314
Other Attendees		46	49	39
Students Registered Early		95	140	185
Faculty Registered Early		127	175	168
Others Registered Early		30	17	13
Student registration (early, regular)		$80, $125	$125, $225	$150, $250
Faculty registration (early, regular)		$350, 425	$400, $575	$425, $600
Non AEESP member registration (early, regular)		$600	$500, $700	$525, $700
Total number of early registrants		252	315	353
Funding from Registration		$95,600	$83,355	$224,100
Funding from Corporate Sponsorship		$14,850	$9,750	$9,000
Funding from University Sponsorship	$30,000	$20,000	$26,000	$5,000
Funding from Grants	$40,000	$ 44,350	$50,000	$50,000

Sponsorship Level

	Conference $7500	Event $5000	Session $2500	Student $1000
Table Space	✓	✓	✓	✓
1 Full Registration	✓	✓	✓	✓
Plenary Speaker Intro	✓			
Session Speaker Intro		✓		
Logo on Banners	✓	✓		
Logo on Website	✓	✓		
Logo on Program	✓			
Logo on Sponsor Listings				
Top Tier	✓			
2nd Tier		✓		
3rd Tier			✓	
4th Tier				✓

The AEESP Board does not wish to exclude participation by any faculty, students, or practitioners by assigning sponsorship of the Research and Education Conference to one sole sponsor. The Board is very supportive of any firm or set of firms who wish to "take the lead" in sponsoring any given conference by establishing matching funds or other mechanisms that not only guarantee their own substantial involvement, but also foster participation and contributions by others. The Board favors formal recognition of the level of support of various sponsors by different levels of support. An example of sponsorship levels and entitlements is shown.

Conference Format

Proposers are at liberty to propose any schedule that maintains a conference length of at least two full days of sessions with additional time for workshops. The Annual Business Meeting of AEESP will take place during the conference. The AEESP Board typically meets immediately after the conference for at least a day and a half. The AEESP Foundation Board typically meets just prior to or during the conference for up to one day. The proposal should include provisions for these meetings.

The conference will include the following activities:

- Organized oral sessions on topical areas containing invited speakers. Some of these will focus upon specific topics proposed by the host organizer, and may include speakers from outside the AEESP community as appropriate. Equal opportunity to present findings or ideas on both research and education is strongly encouraged.

- Invited speakers and/or special activities for lunchtime and evening receptions.
- Oral sessions containing contributed papers relating to educational and research activities, and policy issues, of broad interest to the membership.
- Organized panel sessions focusing on forefront issues in education and research in environmental engineering and science.
- Reports of committees discussing the development of position documents pertaining to environmental engineering and science research and education.
- Contributed poster sessions containing papers of interest to segments of the membership concerning research and educational activities of members (and their students).
- Exhibitor space including participating publishers, consultants, and public sector.
- Pre-conference workshops on issues of interest to segments of the membership (e.g., CAREER proposal preparation, teaching effectiveness, accreditation, tenure preparation, academic job search, novel forefront research techniques, preparation for the environmental PE, leadership development, career planning).
- Workshops and conference sessions jointly organized by academics and individuals from the practitioner community.

Regardless of format, platform speakers are expected to be of the highest quality. We also encourage that the abstracts should be extensive (~2-page) with substantial data and discussions on results to evaluate the submissions in each track/session for platform and poster presentations. The organizers are encouraged to have at least a portion of the presentations published in a peer-reviewed form (e.g., special issue of Environmental Engineering Science).

The conference organizers must conduct an assessment of the success of the conference both in terms of quality of experience and in terms of finances; results of the assessment must be shared with the Conference Site Selection Committee and the AEESP Board within ninety (90) days of the conclusion of the conference, and be available to potential hosts of subsequent conferences.

2017 Conference Site Selection Committee

Junko Munakata Marr	Colorado School of Mines, Chair
Andrea Achilli	Humboldt State University
Jeff Cunningham	University of South Florida
Keri Hornbuckle	University of Iowa
Kimberly Jones	Howard University
Mohiuddin Khan	Washington State University and Los Alamos National Laboratory
Jaehong Kim	Yale University
Jonathan (Josh) Sharp	Colorado School of Mines
Heather Shipley	University of Texas, San Antonio
Maya Trotz	University of South Florida, AEESP Board Liaison

New Faculty join Sustainability and Environmental Engineering Group at the University of Pittsburgh

Dr. Leanne Gilbertson joins the department of Civil and Environmental Engineering at the University of Pittsburgh after completing her postdoctoral research in the Department of Chemical and Environmental Engineering and the Center for Green Chemistry and Green Engineering at Yale University. Following receipt of a bachelors degree in Chemistry from Hamilton College in 2007 and several years as a secondary school teacher, Dr. Gilbertson earned her PhD in Environmental Engineering from Yale University in 2014 with support from a NSF Graduate Research Fellowship and an EPA STAR Fellowship. Her doctoral research identified underlying material properties that govern carbon nanotube (CNT) cytotoxicity serving as a foundation for the development of safer nanomaterial design guidelines. Dr. Gilbertson's ongoing research aims to inform sustainable design of emerging materials and products to ensure that the realization of novel technologies simultaneously offer improved functional performance and are inherently safer. She joins the growing research program of the Mascaro Center for Sustainable Innovation and the Petersen Institute of NanoScience and Engineering.

Dr. Carla Ng earned her PhD in Chemical Engineering in 2008 from Northwestern University, where she worked with Kimberly Gray to model the bioaccumulation of legacy contaminants in Great Lakes food webs heavily altered by chemical pollution, species invasions and ongoing climate change. She then moved to the Swiss Federal Institute of Technology (ETH) in Zurich, Switzerland, for a postdoctoral appointment focused on investigating the hazardous properties of industrial chemicals and their transformation products. She was subsequently promoted to Senior Scientist, leading her own research team in projects investigating pesticide fate in tropical environments and the unique bioaccumulation behavior of perfluorinated alkyl acids.

Dr. Ng's broad research interests are organized around the intersection of chemistry and biology. Current research areas include: (i) the development of mechanistic models for chemical fate in organisms, with a focus on emerging contaminants, (ii) understanding the links between ecological structures (e.g. landscape characteristics, food web structure) and socioeconomic systems (e.g. international trade) and their influence on chemical fate and (iii) investigating how key drivers of chemical fate affect the resilience of ecosystems—including human populations—to multiple anthropogenic pressures. By better understanding these interactions at diverse spatial and temporal scales, she seeks ways to protect, restore and encourage more sustainable human-environment systems.

Barbara Turpin joins Faculty at the University of North Carolina – Chapel Hill

The Department of Environmental Sciences and Engineering at the University of North Carolina – Chapel Hill is pleased to announce that **Dr. Barbara J. Turpin** has joined our faculty as tenured Professor. Dr. Turpin came to UNC from Rutgers University, where she was Distinguished Professor of Environmental Science and also served as Cook Campus Dean for Undergraduate Education. She holds a BS in engineering and applied science from the California Institute of Technology and PhD from Oregon Health and Science University. Barb is internationally renowned for her work on the atmospheric chemistry and physics of aerosols, particularly secondary organic aerosols and the role of aqueous chemistry in the formation and behavior of SOA. She is a Fellow of the American Association for the Advancement of Science, the American Geophysical Union, and the Association for Aerosol Research. Barb also serves as an Associate Editor of *Environmental Science & Technology.* Her addition to the faculty adds depth to our already strong and youthful group working on air quality and atmospheric science.

Krishna Pagilla to Direct Environmental Engineering Program at University of Nevada, Reno

The Department of Civil and Environmental Engineering at the University of Nevada, Reno (UNR) is pleased to announce that **Dr. Krishna Pagilla** has joined as a Professor and Environmental Engineering Program Director starting September 1, 2015. His goal at UNR is to grow the ENVE program into a top ranked, water-focused program in the country. Prior to joining Nevada, Dr. Pagilla was Professor of Environmental Engineering at the Illinois Institute of Technology, Chicago. He received his PhD in Civil/Environmental Engineering from the University of California, Berkeley in 1994 and is a registered professional engineering in California and Nevada. Dr. Pagilla has BE and MS degrees in Civil Engineering from the Osmania University, India and the University of Oklahoma, Norman, respectively.

Dr. Pagilla is an accomplished and well recognized professor in environmental engineering. He is a Fellow of both Water Environment Federation (WEF) and International Water Association (IWA), and holds leadership roles in both organizations. Dr. Pagilla served as the President of Illinois Water Environment Association, a WEF Member Association in 2012-13, and currently serves as the Vice-Chair of the USA National Committee of the International Water Association (IWA). He is an Associate Editor of Water Environment Research. Among his numerous awards, he received the Thomas R. Camp Applied Research Award (2013) and Fair Distinguished Engineering Educator Award (2013) from WEF. He received Harrison Prescott Eddy Medal for Outstanding Applied Research on Wastewater Prin-

ciples and Processes (2011) from WEF and the Bill Boyle Outstanding Educator Award (2012) from the Central States Water Environment Association. Dr. Pagilla was AEESP/WEF Scientists Luncheon Speaker at WEFTEC 2013. Dr. Pagilla is a Board Certified Environmental Engineer (BCEE) of the American Academy of Environmental Engineers and Scientists (AAEES). He is a member of WEF, IWA, AEESP, ASCE, AAEES, Central States, Illinois, and Nevada Water Environment Associations.

Dr. Pagilla's expertise is in the field of water quality, water/wastewater treatment, and environmental biotechnology. Dr. Pagilla recent and past research includes reactive stormwater filtration, anaerobic digestion foaming, refinery wastewater sludge treatment, activated sludge process kinetics, ultra-low effluent P chemical precipitation mechanisms, and low DO nitrification, activated sludge process bulking and foaming, dissolved organic nitrogen issues, anaerobic digestion, bacterial hemoglobin technology for bioremediation and bioproducts production, and odor emissions and control. His current interests are continued focus on biological and chemical aspects of water production, water-economy nexus, and environmental biotechnology.

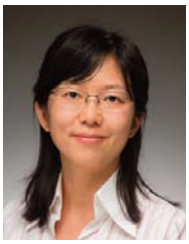
Jong Kwon Choe joins the Faculty at Clarkson University

The Clarkson University Department of Civil and Environmental Engineering welcomes **Dr. Jong Kwon Choe** who will be joining the faculty as an assistant professor starting in January 2016. Dr. Choe is currently a postdoctoral research fellow at Stanford University working with Dr. William Mitch. He received his Ph.D. and M.S. at University of Illinois at Urbana Champaign under the direction of Dr. Charles Werth and Dr. Timothy Strathmann. At Stanford, Dr. Choe has been investigating oxidative damages in proteins in the human body and the natural environment. At the University of Illinois, his research focused on developing catalytic treatment technologies for oxyanion contaminants (i.e., perchlorate and nitrate) in drinking water. Dr. Choe's research interests include redox transformation and byproduct formation of water contaminants; catalytic water treatment process; nanomaterial synthesis and modification; spectroscopic (XPS, XAS) and microscopic characterization (STEM-EDS) of catalyst materials; and applications of life cycle assessment tools to water treatment technologies. He will contribute to the graduate and undergraduate programs, teaching courses in environmental physico-chemical processes, systems analysis, and industrial ecology.

Constantine Samaras joins Carnegie Mellon Faculty

Constantine Samaras joined the Department of Civil and Environmental Engineering at Carnegie Mellon as an Assistant Professor. He researches how energy technology and infrastructure system designs affect energy use and national security, resiliency to climate change impacts, and life cycle costs and environmental externalities. He serves on the Transportation Research Board's Alternative Transportation Fuels and Technologies Committee, is an Associate Editor of the journal Renewable and Sustainable Energy Reviews, and serves on the American Society of Civil Engineers Committee on Adaptation to a Changing Climate. Professor Samaras holds a BS in Civil Engineering from Bucknell University (1999), an MPA from New York University (2004), and a PhD in Civil & Environmental Engineering and Engineering & Public Policy from Carnegie Mellon (2008). He was previously a Senior Researcher at the RAND Corporation and earlier worked on megaprojects as a civil engineer in New York City.

Na Wei joins the University of Notre Dame



Dr. Na Wei joined the Department of Civil & Environmental Engineering & Earth Sciences at the University of Notre Dame in July 2015. She is an assistant professor. Dr. Wei received her Ph.D. (2011) and M.S. (2008) in Environmental Engineering from the University of Illinois at Urbana-Champaign (UIUC), and B.S. (2006) from Sichuan University in China. Prior to joining Notre Dame, she was an assistant professor at the University of Pittsburgh (2014-2015) and Postdoctoral Research Fellow at the UIUC's Institute for Genomic Biology and Energy Bioscience Institute (2011-2013).

The overarching theme of Dr. Wei's research is to understand and manipulate microbial processes at the molecular level for beneficial biotransformation in environmental engineering. Her research interests lie at the intersection of environmental engineering and synthetic and systems biology, with a focus on 1) waste-to-energy/value biotransformation, 2) biocatalysis for water treatment and reuse, 3) biological/ecological effects of emerging and persistent pollutants. In Dr. Wei's research, metabolic engineering, synthetic biology, systems biology (omics), molecular biology techniques, and bioprocess engineering are used to understand and engineer microbial systems to provide novel solutions to challenges in sustainability of water, energy and resources. More information of Dr. Wei's research and teaching interests can be found at https://engineering.nd.edu/profiles/nwei

2015 AEESP Award Recipients

Submitted by LYNN KATZ (UNIVERSITY OF TEXAS)

The 2015 AEESP Awards were presented to attending recipients at the 2015 AEESP Research and Education Conference held at Yale University on June 16, 2015. Below is a list of the recipients of these awards. Congratulations to all award winners. Thank you to the members of the awards committee and sub-committees for thoughtful and thorough evaluation of the nominations: Allison Cupples, Helen Hguyen, Gregory Korshin, David Sabatini, Avery Demond, Lucy Camacho, Jianmin Wang, Ruth Richardson, Jeff Cunningham, Aria Amirbahman, Jean- Francois Gaillard, Edward Kolodziej, Jeff Nason and James Stone. Thanks also to AAEES members, Joseph Malina, Cecil Lue-Hing, Hector Fuentes, Webster J. Owen, Jr., and Jim Mihelcic, for serving on joint AAEES/AEESP awards committees.

Student Awards

CH2M Hill/AEESP Outstanding Doctoral Dissertation Award
This award is given annually to recognize an outstanding doctoral dissertation that contributes to the advancement of environmental science and engineering.

Dr. Ngai Yin Yip, Yale University (advised by Menachem Elimelech)
Yale University

Sustainable Production of Water and Energy with Osmotically Driven Membrane Processes and Ion-Exchange Membrane Processes

Ngai Yin Yip (middle left) and advisor, Menachem Elimelech (middle right) accept the CH2M Hill/AEESP Outstanding Doctoral Dissertation Award from AEESP President, Greg Characklis (left) and Awards Committee Chair, Lynn Katz (right).

Justin Jasper (middle) accepts the Paul V. Roberts/ AEESP Outstanding Doctoral Dissertation Award from AEESP President, Greg Characklis (left) and Awards Committee Chair, Lynn Katz (right).

Paul V. Roberts/AEESP Outstanding Doctoral Dissertation Award
This award is given annually to recognize an outstanding doctoral dissertation that advances the science and practice of water quality engineering for either engineered or natural systems.

Justin T. Jasper (advised by David L. Sedlak)
University of California, Berkeley

Treatment of Trace Organic Contaminants and Nutrients in Open-Water Unit Process Wetlands

The 2015 dissertation awards sub-committee noted that they received a number of exceptionally outstanding nominations this year, and selecting winners was challenging.

Consequently, in addition to the two award winners, the Awards Committee recognizes **Kungang Li from Georgia Tech with an Honorable Mention.** Dr. Li was advised by **Professor Yongsheng Chen**.

MWH/AEESP Master's Thesis First Place 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.

Brian D. Shoener (middle) and advisor, Jeremy S. Guest (right) accept the MWH/AEESP Master's Thesis First Place Award from AEESP President, Greg Characklis (left)

First Place: Brian D. Shoener (advised by Jeremy S. Guest)
University of Illinois

Advancing Sustainable Wastewater Treatment: Elucidating Tradeoffs among Emerging Resource Recovery Technologies through Quantitative Sustainable Design

Second Place: Caitlin Rose Proctor (advised by Amy Pruden)
Virginia Polytechnic Institute and State University

Effect of Various Water Chemistry Factors on Legionella Proliferation and the Premise Plumbing Microbiome Composition

Amy Pruden accepts the MWH/AEESP Master's Thesis Second Place Award from AEESP President Greg Characklis (left) and Awards Committee Chair Lynn Katz (right), on behalf of Caitlin Rose Proctor

W. Wesley Eckenfelder Graduate Research Award

This award, jointly administered by AEESP and AAEES, is given annually to recognize a student whose research contributes to the knowledge pool of industrial wastewater management.

Mr. Bryan Coday (advised by Tzahi Cath),
Colorado School of Mines

William Brewster Snow Award
This award, jointly administered by AEESP and AAEES, is given annually by the American Academy of Environmental Engineers and Scientists (AAEES) to an outstanding environmental engineering student currently pursuing or recently completing a Master's degree in Environmental Engineering or closely related degree program.

Mr. John Trimmer (advised by Sarina Ergas),
University of South Florida

John Trimmer (middle) accepts William Brewster Snow Award from AEESP President, Greg Characklis (left) and AAEES Awards Committee Chair, Jim Mihelcic (right).

Graduate Research Award in Computational Hydraulics & Hydrology
This award is given annually by AAEES and is cosponsored by Innovyze to recognize an M.S. or Ph.D. student whose research contributes to knowledge in the area of computational hydraulics and hydrology.

Ms. Amy Dale (co-advised by Elizabeth Casman and Greg Lowry),
Carnegie Mellon University

Education, Research, Practice and Outreach Awards

AEESP Award for Outstanding Teaching in Environmental Engineering and Science
This award is given annually to recognize excellence in classroom performance and related activities.

Gajan Sivandran, The Ohio State University
Gajan (Gaj) Sivandran became a tenure-track Assistant Professor in September 2012 and quickly demonstrated his impressive teaching and mentoring skills at OSU. Gaj teaches several courses including the 100-150 student entry course to the majors, Numerical Methods for Engineers, a technical elective, Applied Hydrology, and a graduate course, Data Analysis for Environmental Engineering. His teaching evaluations in these courses are exceptional and his department chair notes, that "his truly amazing instructional skills and teaching style, his love for teaching and great rapport that he has developed with the students, time and effort that he devotes to teaching and preparation for his classes, paired with his great professional expertise make him a truly outstanding academic teacher." In addition to his contributions as a teacher, Gaj has served as faculty advisor to Engineers Without Borders (EWB) and as one of the founders of the STEAM Factory, a grass-roots effort to collaborate and share ideas across disciplines and to disseminate research to the Columbus community.

AEESP Outstanding Contribution to Environmental Engineering and Science Education
This award is given annually to recognize and honor the development of innovative teaching methods, including the application of these methods in the classroom and the dissemination of methods to the academic community.

Des Lawler (center) accepts the AEESP Outstanding Contribution to Environmental Engineering and Science Education from AEESP President, Greg Characklis (left) and Awards Committee Chair, Lynn Katz (right). (Mark Benjamin absent)

Mark Benjamin, University of Washington and Desmond Lawler, University of Texas at Austin
Mark Benjamin and Des Lawler are two exceptional teachers who are both deserving of this award for their contributions to teaching within their own universities and beyond. Each has made contributions relevant to several of the criteria listed for the award, including demonstrated effectiveness in course development, service as mentors to other teaching faculty, and publications of original work that enhance the engineering education process.

However, the collaboration that led to their 2013 book *Water Quality Engineering* stands out as a milestone for our field. As noted in their nomination letter this book is "a gift to our community that was the product of their professional experience, dedication to educational excellence, and deep collaboration." While the book spans the fundamental principles underlying a comprehensive set of physical and chemical treatment processes to their applications in real-world scenarios, the book's greatest and most unique strengths are its depth of treatment of each of the processes and its seamless combination of quantitative and qualitative explanations." Des Lawler and Mark Benjamin have truly provided an outstanding contribution to environmental engineering and science.

Steven K. Dentel/AEESP Award for Global Outreach
This award, established in 2014, is given annually to recognize outstanding contributions and leadership by a faculty member through involvement in environmental engineering and science outreach activities to the global community.

Daniel B. Oerther, Missouri University of Science and Technology
Daniel Oerther is an ideal candidate to be the first to honor the memory of Steven Dental who passed away this year after a 30 year career at the University of Delaware in the Department of Civil and Environmental Engineering. Not only has Dan advanced our profession through his applications of microbial genomics to solve real world challenges in environmental biotechnology, but his pioneering leadership in international collaborations toward environmental sustainability and Millennium Development Goals have also resulted in transformative change. From his early work organizing international workshops on technology transfer of environmental biotechnology to his dedication over the past ten years to improve water quality and community health for the Luo ethnic group who live in western Kenya, eastern Uganda, and in the Mara Region in northern Tanzania, Dan has been a leader in global outreach. His global engagement has been recognized through a number of awards and his appointment as a Jefferson Science Fellow to serve as science and technology policy advisor within the Department of State and USAID. Finally, Dan received the additional honor of being selected to serve Secretary John Kerry as a member of the Secretary's Office of Global Food Security — a cross-cutting theme that supports President Obama's signature global hunger and food security initiative, Feed the Future.

Continued next page

2014 Excellence in Environmental Engineering Education (E4) Award

This award, jointly administered by AEESP and AAEES, is given annually by the American Academy of Environmental Engineers and Scientists (AAEES) to an individual who has made a significant contribution to the profession in the area of educating practitioners.

Loring (Larry) Nies, Purdue University

Dr. Loring (Larry) Nies (PE) is a Professor of Environmental & Ecological Engineering and the School of Civil Engineering at Purdue University. For more than two decades as a faculty member, Dr. Nies has demonstrated an outstanding ability to engage and inspire thousands of future engineering practitioners in environmental engineering courses. He has exhibited exceptional skill at motivating students, and has demonstrated an unwavering dedication to mentoring, counseling, advising, and leading students – all directed at promoting their professional growth and academic success. In addition, through his leadership, he has helped to create an innovative environmental engineering baccalaureate degree program that is popular with students and practitioner employers. Dr. Nies twice received the Ross Judson Buck Outstanding Counselor Award in Civil Engineering, was named an Engineering Education Scholar for his efforts related to First Year Engineering, and is a recipient of the Society of Environmental and Ecological Engineering Instructional Excellence Award. He has been inducted into Purdue's Book of Great Teachers and been honored with the Marion B. Scott Outstanding Professor Award which is given to an engineering professor for his or her devotion to encouraging, inspiring, and advising engineering students in order that they grow both academically and professionally to become ready for practice.

Charles R. O'Melia/AEESP Distinguished Educator Award

This award recognizes the significant contributions of Professor O'Melia to environmental engineering education and is awarded to an environmental engineering or science professor who has a record of excellent classroom teaching and graduate student advising; significant research achievements; and an outstanding record in mentoring of former students and colleagues.

Gene Parkin, University of Iowa

Gene Parkin is a true scholar-teacher who exemplifies the ideals of Charlie O'Melia. He is best known for his research in the area of anaerobic treatment and the use of zero valent iron for remediation of chlorinated solvents. His groundbreaking work on sulfide toxicity to anaerobic microbial communities was recognized by the Harrison Prescott Eddy Medal from the Water Pollution Control Federation in 1991. While his research accomplishments are substantial it is in his role as an educator that Gene has been most notable. Whether in front of the classroom of students or in one on one conversation Gene is at his best when guiding students in their development and toward a path of discovery.

Gene Parkin (center) accepts the Charles R. O'Melia/AEESP Distinguished Educator Award from AEESP President, Greg Characklis (left) and Awards Committee Chair, Lynn Katz (right).

At the University of Iowa he has received numerous teaching awardsincluding the President and Provost Award for Teaching Excellence and the Marion L. Hit Award for Faculty Excellence in 2010. Additionally, he is co-author of one of the most widely used textbooks in the environmental engineering and science fields, Chemistry for Environmental Engineering and Science, published by McGraw-Hill. It is currently in its 5th edition, has been translated into Spanish, Korean, Chinese, and Japanese and over 100,000 copies have been sold. It is with great pleasure, that AEESP awards the Charlie O'Melia Distinguished Educator Award to Gene Parkin.

ARCADIS/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.

Marc Edwards, Virginia Polytechnic Institute and State University

Marc Edwards has taken his background in physicochemical processes and water chemistry and truly developed his own niche, followed his own path and identified important research questions that have significant health implications. Marc is considered by many to be the foremost authority on plumbing corrosion in homes and buildings. His research in this area has provided new insights into the complex chemistry that leads to the development of pinhole leaks in copper pipes. His efforts to identify solutions to this problem have led to the development of innovative "Autogenous Repair" strategies that utilize water chemistry manipulation for self-healing. Marc's interest in corrosion and pin-hole leaks led him to the work that he is probably most well-known for: the role of disinfectant chemistry on the release of lead from pipes and water fixtures. Marc's groundbreaking research revealed that the shift from chlorine to chloramines led to drinking water concentrations of lead in Washington D.C. homes that were 83 times higher than the EPA MCL. Marc's 2009 ES&T paper confirming these findings was selected as the Editor's Choice Award for Best Science paper in 2009. Marc's research, and subsequent struggle to expose unethical behavior in government agencies ultimately led EPA to develop revisions to the Lead and Copper Rule. His effort and commitment to apply his research to protect public health have been recognized by awards from the IEEE Social Implications of Technology, the Praxis Award for Professional Ethics and a MacArthur Foundation Fellowship. Marc is truly an innovative research leader who has had a significant impact on our profession.

Marc Edwards (center) accepts the ARCADIS/ AEESP Frontier in Research Award from AEESP President, Greg Characklis (left) and Arcadis Representative, Caroline Lowe, Associate Vice President, ARCADIS (right)

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 previ-

ous winners are ineligible for a period of three years. The selected recipient will receive a plaque.

Authors: Dave Reckow, University of Massachusetts Amherst
Philip Singer, University of North Carolina, Emeritus
Ron Malcolm, U.S. Geological Survey

for their paper:

"Chlorination of Humic Materials: Byproduct Formation and Chemical Interpretations" Environmental Science & Technology, 1990, 24 (11), pp 1655–1664

This landmark paper addresses one of the most important areas of drinking water research for the past 35 years; namely disinfection byproducts (DBPs). Prior to this, most of the research on this topic had been primarily empirical in nature. This paper provided a sound fundamental basis for understanding how the chemical structure of humic and fulvic acids affects DBP formation. According to the Web Science database, this paper has been cited an average of 23 times annually over the past five years, which is remarkable, given its publication 25 years ago. This remarkable continuity of recognition shows the caliber and value of this paper to the environmental engineering and science community, one that has clearly stood the test of time.

Perry L. McCarty/AEESP Founders' Award
This award, established in 1991 and newly endowed in 2014, is given annually to recognize a member of AEESP who has made "sustained and outstanding contributions to environmental engineering education and practice."

Jerry Schnoor, University of Iowa
Jerry Schnoor has been a pillar of excellence and leadership in the environmental engineering community since the 1970s. He has not only had a long-standing record of innovative and substantive research contributions in our field, but his contributions as a thought leader are even more extraordinary. Several of his most noteworthy research contributions are his model for pesticide transport and bioconcentration, his "trickle-down model for acid precipitation, and his pioneering work in phytoremediation. Jerry is an author of almost 200 peer-reviewed journal articles, has edited or authored seven books, and numerous technical reports, book chapters, and monographs. He has supervised dozens of doctoral students, more than 60 master's theses, and hundreds of undergraduate researchers. Jerry has also actively translated science into policy in his roles as a National Academy Member, Editor-in-Chief for ES&T for over ten years, an EPA advisory board member, and Director of the Center for Global & Regional Environmental Research (CGRER). He is a recipient of numerous awards for including the 2010 Clarke Prize from the National Water Research Institute. Jerry's never-ending commitment to using his knowledge of science to change the world has inspired hundreds, if not thousands of students, colleagues, and citizens to join him in the crusade for clean air and water.

Jerry Schnoor (middle) accepts the Perry L. McCarty/ AEESP Founders' Award from AEESP President, Greg Characklis (left) and Awards Committee Chair, Lynn Katz (right).

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

Morton A. Barlaz, North Carolina State University
Mort Barlaz's primary area of interest is microbiological processes in waste systems, and he has conducted research in a number of areas related to solid waste management, including life cycle analysis, policy issues related to recycling, and geotechnical aspects of refuse. He has authored or co-authored over 120 peer-reviewed publications and seven book chapters. His ability to apply fundamental knowledge to real-world solid waste systems has allowed his research findings to be used routinely by practicing engineers. His research over the past 25 years has elucidated the key mechanisms controlling anaerobic microbial degradation of nearly every organic waste stream encountered in landfills and the impact of these processes on production of methane and carbon dioxide. His research results are used to predict landfill gas production and design landfill gas collection and treatment systems, but also provide novel insights. He has a long history of providing guidance to the EPA and the solid waste industry in design and operation of bioreactor landfills, strategies for acceptance and management of sulfate-containing wastes, appropriate rate constants for methane production, liabilities associated with long-term care and management of closed landfills, and application of life-cycle analysis to solid waste management. He served as the AAEE Kappe Lecturer in 2010 and the International Lecturer for the Waste Management Association of Australia in 2008. Mort Barlaz has created the bridge between education, research and practice in the area of solid waste engineering.

Morton Barlaz (right) accepts the Fredrick George Pohland Medal from AEESP President, Greg Characklis (left) and Awards Committee Chair, Lynn Katz (right).

Distinguished Service Awards

David Dzombak, Carnegie Mellon University
Distinguished Service Award for Outstanding Service as Chair of the AEESP Foundation

AEESP Committee Chairs
Upal Ghosh, University of Maryland Baltimore County
Distinguished Service Award for Outstanding Service as Editor of the AEESP Newsletter

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Karl Linden, University of Colorado Boulder
Distinguished Service Award for Outstanding Service as Chair of the AEESP Dissertation Award Sub-committee

Kris Maillacheruvu, Bradley University
Distinguished Service Award for Outstanding Service as Chair of the AEESP Publications Committee

Maya Trotz, University of South Florida
Distinguished Service Award for Outstanding Service as Chair of the 2015 AEESP Research and Education Conference Site Selection Committee

Claudia Gunsch, Duke University
Distinguished Service Award for Outstanding Service as Chair of the AEESP Education Committee

Jean-Francois Gaillard, Northwestern University
Distinguished Service Award for Outstanding Service as Chair of the AEESP M.S. Thesis Award Sub-committee

Bruce Logan, Pennsylvania State University
2014-2015 AEESP Distinguished Lecturer Award:

David Reckhow, University of Massachusetts-Amherst
2015 AEESP Award for Outstanding Publication:

2015 Distinguished Service Award: Joanne Fetzner:
For Outstanding Service in Support of AEESP Management and Formation of the AEESP Foundation

*AEESP President Greg Characklis (left) presenting the **Virginia Tech Student Travel Award** to **Paramjeet Patil.***

AEESP Board Members

John E. Tobiason, University of Massachusetts, Amherst
Distinguished Service Award for Outstanding Service as AEESP President and Board Member

Jean MacRae, University of Maine
Distinguished Service Award for Outstanding Service as Chief Technology Officer and AEESP Board Member

Andrea Ferro, Clarkson University
Distinguished Service Award for Outstanding Service as AEESP Treasurer and Board Member

AEESP Conference Organization

Jaehong Kim, Yale University
Distinguished Service Award for Outstanding Service as Chair of the 2015 AEESP Research and Education Conference

Menachem Elimelech, Yale University
Distinguished Service Award for Outstanding Service as Co-Chair of the 2015 AEESP Research and Education Conference

Menachem (Meny) Elimelech Wins Eni Award for Protection of the Environment

Menachem (Meny) Elimelech, the Roberto Goizueta Professor of Chemical and Environmental Engineering at Yale University, was selected as the recipient of the prestigious Eni Award for Protection of the Environment. The Award Ceremony will take place at the Presidential Palace in Rome in October in the presence of the President of Italy. The Eni Awards are international prizes that recognize outstanding research and development in the fields of energy and the environment. Past Eni award winners include Nobel laureates Harold Kroto and Alan Heeger.

Elimelech's research interests include (i) engineered osmosis for sustainable production of water and power, (ii) environmental applications of nanomaterials, (iii) membrane separations for desalination and water reuse, and (iv) water and sanitation in developing countries. Professor Elimelech was the recipient of numerous awards for his research. Notable among these are the 2005 Clarke Prize for excellence in water research and election to the National Academy of Engineering in 2006. In recognition of his mentoring contributions, he won the Yale University Graduate Mentor Award in 2004 and the Yale University Postdoctoral Mentoring Prize in 2012.

Alleman and Oerther Serve as Jefferson Science Fellows

Throughout the 2014-5 academic year, two AEESP members, Professor Jim Alleman from Iowa State and Professor Dan Oerther from Missouri S&T, served as Jefferson Science Fellows at the United States Agency for International Development (USAID) and the United States Department of State, respectively. Established by Secretary Colin Powell in 2003 and managed by the National Academies, the Jefferson Science Fellows program brings senior, tenured faculty to Washington, D.C. to contribute to the formulation and implementation of United States foreign policy including diplomacy and development. Professor Alleman served in the Bureau for Europe and Eurasia in USAID. His primary responsibilities included supporting ongoing work managing and monitoring Ukraine's Chernobyl 'arch' sarcophagus. Professor Oerther served in Secretary Kerry's Office of Global Food Security. His primary responsibilities included providing leadership to launch a public-private initiative to promote food security and climate resilience via an innovative insurance product – the Caribbean Oceans and Aquaculture Sustainability faciliTy (COAST). Applications for the Jefferson Science Fellowship are competitive, and are due at the start of November annually.

Ming Xu was awarded the Robert A. Laudise Medal

Member Ming Xu was awarded the Robert A. Laudise Medal by the International Society for Industrial Ecology (ISIE) at its 2015 biennial conference held during July 6-10 at University of Surrey, UK. The Laudise Medal is awarded for outstanding achievements in industrial ecology by a researcher under the age of 36, endowed by AT&T in memory of Robert A. Laudise. This prize is awarded every two years at the ISIE biennial conferences.

Ming Xu also became the Editor-In-Chief of journal Resources, Conservation & Recycling on June 1, 2015. The journal promotes sustainable management and conservation of resources. The journal welcomes submissions from the AEESP community.

Ming Xu is currently an assistant professor in School of Natural Resources and Environment and Department of Civil and Environmental Engineering at the University of Michigan, Ann Arbor.

James K. Edzwald Professorship at Clarkson University

Former Clarkson University Civil and Environmental Engineering faculty member James K. Edzwald and his wife, Joan, have established the James K. Edzwald Professorship in Environmental Engineering at Clarkson University. This professorship will be awarded to a tenured faculty member in recognition of significant research, teaching excellence and scholarly achievements in drinking water treatment.

James Edzwald was a member of the Clarkson faculty from 1974 to 1984. His distinguished career has included positions at the University of Massachusetts and the University of Missouri. He is editor of Water Quality & Treatment: A Handbook on Drinking Water, now in its sixth edition and long considered the seminal book on water quality and treatment resources. His research and consulting have significantly impacted the design and operation of water plants around the world. He is currently advising on water facilities in Canada and the United States. Many of his former graduate students are senior engineers and leaders of major environmental engineering companies. The creation of this legacy also offers the opportunity for colleagues and former students of Edzwald to honor him and his achievements with a gift to the fund. Those interested can call Clarkson at 315-268-7778 or email anniesociety@clarkson.edu.

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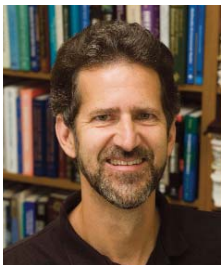
Thomas M. Holsen Named Jean S. Newell Distinguished Professor of Engineering at Clarkson University



Clarkson University Professor of Civil & Environmental Engineering Thomas M. Holsen has been named the Jean S. Newell Distinguished Professor of Engineering in Clarkson's Wallace H. Coulter School of Engineering. Holsen also serves as associate director of Clarkson's Center for Air Resources Engineering and Science (CARES). The Jean S. Newell Distinguished Professorship in Engineering was established through a generous contribution by the late Jean Smith Newell, Clarkson's first elected female trustee.

Holsen's research interests include determining the sources, movement, transformations and fate of environmental pollutants including emerging contaminants of concern in a wide array of environmental systems including the Adirondacks and the Great Lakes. Of particular interest is pollutant exchange between Earth's surface and the atmosphere. Holsen is a Board Certified Environmental Engineering Member of the American Academy of Environmental Engineers and Scientists. He has served on U.S. EPA Science Advisory Board committees and the board of the International Association of Great Lakes Researchers. He has more than 140 journal publications.

Jean Newell was a director of the Newell Manufacturing Company of Ogdensburg, N.Y., from 1966 to 1983. While a resident of Ogdensburg from 1946-1964, she was prominent in social and civic activities and a generous supporter of several scholarship funds at Clarkson during her lifetime. The Jean S. Newell Distinguished Professorship in Engineering is a visible reminder of her commitment to excellence at Clarkson University.

Call for Abstracts

REFFIT's (*Resource-Efficient Technologies)* editorial team and Nanotech-2016 conference & exhibition partner in organizing resource-efficient technologies session at Nanotech-2016 and in publishing selected papers presented at the Nanotech-2016 to be held in Baltimore, USA on April 4-6, 2016.

About REFFIT: **http://www.journals.elsevier.com/resource-efficient-technologies/**
Please see the website for further details on conference: **http://nanotech.madridge.com/**

Resource-Efficient Technologies publishes research and review articles, short communications, commentaries, and book reviews in the ever broadening field of sustainable and resource-efficient technologies, which reduce energy and materials consumption, reduce or completely eliminate toxic waste, develop closed-loop recycling technologies with the purpose of sustainable, economically efficient and socially responsible use of all natural resources and man-made products. The coverage of the journal includes the following topics:

- Alternative and sustainable energy
- Green and environmental chemistry
- Novel functional materials and materials efficiency
- Efficient use of natural resources
- Waste processing and recycling technologies

Questions related to sessions and technical content may be directed to Gnaneswar Gude at **gude@cee.msstate.edu** or Anatoli Korkin at **anatoli.korkin@asu.edu.**

USC Viterbi
Sonny Astani Department of Civil and Environmental Engineering

The **Sonny Astani Department of Civil and Environmental Engineering,** as part of its initiative to pursue water-related sustainability challenges, is searching for faculty candidates in the area of Environmental Engineering (**cee.usc.edu/academics/environmental-engineering**) with an emphasis on aquatic and environmental chemistry. Applications and nominations for tenure-track or tenured faculty positions at all levels are requested. Applicants should have a doctorate in environmental engineering or a related field of study, and those applying for Associate Professor or Professor ranks must have a well-established academic record.

The intellectual depth, innovation, and promise of candidates are of higher priority than specific research areas; however, some areas of particular interest include the following: contaminants of emerging concern in the environment; effects of environmental contaminants on natural systems, engineered systems, and human health; new technologies to assess and treat environmental contaminants; and environmental impacts of new and existing materials.

Applications are especially encouraged from transformative scholars—those who are transforming the field—and from interdisciplinary scholars who are engaged in research that align with the interests of the Department and are synergistic with other areas in the School and University.

Positions are available starting August 16, 2016. To receive full consideration, candidates should apply on-line at: http://cee.usc.edu/facultysearch by October 31, 2015. Applications received after this deadline may not be considered. Application materials, which should be uploaded as a single PDF document, should include a cover letter, a curriculum vitae, statements of research and teaching interests, and contact information for five references. All application materials will be held in strict confidence. Interested individuals are welcome to contact Prof. Amy Childress, Director of Environmental Engineering, Sonny Astani Department of Civil and Environmental Engineering, University of Southern California, 3620 S Vermont Ave, Los Angeles CA 90089-2531 (email: amyec@usc.edu).

The Astani Department (**cee.usc.edu**) has 23 tenured/tenure track faculty members, including four chaired professorships, seven current or former Young Investigator and Early Career awardees, and many fellows of professional organizations. In November 2007, the Department was the beneficiary of a $17 million pledge from Sonny Astani, the largest ever bestowed on a department of civil and environmental engineering. The USC Viterbi School of Engineering (http://viterbi.usc.edu) is among the top engineering schools in the world. More than a third of its 180 tenured/tenure-track faculty members are fellows in their respective professional societies and 35 affiliated faculty have been elected to the National Academy of Engineering. The School is home to over 45 research centers and institutes, including the Information Sciences Institute (ISI), two National Science Foundation Engineering Research Centers, the Department of Homeland Security CREATE Center, and an Energy Frontiers Research Center (EFRC) supported by the Department of Energy.

USC is an equal-opportunity educator and employer, proudly pluralistic and firmly committed to providing equal opportunity for outstanding persons of every race, gender, creed and background. The University particularly encourages women, members of underrepresented groups, veterans and individuals with disabilities to apply. USC will make reasonable accommodations for qualified individuals with known disabilities unless doing so would result in an undue hardship. Further information is available by contacting uschr@usc.edu.

Make an Impact with Community Engineering Corps

While their stories do not often make the news, it is a fact that many communities across the United States have deficient infrastructure systems and struggle with regulatory compliance issues. A new program from the American Water Works Association (AWWA), the American Society of Civil Engineers (ASCE) and Engineers Without Borders USA (EWB-USA) offers an opportunity for engineering and science professionals of all ages to volunteer their time and expertise to help address these problems.

The program, called the Community Engineering Corps® (CE Corps), assists underserved communities in the United States in meeting their infrastructure needs and improving each community member's quality of life. By combining the strengths of three organizations to provide technical expertise to these communities, CE Corps' goal is to bring communities and volunteers together to advance local infrastructure solutions, and to create a country where all communities have access to the technical expertise required to ensure the infrastructure capacity to meet their needs.

In the 18 months since the program launched, the CE Corps has seen successes across the United States. Currently, more than 25 projects are in varying stages of progress. These projects are informational in nature with project teams offering engineering services, writing reports, drafting conceptual designs, or conducting assessments. The ultimate goal being that the community then uses the information the project team has provided to hire the appropriate contractors to carry out or build the improvements.

CE Corps is seeking enthusiastic volunteers to use their skills and expertise to help underserved communities across the United States. Volunteers with a range of experience and expertise are invited to apply to work on project teams or mentor student project teams.

EWB-USA chapters and AWWA or ASCE sections are encouraged to form project teams, but each project team must have a Professional Engineer licensed in the state in which the project will be constructed who is willing to serve as the Responsible Engineer in Charge (REIC).

While this program often starts with the community, it only moves forward with help from volunteers. With your help, volunteer project teams may serve as the catalyst for engaging new communities and helping them understand the available opportunities. Whether they are providing engineering services or navigating the maze of funding options, project teams can make an impact.

The needs are vast and the options are limitless, but this is just the beginning! Visit www.communityengineeringcorps.org for more information or to submit an application today!

Environmental science journals

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Water Research & Technology

High quality research and innovative technologies that promote sustainable water resources in engineered systems and the built environment.

Visit http://rsc.li/es-water

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The University of Oklahoma
International WaTER Conference
and
International Water Prize Award Ceremony
Sept. 21-23, 2015
Norman, Okla., USA

The WaTER Technologies for Emerging Regions (WaTER) Center at the University of Oklahoma will host the **Fourth OU International WaTER Conference and International Water Prize Award Ceremony on Sept. 21-23, 2015 in Norman, Okla.**

The conference theme "***Off the Grid: Sustainable Water and Sanitation in a Non-Networked World***" is designed to bring together participants from multiple disciplines responding to the UN Millennium Development Goals of bringing water and sanitation to developing countries. Attendees will include water and sanitation experts from academia, industry, NGOs, government and foundations.

The two-day conference will include poster and concurrent paper sessions devoted to all technical and non-technical topics and sectors (e.g., science, engineering, health, anthropology, sociology, business, meteorology, geography, education and cultural issues) relevant to water and sanitation in remote regions of developing countries.

The highlight of the conference will be a plenary lecture by, and presentation of the fourth OU International Water Prize to **Peter Lochery,** CARE Director of Water.

Peter Lochery
2015 University of Oklahoma International Water Prize Winner

Since 1995, Peter has led the expansion of CARE's Water Team strategies to include action, learning, partnership and advocacy.

An environmental engineer with over 30 years WASH experience, Peter has worked in the private sector, most recently CARE and also with the World Bank's Water and Sanitation Program, and currently serves on the board of Building Partnerships for Development in Water and Sanitation, Water/WASH Advocates and the Millennium Water Alliance, both of which he was a founding father.

Peter's passions lie in addressing social inequities faced by women and girls, as well as building collaborative relationships with the private sector to expand corporate social responsibility. Peter's humanitarian focus and dedication to affecting profound and lasting improvements in the lives of the world's poor, has guided his work, establishing him as a true leader in the international development field.

In addition to the plenary lecture by Peter Lochery, keynote speakers from the following fields will give timely addresses, all with an emphasis on applications in the developing world:

- Kerstin Danert, RWSN; Switzerland (sustainable ground water in Africa)
- Pawan Labhasetwar, NEERI; India (water and sanitation in rural India)
- Christine Moe, Emory; USA (WaSH in healthcare facilities in low-income countries)
- Afreen Siddiqi, MIT/Harvard; USA (Water-Energy-Climate Nexus in Pakistan)
- Ani Vallabhaneni, Sanergy; Kenya (sanitation and social entrepreneurship)

Registration Information

Regular
$390

Emerging Regions
$200

Students
$150

Registration fees do not include lodging.

Conference and workshop registration, and lodging information can be found at http://WaTER.ou.edu

Banquet only registration may be purchased at the door on the night of the event, or by contacting Cindy at cvittmurphy@ou.edu. Tickets can be purchased for $40 per person on a cash/check basis only.

Post-conference workshops

Two post-conference workshops will be held on Wednesday morning, Sept. 23, 2015. Workshop #1 focuses on hands-on instruction of water well drilling, sustainable pump technologies, and biosand filters. Workshop #2 will focus on social intervention and entrepreneurship. Seating may be limited and will be assigned on a first-come, first-serve basis.

Side event: Water4 Tour– Wed., Sept. 23, 1:30-5:30 pm (limited to first 50 conference participants)

Contact Info: http://WaTER.ou.edu

WaTER
Water Technologies for Emerging Regions

The Environmental Research & Education Foundation Awards Eight Scholarships and Three Research Grants

The Environmental Research & Education Foundation (EREF) scholarship program recognizes students with academic excellence, professional involvement and an interest in solid waste management issues at the postdoctoral, doctoral and master's levels. The EREF Board of Directors is pleased to announce the award of eight scholarships:

Arlene Janousek
Simon Frasier University, MS
Comparing Waste Management Impacts on Conventional vs. Organic Food Supply Chains

Brent Perdue
University of Texas – Austin, MS
Analysis of Municipal Landfill Diversion Ordinances

Kat McCarthy
Green Mountain College, MS
A Strategy for Organics Diversion

Nicholas Hotzelt
Clemson University, MS
Landfill Leachate Valorization for Commodity Methane Generation

Olga Kachook
Yale University, MS
Integrating Zero Waste and Extended Producer Responsibility Practices into Corporate Waste

Judd Larson
University of Wyoming, Ph.D.
Stimulating Autoinduction of Biofilm Growth to Enhance Cellulose Stabilization

Laura Mast
Georgia Institute of Technology, Ph.D.
Chelant-Enhanced Selective Leaching and Capture of Rare Minerals from Coal Ash

Lori Clark
State University of New York – Stonybrook, Ph.D.
A Novel Treatment to Hydrogen Sulfide Contaminated Landfill Gas

More information on these, as well as EREF's other scholars, can be found at http://erefdn.org/index.php/scholarships/scholars.

Design of Waste Transfer Station Concrete Overlays against Premature Deterioration
North Carolina State University Award Amount: $160,000

Geopolymer-Based Solutions for Coal Combustion Product Solidification and Stabilization
University of Texas at Austin and University of California, Los Angeles Award Amount: $285,000

Methane Oxidation: Field-Scale Test Sections Experiment
Florida State University Award Amount: $70,000

More information on these, as well as EREF's other funded projects, can be found at http://erefdn.org/index.php/grants/fundedresearch.

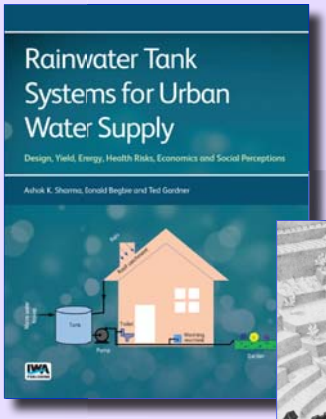
EREF is a 501(c)3 class charity that funds and directs scientific research and educational initiatives for waste management practices to benefit industry participants and the communities they serve. For more complete information on EREF funded research, its scholarship program and how to donate to this great cause, visit www.erefdn.org.

New Books for 2015

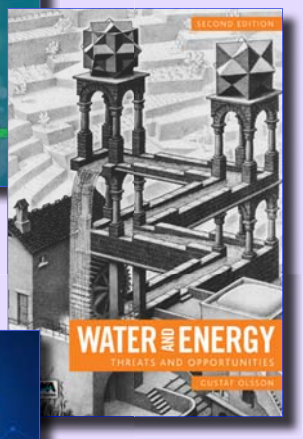
IWA PUBLISHING

@IWAPublishing

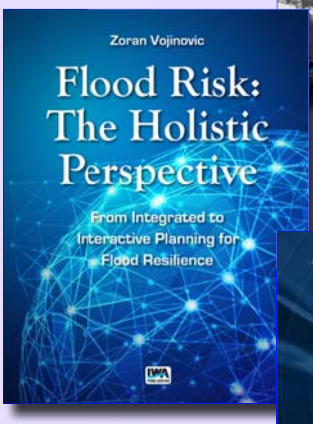
Rainwater Tank Systems for Urban Water Supply
Ashok K. Sharma, Donald Begbie, Ted Gardner
May 2015 • ISBN: 9781780405353
Pages: 372 • Paperback • US$ 189.00
IWA members price: US$ 142.00



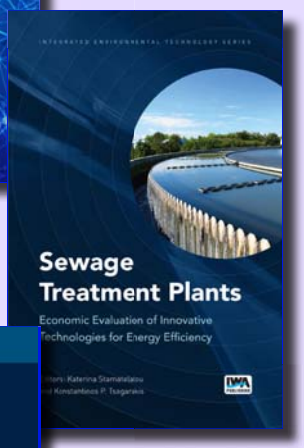
Water and Energy: Threats and Opportunities – Second Edition
Gustaf Olsson
June 2015 • ISBN: 9781780406930
Pages: 496 • Hardback • US$ 178.00
IWA members price: US$ 133.00



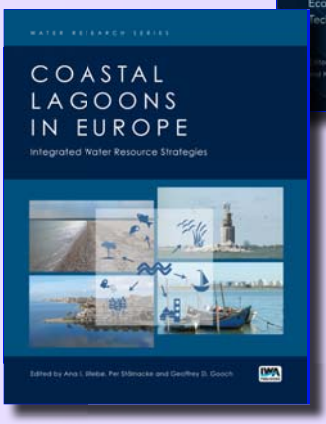
Flood Risk: The Holistic Perspective
Zoran Vojinovic
March 2015 • ISBN: 9781780405322
Pages: 296 • Hardback • US$ 178.00
IWA members price: US$ 133.00



Sewage Treatment Plants: Economic Evaluation of Innovative Technologies for Energy Efficiency
Katerina Stamatelatou and Konstantinos P. Tsagarakis
May 2015 • ISBN: 9781843395018
Pages: 376 • Paperback • US$ 207.00
IWA members price: US$ 155.00



Coastal Lagoons in Europe: Integrated Water Resource Strategies
Ana Lillebø, Per Stalnacke and Geoffrey D. Gooch
July 2015 • ISBN: 9781780406282
Pages: 256 • Hardback • US$ 178.00
IWA members price: US$ 133.00



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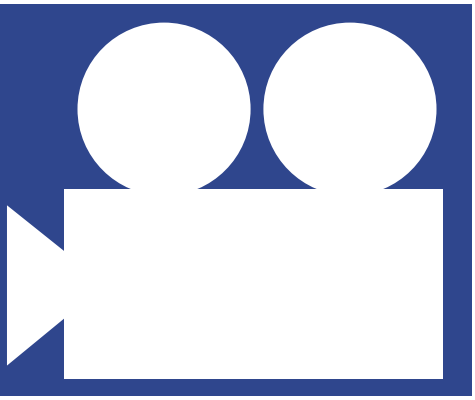
2015-16 AEESP Student Video Competition



Theme "Environmental Engineers Protect Public and Ecological Health"

Audience Middle and high school students

Prizes
1st place - $1,000
2nd place - $750
3rd place - $500

Deadlines
Entry forms due Nov 20, 2015
Videos submissions due Dec 18, 2015

Undergraduate and graduate students are welcome to enter. For complete rules and guidelines, visit our Web site:

aeesp.org/student-video-competition

AEESP | Association of Environmental Engineering & Science Professors

AEESP Membership

Membership in AEESP offers important benefits to educators, researchers, students, professionals, corporations and organizations engaged in the environmental engineering and science profession. All who are eligible for membership are welcome to join the Association and to participate in the full range of benefits and opportunities. Membership categories and fees are described below, with complete definitions provided in the AEESP Bylaws. Applying online is easy! We welcome your participation!

Regular and Student Membership

Regular Membership in AEESP is open to persons of full-time faculty or instructional rank (instructors, lecturers, assistant, associate, full professors) in environmental engineering or environmental science at academic institutions that offer baccalaureate, diploma, or graduate degrees in environmental engineering, environmental science or related fields.

Rank	Annual Fee
Full Professors	$100
Associate Professors	$75
Assistant Professors	$50
Affiliate Members	$60
Students and Post-docs	$15

Application for regular membership is made by sending a completed application form and a brief, 2 page curriculum vitae to the Secretary after online payment. Alternatively, application materials may be mailed to the secretary with a check enclosed.

Affiliate Membership

Affiliate Membership is open to individuals who are not eligible for regular membership including:

- Individuals primarily employed outside academia who also hold academic appointments in an environmental engineering or related academic program (e.g. adjunct faculty).
- Individuals primarily employed outside academia who have made contributions to education in environmental engineering or related fields.
- Educators in environmental engineering or related fields who are employed at junior colleges or other educational institutions that do not offer the degrees specified above.
- Individuals who were members at one time and who have retired from active teaching.

Application for affiliate membership is the same as for regular membership. The annual dues for affiliate members are $60.

Sustaining Membership

Sustaining Membership is open to individuals and organizations whose concern for education in environmental engineering and related fields stimulates them to assist in strengthening university programs devoted to this area. Sustaining members are often those who employ or interact closely with graduates of environmental engineering and science programs such as consultants, utilities, research foundations, professional organizations, publishers and equipment manufacturers. The financial support provided by Sustaining Members allows AEESP to carry out a variety of special programs that benefit all members of the profession. Sustaining Members have access to all AEESP publications and are invited to all AEESP events. Organizations or individuals desiring more information on Sustaining Membership should write to the Secretary, the President, or the Business Office.

Annual dues for sustaining members are $500. Organizations or individuals desiring more information on sustaining membership should contact the Business Office at the phone number below.

Ready to join? You can apply for membership online!

https://aeesp.org/user/register

More information can also be obtained from the AEESP Business Office:

Brian Schorr
AEESP Business Office
1211 Connecticut Avenue, NW, Suite 650
Washington, DC 20036
Phone: (202) 640-6591
Fax: (202) 223-5537
email: bschorr@aeesp.org

Association of Environmental Engineering and Science Professors Newsletter

Steven Mylon, AEESP Newsletter Editor
Department of Chemistry
Lafayette College
Hugel Science Center
Easton, PA 18042
Phone: 610-330-5825
mylons@lafayette.edu

AEESP Officers

President

Gregory Characklis
Environmental Science and Engineering
University of North Carolina
School of Public Health
CB 7431 Rosenau Hall
Chapel Hill, NC 27599-7431
Phone: (919) 843-5545
Fax: (919) 966-7911
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Peter J. Vikesland
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Virginia Tech
415 Durham Hall
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Fax: (540) 231-7916
pvikes@vt.edu

Vice-President

Linda K. Weavers
Civil, Environmental & Geodetic Engineering
The Ohio State University
470 Hitchcock Hall
2070 Neil Avenue
Columbus, OH 43210
Ph: 614-292-4061
Fax: 614-292-3780
Email: weavers.1@osu.edu

Secretary

Ching-Hua Huang
School of Civil & Environmental Engineering
Georgia Institute of Technology
200 Bobby Dodd Way
Atlanta, GA 30332-0512
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Fax: (404) 385-7087
ching-hua.huang@ce.gatech.edu

Treasurer

Andrea Ferro
Civil & Environmental Engineering
Clarkson University
Box 5710
Potsdam, NY 13699-5710
Phone: (315) 268-7649
Fax: (315) 268-7985
aferro@clarkson.edu

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