Submitted by JENNIFER BECKER (MICHIGAN TECHNOLOGICAL UNIVERSITY)

Fifty years ago, 21 professors gathered together in a Chicago hotel and formed the American Association of Professors of Sanitary Engineering (AAPSE), the forerunner of the organization now known as AEESP. Anniversaries such as these offer an opportunity to reflect on our past accomplishments and traditions. Most recently, many of us were able to participate in the very successful 2013 AEESP Research and Education Conference in Golden, CO. One testimony to the dynamic and engaging nature of this event is that even after conference attendees devoted three days to attending workshops, oral and poster presentation sessions, plenary talks, and receptions and participated in nearly non-stop networking (and socializing), their excitement about the next AEESP conference (in 2015) was already beginning to grow. Those of you who were unable to join us in Golden should definitely make plans to attend the 2015 conference! The success of each AEESP conference is the direct result not only of the vision and very hard work of the conference planning committee, but also the active participation of AEESP members who represent the ever-expanding breadth of the environmental engineering and science discipline. AEESP and our conferences provide us with opportunities to enjoy the collegial interactions we all cherish, but also to focus on our shared goals: a passion for protecting the environment and human health, and a commitment to engaging, educating, and mentoring students and conducting research that matters.

As we look a bit further into our past, we have even more to be proud of. The research conducted by current and past AEESP members has led to the development of theory and practices that are being implemented by practicing engineers and scientists who were educated through curricula largely shaped by AEESP members, and the resulting impacts on environmental and human health are nothing short of inspirational! And yet, as we were constantly reminded throughout the recent conference in Golden, there is an urgent need for continued and accelerated innovation in our discipline. While it is easy, for example, to take for granted the provision of safe drinking water and the collection and treatment of wastewater that are part of our modern urban water infrastructure, paradigm shifts are underway even in the traditional areas of water and wastewater treatment that were at the core of AAPSE. Changes in the management of water resources are needed because the growing demands for water (and renewable energy) cannot be sustainably met solely using traditional approaches. Not only will these changes increasingly blur the boundaries of the traditional applications of water treatment and wastewater treatment, but they will also require the development of new technologies, materials and analytical and monitoring methods. Of course, many of you are already leaders in these and other frontiers of environmental engineering and science research!

Yet, as we work to meet the growing demands for innovation through our research and revise our environmental engineering and science curricula to reflect new technological developments, there is another pressing initiative for us to undertake as an organization. Our members collectively possess an incredible amount of knowledge, talent, and...
President’s Letter, continued from page 1

passion. Therefore, as we look forward to the future, I think that AEESP must commit to playing a larger role in engaging and educating the general public about the science underlying global climate change and the related environmental challenges that our society faces. While public advocacy might not be easy, nor a role that all of us are comfortable with, we simply must move beyond the lab and the classroom, and do our part to produce a more science-literate populace, one Rotary Club meeting and one K-12 classroom at a time.

As I mentioned in my remarks in Golden, it is my hope that in the coming year, AEESP can take the leadership in developing a program through which environmental engineering and science faculty will learn how to design, deliver, and assess effective public education and outreach programs. I think that many of us would benefit from this type of training because educating and influencing the behavior of members of the general public requires a very different set of skills and motivators compared to those used in our traditional classrooms. Training in methods for assessing outreach programs will also help us plan activities that achieve the desired outcomes, which hopefully will include an increase in understanding/knowledge among our audiences, and ultimately, positive changes in their attitudes and actions.

Development of an effective outreach training program will take some work, and it will require partnerships with the National Science Foundation and other federal agencies. It will also require input from public education experts. So the first step will be to conduct a planning workshop that brings together the key partners and experts, including, I hope, many of you.

I look forward to taking these initial steps with you, and in serving as your President in the coming year. And, as we rise together to meet this latest challenge, I have the feeling that the 21 founding members of AAPSE/AEESP would have expected nothing less from us!

Request for Proposals for the 2015 AEESP Conference

Submitted by MAYA TROTZ (UNIVERSITY OF SOUTH FLORIDA)

Proposals are solicited from universities to host the AEESP biennial conference to be held during 2015. The AEESP 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 and the preparation of students for professional practice in environmental engineering and science.

AEESP Conferences are held every other year and are balanced with respect to content on research and education.

Responders to this RFP should include a projected budget and narrative responses to enable the selection committee to evaluate the attributes detailed in the rfp (see www.aeesp.org/conference). The responses should be transmitted to the chair of the Conference Site Selection Committee (Maya Trotz at the University of South Florida) as a single pdf file—send to matrotz@usf.edu.

The proposals must be submitted no later than 8 am ET on February 3, 2014. The conference committee makes a recommendation to the AEESP board by March 1, 2014. The AEESP board will notify proposers on the site selection.
Submitted by CHAD JAFVERT (PURDUE UNIVERSITY)

The 2013 AEESP Awards were presented to attending award recipients at the banquet and awards ceremony at the 2013 AEESP 50th Anniversary Conference on July 16, 2013 at the Denver Marriott West. Below is a list of the recipients of these awards. Congratulations to all award winners, and thank you to the members of the awards committee and sub-committees for thoughtful and thorough evaluation of the nominations: Robert Nerenberg, Ali Boehm, Bill Arnold, Gregory Korshin, Cindy Lee, John Little, Paula Mouser, Karl Linden, April Gu, Kalliat Valsaraj, Francis De Los Reyes, Jean-François Gaillard, and Edward Kolodziej. Thanks also to AAEES members, Joseph Malina, Cecil Lue-Hing, Hector Fuentes, David Hokanson, 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.

Mari Winkler advised by Mark van Loosdrecht, Delft University of Technology

Magic Granules

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.

Greg LeFevre co-advised by Paige Novak (not in attendance) and Raymond Hozalski, The University of Minnesota

Fate and Degradation of Petroleum Hydrocarbons in Stormwater Bioretention Cells

MWH/AEESP Master’s Thesis Awards

These awards annually recognize the first and second most outstanding Master of Science theses that contribute to the advancement of environmental science and engineering.

First Place: Jenna E. Forsyth advised by Michael C. Dodd, University of Washington

Optimization of Aqueous Chlorine Photochemistry for Enhanced Inactivation of Chlorine-resistant Microorganisms

Second Place: Cale Thomas Anger advised by William A. Arnold, University of Minnesota (not in attendance)

Quantification of Triclosan, Chlorinated Triclosan Derivatives, and their Dioxin Photo-products in Lacustrine Sediment Cores

Virginia Tech Student Travel Award

This endowed award was established in 2007 in memory of the civil and environmental engineering students and faculty who lost their lives to senseless violence in 2007 on the Virginia Tech Campus.

Caitlin Proctor, Virginia Tech

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.

Roland Cusick advised by Bruce Logan (not in attendance), Pennsylvania State University

continued on next page
2013 AEESP Award Recipients, continued from page 1

Roland Cusick of Penn State University (2nd from right) accepts the W. Wesley Eckenfelder Graduate Research Award from incoming president Jennifer Becker (right), AEESP awards committee chair Chad Jafvert (left), and Jim Mihelcic (2nd from left) as a representative of AAEES.

Philip Singer of the University of North Carolina, Chapel Hill accepts the Charles R. O’Melia Distinguished Educator Award from incoming president Jennifer Becker and awards committee chair Chad Jafvert.

Desmond Lawler of the University of Texas (center) accepts the AEESP Distinguished Lecturer Award from incoming president Jennifer Becker and awards committee chair Chad Jafvert.

Paul Westerhoff of Arizona State University (center) accepts the ARCADIS/AEESP Frontier in Research Award from incoming president Jennifer Becker and awards committee chair Chad Jafvert.

David Stensel of the University of Washington (2nd from right) accepts the Fredrick George Pohland Medal from incoming president Jennifer Becker, AEESP awards committee chair Chad Jafvert (left), and Jim Mihelcic (2nd from left) as a representative of AAEES.

Linda Figueroa of the Colorado School of Mines accepts the Distinguished Service Award for Outstanding Service as Chair of the 2013 AEESP Research and Education Conference Organizing Committee from incoming president Jennifer Becker and awards committee chair Chad Jafvert.

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.

David Stensel, University of Washington

2012-2013 AEESP Distinguished Lecturer Award
This award is given to the annual AEESP Distinguished Lecturer for recognizing her or his commitment to maintaining the excellence of the Lecture Series.

Desmond Lawler, University of Texas

Education, Research, and Practice 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.

Amy E. Landis, Arizona State University (not in attendance)

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.

Paul Westerhoff, Arizona State University

Charles R. O’Melia 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.

Philip C. Singer, University of North Carolina, Chapel Hill
Distinguished Service Awards

Distinguished Service Award for Outstanding Service as Chair of the 2013 AEESP Research and Education Conference Organizing Committee

Linda Figueroa, Colorado School of Mines

Distinguished Service Award for Outstanding Service as a Co-Chair of the 2013 AEESP Research and Education Conference Organizing Committee

Junko Munakata Marr, Colorado School of Mines

Angela R. Bielefeldt, University of Colorado Boulder (not in attendance)

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

Mark Wiesner, Duke University

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

Mira S. Olson, Drexel University

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

Andrew J. Whelton, University of South Alabama

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

Robert G. Arnold, University of Arizona

Distinguished Service Award for Outstanding Service as Chair of the AEESP Dissertation Award Sub-committee

John C. Little, Virginia Polytechnic Institute and State University

Distinguished Service Award for Outstanding Service as Chair of the AEESP M.S. Thesis Award Sub-committee

Francis de los Reyes III, North Carolina State University (not in attendance)
AEESP Lectures and Activities at Water Environment Federation Technical Exhibition & Conference (WEFTEC)

October 5–9, 2013, McCormick Place South, Chicago, IL

Submitted by GREG CHARACKLIS (UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL, AEESP VICE PRESIDENT)

The AEESP community is invited to participate in several rewarding AEESP-sponsored activities that will occur at WEFTEC on October 7, 8, and 9, 2013 in Chicago, IL. Detailed information on these events, including the AEESP/WEF lecture, the AEESP/WEF Scientists’ luncheon, the AEESP Meet-and-Greet and Awards Ceremony, and two technical sessions is provided below.

WEF is pleased to offer special registration rates for WEF’s Academic Members – just $575 for full conference and exhibition and new lower rates for nonmembers and there is no charge for student members to attend WEF events. (www.weftec.org/register/)

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**AEESP/WEF Research Lecture**

**Dr. John Novak**

Professor Emeritus, Charles E. Via, Jr. Department of Civil & Environmental Engineering, Virginia Polytechnic Institute and State University

“Biosolids Management—Where do we go from here?”

Monday, October 7, 2013, 1:30 PM–3:30 PM
Room S406b McCormick Place South

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**AEESP/WEF Scientists Luncheon**

**Dr. Krishna Pagilla, Professor of Environmental Engineering, Illinois Institute of Technology**

Low DO Nitrification by Bacterial “Sherpas”

*Sponsored by Brown & Caldwell*

Monday, October 7, 2013, 12:00 PM–1:30 PM
Room S103b McCormick Place South

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**AEESP Meet & Greet**

*Sponsored by Carollo Engineers*

Monday October 7, 2013 5:00 PM–7:00 PM
Private Dining Room 2 (PDR 2, 3rd Floor), Hilton Chicago

A great opportunity to meet and network with fellow AEESP members and learn about recent and upcoming AEESP activities from AEESP Board members in attendance.

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**AEESP Sessions: Emerging Issues and Innovative Approaches**

The AEESP sessions at WEFTEC are primarily intended as a platform to promote the participation of students and researchers at WEFTEC. These sessions feature cutting edge fundamental and applied research focused on emerging future issues related to water, wastewater and the environment. They are particularly intended to highlight collaborative research conducted jointly by utilities and universities.

Part I: Wednesday, October 9, 2013, 8:30 AM–12:00 PM (Session #500)
Part II: Wednesday, October 9, 2013, 1:30 PM–5:00 PM (Session #600)
Room S403b, McCormick Place South
Submitted by DAVE DZOMBAK (CHAIR, AEESP FOUNDATION BOARD)

The AEESP Foundation is an independent, nonprofit educational organization founded at the initiative of AEESP leadership in 2006. The mission of the Foundation is to improve the state of knowledge in environmental engineering and science through the support and encouragement of excellent education, outreach, and scientific research. The focus of the Foundation’s programs is at the university level, and includes sponsorship of AEESP awards for professors and students as well as sponsorship of the AEESP Distinguished Lecturer Series. In addition, the Foundation supports engagement of university environmental engineering and science faculty and students with K-12 educational programs. The Foundation aims to help educate the public about environmental engineering and science and to attract young people into the field.

Management of the AEESP Foundation is overseen by an elected Board whose members serve three-year terms. Current Board members are Dave Dzombak, Carnegie Mellon University, Chair; Steve Dentel, University of Delaware, Secretary; Bob Arnold, University of Arizona, Treasurer; Joel Burken, Missouri University of Science and Technology; Amy Childress, University of Southern California; Sharon Jones, University of Portland; and James Mihelcic, University of South Florida. The Foundation Board meets at least twice each year, and met most recently in July in Golden, CO as most members were present there for the AEESP Conference.

In July 2013, AEESP Foundation assets totaled approximately $339,000, with most of these funds invested conservatively in a portfolio consisting of three short- and intermediate-term bond funds and one large cap stock index fund of the Vanguard mutual fund family. The investment strategy for the Foundation was established in 2011 after considering various options developed with the assistance of an external Investment Advisory Committee of AEESP members. Nearly all of the assets are designated as principal to support the annual awards of AEESP.

At the April 2013 Foundation Board meeting, the Board approved three grants related to K-12 education. The grants provided partial travel/registration support for three individuals to give presentations at the July AEESP Conference on environmental engineering and K-12 education. The three grant recipients, their conference presentations, and the award amounts were:

- Dr. Justin Lawrence, University of California Berkeley, “Design and Implementation of a Hands-on Water Engineering Challenge for a Public Science Center: An Interdisciplinary Collaboration of Scientists, Engineers, and Museum Staff,” $750.
- Dr. Daniel Yeh, University of South Florida, “Biorecycling/Bioenergy Research and Training Station (BBRATS): An Elemental Approach to Education Innovation,” $750.

The awards are part of an expanding effort by the Foundation to support environmental engineering outreach and education at the K-12 level. Future efforts in this area, funds permitting, could include supplemental support of outreach activities associated with NSF awards, support for university programs with local schools, and similar initiatives by environmental engineering faculty and students. Criteria and procedures for K-12 education grants are in development by the Foundation Board.

The AEESP Foundation Board is working to steward well and to grow the assets of the Foundation. Please consider making a gift (tax deductible) to the Foundation when you renew your membership. More information about the Foundation is available at www.aeespfoundation.org (there is a direct link to the Foundation web site on the AEESP home page).
Reflections on being the AEESP Distinguished Lecturer

Submitted by DESMOND F. LAWLER (UNIVERSITY OF TEXAS AT AUSTIN)

In college (many moons ago), my professor in a Philosophy of Religion course had the idea that people's characteristics involved thought, feeling, and action. His idea was that everyone had all three of these characteristics and that the integrated person was one who used all three to a reasonable degree, even though one might be dominant. In trying to offer a few reflections on the experience of being the 2012-13 Distinguished Lecturer for AEESP, this idea came to mind. How can one capture the unique experience of visiting 16 different universities, with many of those destinations representing consortia of a few universities? The lecture tour involves plenty of action (travel to an extent I never experienced before), and hopefully plenty of thought in my lectures, but this reflection evokes most of all some feelings, which we engineers are generally not good at expressing.

The first and overwhelming feeling is one of gratitude. Gratitude to the selection committee for giving me the greatest honor of my career. Gratitude to the primary hosts at each stop, who responded to many emails to set up the schedule and then went about the difficult task of setting up 24 hours of appointments, meals, lab tours, and, oh yes, a seminar to earn the title of lecturer. Gratitude to the faculty and students at each university for sharing their time, their insights, their intellectual curiosity, their questions, and their energy. Gratitude to my colleagues at the University of Texas and the many M.S. and Ph.D. students I have graduated who made me well-known enough to be selected for this honor. And, even gratitude to the seven different airlines I flew (Air Canada, American, Delta, Frontier, Southwest, United, US Airways), because, believe it or not, I had no significant travel problems—no substantial delays, no cancelled flights that caused a problem, simply no problem! (One flight was cancelled with the result that I was re-booked on a non-stop from Point A to Point C, instead of two flights from A to B to C; the trip took nearly three hours less than originally scheduled, and I arrived early!)

The second strong feeling is one of awe. Awe at the young (and not so young) faculty at many institutions who are doing incredible research and creatively finding a huge variety of funding sources. Awe at some of the undergraduate students who came to the lecture and asked excellent questions. Awe at the Ph.D. students and post-docs for their wide ranging research and their questions (technical, philosophical, career) to me. Awe at the breadth and the health of our field. Dick Luthy, in his reflections on his tour a year before me, noted how different the field is now than when we started. Thirty years ago, if you were an active researcher and participated in the annual conferences of AWWA and WEF, you knew virtually all of the other active researchers within about four years of becoming an assistant professor. The proliferation of conferences, journals, and topics in our field of environmental engineering in the meanwhile makes the idea of knowing virtually all of the other active researchers in environmental engineering (no less environmental engineering and science!) impossible. Even this lecture tour, which introduced me to dozens of faculty members I had not known before, went to “only” 16 universities, and we have perhaps ten times that number of programs in the U.S. in our field. (Note to committee: don’t add more stops!)

I could give awards for the best hotel, the best airline, the best meal, or the best host, but I will resist all that and only write about the best question after one of the lectures. Among the universities I visited was Rice University where the Texas consortium (Rice, U. of Houston, Texas A&M, and my own program of the U. of Texas) gathered this year. Shankar Chellam of UH asked "How do you know that what you are working on in research is the most important thing to do?" My fumbling answer was along the lines that there is probably no “most important research” but that one’s choice of what to work on within environmental engineering should reflect our values of protecting human and environmental health and also be a topic that, for whatever reason, holds deep intellectual curiosity for you. This question is faced by all Ph.D. students as they embark on their research and by us faculty each time we write a proposal. I was told afterwards that, after this question was asked, you could hear a pin drop in the room as I attempted to answer. To me, this rapt attention was yet another sign of the health of our profession: our students choose to go into environmental engineering because they want to make a substantial impact on the world. We are lucky to work in a field that attracts such outstanding people.

We all have our reasons to be professors, and mine primarily is the hope that something I say or do has a positive impact on students in my classes and in my research group. Being the AEESP Distinguished Lecturer presented the opportunity to interact with a far greater audience; I hope that it had a positive impact on a few people, students or faculty members, at each of my stops.

Although my experience went much beyond the lectures themselves, they are for most people the heart of the visit. Both topics are available on line, thanks to taping at my last two stops: the University of Michigan and the University of Minnesota:


At Minnesota: Particles, Particles, and More Particles, mediasite.uvs.umn.edu/Mediasite/Viewer/?peid=db299497e50c40a38beb68b3abeda69c

This site uses Mediasite 5.0.2045 and you need the Microsoft Silverlight plugin to view it.
The Student Services Committee (SSC) hosted its biannual Navigating the Academic Job Search Workshop at the 2013 AEESP conference in Golden, CO. Twenty-four graduate students and postdoctoral researchers and twenty-eight faculty volunteers from across North America participated in a two-hour discussion session about securing an academic appointment in the Environmental Engineering and Sciences field.

In preparation for the workshop, student and postdoctoral participants submitted their personal faculty application materials to the SSC and uploaded their questions about the interview process to AEESP’s unique wiki website for students (environmentalengineering.wikispaces.com/). Faculty volunteers reviewed participants’ materials and prepared individualized advice.

This year’s workshop featured a panel of experts who shared their wisdom with researchers new to the interview process. Drs. James Mihelcic (University of South Florida), Keri Hornbuckle (University of Iowa), Debra Reinhart (NSF), and Matthew Eckelman (Northeastern University) provided key advice for a successful interview based on their experiences on faculty search committees. The panel stressed that, in addition to presenting a strong application package, applicants must convincingly show how well they will fit in with their future department and collaborate with their colleagues. Qilin Li (Rice University) presided over the discussion and facilitated questions that were either posted on the AEESP wiki website or were asked by the audience during the panel session.

Following the panel discussion, attendees gathered in pre-arranged small groups of two students/postdocs and two faculty reviewers for continued discussion specific to participants’ needs. Faculty reviewers provided constructive advice to improve participants’ cover letters, CVs, research statements, and teaching philosophies. These small groups enabled participants to ask more detailed questions about the academic job search process and develop professional relationships with colleagues.

Within a participant exit survey, all respondents indicated that they would recommend the workshop to others seeking a faculty job. In fact, the most common feedback was appreciation for individual attention and a desire for additional time with the small groups and panel. Eleven of the participants who had already applied to over 150 positions and attended 33 telephone and on-site interviews were also able to share advice based on their experiences with the interview process.

This workshop was the culmination of two years of planning and preparation by the SSC team. The SSC would like to thank all panelists and faculty who volunteered as their participation truly made the workshop an excellent opportunity for the attendees. The SSC will continue to offer reviewing services for prospective applicants through next summer’s online Academic Job Application Review program. Please visit our wiki website, which hosts content helpful to student professional development and continues to be updated to serve AEESP members. The SSC is always looking for new members, ideas, volunteer reviewers, and recommendations for future student service projects.

Sincerely,
The AEESP Student Services Committee

* Indicates AEESP SSC Member
The AEESP Lectures Committee is pleased to announce the tentative schedule for the 2013-14 AEESP Distinguished Lecture Series by Mark van Loosdrecht. Mark will be visiting sixteen environmental engineering and science programs in North America during his tour from October 2013–March 2014. He will be offering two primary lectures during his tour: “Aerobic Granular Sludge—The Next Generation Wastewater Treatment?” and “Waste Based Biorefineries.” He will also be offering alternatives lectures on wastewater innovations and Anammox.

Mark van Loosdrecht is Professor in Environmental Biotechnology at Delft University of Technology, The Netherlands. He graduated from and did his PhD research at Wageningen University. His PhD topic was a combination of microbiology and colloid chemistry. He was appointed at Delft in 1988 and became Full Professor in 1998. His research is characterized by the combination of scientific understanding of complex systems and development of new processes. Dr. van Loosdrecht’s scientific interests are mainly related to biofilm processes, nutrient conversion processes and the role of storage polymers in microbial ecology. In particular, he is interested in new processes related to wastewater treatment and resource recovery. His research has resulted in several processes currently applied on full scale such as the Sharon process, Anammox process and Nereda process. He is active member of the International Water Association (IWA) and past chairman of the Biofilm and the Nutrient removal specialist groups. He is Editor in Chief of Water Research. He obtained several prizes for his work, including the Lee Kuan Yew Singapore Water Prize and the IWA Grand Award. He is member of both the Royal Dutch Academy of Arts and Sciences and the Dutch Academy of Engineering. He was awarded a knighthood in the order of the Dutch Lion. He has published over 500 scientific papers, has 15 patents and has supervised over 50 PhD students.

For more information, please contact the host school contacts or Dr. Jeanine Plummer (jplummer@wpi.edu).

### 2013–14 Distinguished Lecture Host Schools Selected

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<th>Dates</th>
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<td>Cornell University</td>
<td>Lars Angenent; <a href="mailto:la249@cornell.edu">la249@cornell.edu</a></td>
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<td>Yale University</td>
<td>Menachem Elimelech; <a href="mailto:menachem.elimelech@yale.edu">menachem.elimelech@yale.edu</a></td>
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<td>The Johns Hopkins University</td>
<td>Ed Bouwer; <a href="mailto:bouwer@jhu.edu">bouwer@jhu.edu</a></td>
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<td></td>
<td>Virginia Tech</td>
<td>Linsey Marr; <a href="mailto:lmarr@vt.edu">lmarr@vt.edu</a></td>
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<td></td>
<td>Duke University</td>
<td>Helen Hsu-Kim; <a href="mailto:hsukim@duke.edu">hsukim@duke.edu</a></td>
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<td>Georgia Institute of Technology</td>
<td>Spyros G. Pavlostathis; <a href="mailto:spyros.pavlostathis@ce.gatech.edu">spyros.pavlostathis@ce.gatech.edu</a></td>
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<td>Jan. 25–Feb. 9 (tentative)</td>
<td>University of South Florida</td>
<td>Jeff Cunningham; <a href="mailto:cunning@usf.edu">cunning@usf.edu</a></td>
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<td>Texas A&amp;M University</td>
<td>Bill Batchelor; <a href="mailto:bill-batchelor@tamu.edu">bill-batchelor@tamu.edu</a></td>
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<td>University of Wyoming</td>
<td>Patricia Colberg; <a href="mailto:pczoo@uwyo.edu">pczoo@uwyo.edu</a></td>
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<td></td>
<td>University of California Berkeley</td>
<td>Slav Hermanowicz; <a href="mailto:hermanowicz@ce.berkeley.edu">hermanowicz@ce.berkeley.edu</a></td>
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<td>University of Washington</td>
<td>Gregory Korshin; <a href="mailto:korshin@uw.edu">korshin@uw.edu</a></td>
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<td>March 15–30 (tentative)</td>
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<td>David Dzombak; <a href="mailto:dzombak@cmu.edu">dzombak@cmu.edu</a></td>
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<td></td>
<td>Michigan State University</td>
<td>Vlad Tarabara; <a href="mailto:tarabara@msu.edu">tarabara@msu.edu</a></td>
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<td></td>
<td>University of Wisconsin–Madison</td>
<td>Matthew Ginder-Vogel; <a href="mailto:mgindervogel@wisc.edu">mgindervogel@wisc.edu</a></td>
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<td></td>
<td>University of Notre Dame</td>
<td>Rob Nerenberg; <a href="mailto:Nerenberg.1@nd.edu">Nerenberg.1@nd.edu</a></td>
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<td></td>
<td>University of Illinois</td>
<td>Helen Nguyen; <a href="mailto:thn@illinois.edu">thn@illinois.edu</a></td>
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Highlights of the AEESP Board of Directors Summer 2013 Meeting

Submitted by GREG CHARACKLIS (UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL, AEESP VICE-PRESIDENT)

Immediately following a very successful biannual conference in Golden, CO, the AEESP Board of Directors met on the Colorado School of Mines campus on July 17 & 18. The Board was joined by Joanne Fetzner, AEESP Business Manager, as well as Brian Schorr and Jeff Serfass of Technology Transition Corporation (TTC). The following is a summary of some of the highlights from the Board Meeting:

1. The Board welcomed newly elected members from the 2013 board elections. The new members include:
   - Shankar Chellam, University of Houston
   - Ching-Hua Huang, Georgia Tech
   - Peter Vikesland, Virginia Tech

2. The AEESP Board is negotiating with TTC on a contract that will involve TTC beginning to assume responsibilities related to the AEESP Business Office as of October 1, 2013. This will involve a staged transfer of responsibilities from AEESP Business Manager Joanne Fetzner to TTC during the last quarter of 2013, with Joanne continuing to provide important transition support for some period thereafter.

3. The Board is proud to welcome a record number of new members over the past year (154), with an especially strong influx of new student members. At the time of the Board meeting, the official membership was 900, a new high water mark. In addition, there are currently 17 Sustaining Members.

4. Jennifer Becker (Michigan Tech) assumed the office of President. Board elections were conducted for the vacant officer positions. The following new officers were installed:
   - President-Elect: John Tobiason, University of Massachusetts, Amherst
   - Vice-President: Greg Characklis, University of North Carolina at Chapel Hill
   - Treasurer: Andrea Ferro, Clarkson University
   - Chief Technical Officer: Jean MacRae, University of Maine

Outgoing Board members Bob Arnold, Allen Davis and Mark Wiesner were recognized for their exceptional service. The Board also thanked Joanne Fetzner for her invaluable service over the years, even as all are pleased to have her continue on with AEESP during the transition to TTC’s management of business operations.

5. A new host fee schedule was agreed to for the AEESP Distinguished Lecture Series in response to the increased cost of domestic and international travel over the past several years.

6. The Board approved a proposal from the membership to create a standing committee (or subcommittee of the Education Committee) that is focused on the Chairs and Directors of Environmental Engineering programs. This will ensure continuation and growth of the network developed at the workshops held in Golden in July 2013 and in Ohio in the summer of 2012 and provide leadership for future workshops.

Special thank you to outgoing Board members:

Submitted by JENNIFER BECKER (AEESP PRESIDENT)

AEESP and the AEESP Foundation are incredibly fortunate to have so many members who dedicate significant amounts of time and energy to keeping our Association and the Foundation running smoothly. I want to especially thank Bob Arnold (Treasurer and Board member, University of Arizona), Allen Davis (Board Member, University of Maryland), and Mark Wiesner (President and Board member; Duke University) for their dedicated and good-humoured service on the AEESP Board of Directors. We look forward to Bob’s continued service as Treasurer on the AEESP Foundation Board.
Masten receives 2013 Ripperton Environmental Education Award

Susan J. Masten, professor in the Michigan State University Department of Civil and Environmental Engineering, is the 2013 recipient of the Lyman A. Ripperton Environmental Education Award.

She was honored during the 106th Annual Conference and Exhibition of the Air & Waste Management Association in Chicago in June, an organization that enhances knowledge and expertise for more than 8,000 environmental professionals in 65 countries.

“It was very special to receive this recognition at an international conference with other award recipients from the U.S., China and Japan,” she said.

The Ripperton Award recognizes the distinguished achievement of an educator in an air pollution control field. Established in 1980, it honors an individual who has inspired students to achieve excellence in all their endeavors.

Masten is known for her classes in air pollution science and environmental engineering. She developed and teaches an introductory course in air pollution as part of the bachelor’s of science degree in environmental engineering. It is the first of its kind at MSU in more than 30 years.

Masten has worked extensively to develop water treatment technologies that are more effective and suitable for use in decentralized water treatment systems. Over the past year, she has also begun to evaluate water treatment technologies for developing countries, and is looking at improving the ceramic water purifiers for pathogen removal.

Masten advises the Environmental Engineering Student Society and is the founding adviser of the MSU Chapter of Engineers Without Borders.

Carnegie Mellon and University of Pittsburgh Research Project Recognized by AAEES

Carnegie Mellon University and the University of Pittsburgh received the 2013 Grand Prize in the University Research category of the AAEES Excellence in Environmental Engineering and Science competition for a jointly-conducted project titled “Use of Treated Municipal Wastewater as Power Plant Cooling System Makeup Water.” Principal investigators for the project were Dave Dzombak of Carnegie Mellon and Radisav Vidic and Amy Landis of the University of Pittsburgh (Amy is now with Arizona State University). The award was conferred at the 2013 AAEES Awards Luncheon and Conference on April 25 at the National Press Club in Washington, DC.

The CMU-Pitt research demonstrated that treated municipal wastewater is a feasible and widely available alternative source of cooling water for thermoelectric power plants across the U.S. However, the biodegradable organic matter, ammonia, carbonate and phosphates in the treated wastewater pose challenges, including fouling and corrosion issues. The researchers along with their graduate students from both CMU and Pitt investigated how to address these challenges. The project also included analysis of life cycle costs and environmental impacts involved with various schemes for reusing treated municipal wastewater in power plant cooling systems.

More information about the research project and the award is available at: www.aaees.org/e3competition-winners-2013gp-universityresearch1.php
Ming Xu speaks at Google Summit

Ming Xu (Assistant Professor at the University of Michigan, www-personal.umich.edu/~mingxu) spoke at Google’s “How Green is the Internet Summit” June 6. The Summit, held at Google headquarters in Mountain View, CA was a one-day, invitation-only event where experts from industry, academia, government and NGOs explored emerging questions around the environmental impacts and benefits of the internet. Ming Xu was one of the seven speakers invited by Google to brief the audience on the current academic research on environmental implications of the Internet.

Some of the Summit’s other speakers included former United States Vice President Al Gore and Executive Chairman of Google Eric Schmidt.

American Water Works Association (AWWA) Scholarship Program Continues to Expand

For the 2014-15 academic year AWWA will be offering 16 scholarships to undergraduate and graduate students. Funding ranges from $5,000 to $25,000 annually. The next deadline to apply is January 6, 2014 with recipients identified in March. Eligibility information and application forms for AWWA national, provincial and section scholarships can be found at scholarships. For more information contact scholarships@awwa.org.

—ADVERTISEMENT —

OBITUARY

Submitted by CHARLES NATHAN HAAS (DREXEL UNIVERSITY)

Wesley O Pipes, Professor Emeritus in the Department of Civil, Architectural and Environmental Engineering, passed away on May 20, 2013. Wes had a long and productive history in research and teaching in civil and environmental engineering.

He was born January 28, 1932 in Dallas, Texas. He received BS and MS degrees in Biology from North Texas State University. He started his PhD at the University of California–Berkeley, and moved to Northwestern University when his advisor, Harold Gotaas, moved to become Dean of the Technological Institute at Northwestern. Wes received his PhD in Sanitary Engineering from Northwestern in 1959.

After receiving his PhD, Wes joined the Northwestern University faculty where he remained until 1974, holding dual appointments in both the Civil Engineering and Biology departments. In 1975, he joined Drexel University as the inaugural LD Betz Professor of Ecology. In 1983, he transferred into the College of Engineering, and served as Head of the Department of Civil Engineering from 1983 until 1987. After stepping down from the headship, Wes remained an active faculty member of the department, and retired in 1998. He was also active in the Environmental Studies Institute (where he served for a time as Associate Director), and participated in numerous Drexel committees. Wes was President of the Drexel chapter of Sigma Xi from 1981–1982.

Wes Pipes was active in a number of national and international societies, including the American Water Works Association, the Water Environment Federation, the American Society of Microbiology, the Association of Environmental Engineering Professors (serving as President in 1975), the International Water Association, the International Environmetrics Society (of which he was a founding member), and the American Society of Civil Engineers.

Wes’ scholarly work was broadly in the area of microbiological understanding of water and wastewater treatment systems. His early work focused on biological disturbances in common wastewater treatment systems and on the use of algae for treatment of wastes. His work at Drexel focused on understanding the distribution of bacteria in drinking water systems, and played an important part in revisions of the US drinking water regulations. Wes authored over 125 papers and major reports on these topics.

He received awards for his work from the Association of Environmental Engineering Professors and the Pennsylvania Water Pollution Control Association.

Wes is survived by his wife, Jane, four children, and his many “academic children.”
Amy Childress

The Sonny Astani Department of Civil and Environmental Engineering is pleased to welcome Amy E. Childress to the faculty. Childress joined the faculty in summer 2013 as professor and director of the department’s environmental engineering program. She previously was professor and chair of the Civil and Environmental Engineering Department at the University of Nevada, Reno. Childress’ current research interests focus on membrane contactor processes for innovative solutions to contaminant and energy challenges; pressure-driven membrane processes as industry standards for desalination and water reuse; membrane bioreactor technology; and colloidal and interfacial aspects of membrane processes. She looks forward to addressing wastewater reclamation and seawater desalination challenges that occur in southern California and around the world. Childress currently serves on the AEESP Foundation Board of Directors and previously served as the AEESP President and Newsletter Editor. She earned her bachelor’s degree in civil engineering from the University of Maryland and her master’s degree and PhD in civil and environmental engineering from the University of California, Los Angeles.

Felipe de Barros

In January 2013, the Astani CEE Department welcomed Felipe de Barros as an assistant professor. His main expertise is in groundwater hydrology and environmental fluid mechanics. The focus of de Barros’ work is on developing task-driven, application-oriented integrated models for simulating and predicting large-scale hydrogeological systems under uncertainty. His research interests include flow and transport in heterogeneous aquifers, fate and transport of contaminants in the environment, stochastic hydrogeology and probabilistic human health risk assessment. More specifically, his research consists of integrating elements from human health with hydrogeological sites in order to aid decision makers to better allocate resources towards uncertainty reduction. de Barros earned his PhD from the Department of Civil and Environmental Engineering at the University of California, Berkeley. Prior to UC Berkeley, he earned his B.Sc. and M.Sc. in Mechanical Engineering from the Federal University of Rio de Janeiro (Brazil).

George Ban-Weiss

George Ban-Weiss was welcomed into the Astani CEE Department as an assistant professor in summer 2013. He comes to USC from Lawrence Berkeley Laboratory where he was a scientist working with both the Urban Heat Island Group and Climate Sciences Department. Ban-Weiss’ broad research interests involve understanding how humans alter the environment from urban to global scales. His research focuses on the intersection of climate, air quality, and the land surface. In particular, Ban Weiss uses field measurements to quantify gas- and particle-phase emissions from pollutant sources, aerial measurements to characterize urban land cover, and numerical models to understand how changes in air pollutants and urban land use alter air quality and regional and global climate. He received his PhD in 2008 from the University of California, Berkeley, where he also obtained his bachelor’s and master’s degrees. After graduate school Ban Weiss was a Postdoctoral Research Associate at the Carnegie Institution, Department of Global Ecology at Stanford University. He was also a Postdoctoral Research Associate at Lawrence Berkeley Laboratory prior to his appointment there as a scientist.

Kelly Sanders

Kelly Sanders will join the Astani CEE Department in January 2014 as an assistant professor. Sanders will begin her tenure at USC following the completion of her PhD in civil engineering from the University of Texas at Austin. Her research seeks to increase the sustainable development of urban and agricultural systems through three major focus areas: the energy-water nexus, sustainable waste management, and low-impact food production. Past projects have explored synergistic resource conservation strategies through the implementation of decentralized energy and water systems, changes to competitive retail electricity markets, and systemic shifts in end-use technologies. Sanders earned her bachelor’s degree in bioengineering from the Pennsylvania State University and her master’s degree from the University of Texas’ Department of Mechanical Engineering. Accordingly, her work is multidisciplinary in nature and addresses issues at the intersection of engineering, science, and public policy.
Dr. Patrick McNamara Joins Marquette University

Dr. Patrick McNamara joined the Marquette University Department of Civil, Construction, and Environmental Engineering as an assistant professor in August 2013. He received his PhD in Civil Engineering from the University of Minnesota where he was advised by Dr. Paige Novak. His dissertation research involved the impact of novel wastewater treatment processes on biodegradation of micropollutants, and also on the impact of micropollutants on microbial processes. Patrick earned an MS in Engineering from the University of Texas at Austin in 2008 in the Environmental and Water Resources Engineering program. He was advised by Dr. Desmond Lawler and his research there focused on improving sludge dewaterability in anaerobic digesters. He received his BS in Civil Engineering from Marquette University in 2006. Most recently, Patrick returned to Marquette as a postdoctoral research associate where he conducted research on pyrolysis for sustainable treatment of wastewater biosolids. His current research program focuses on understanding the role of micropollutants in built and natural environments and wastewater treatment optimization to mitigate the effects of micropollutants in the environment.

Danmeng Shuai: New Assistant Professor at GW

Dr. Danmeng Shuai joined Department of Civil and Environmental Engineering at The George Washington University (GW) as an assistant professor in Aug. 2013. Prior to joining GW, he worked as a postdoctoral research associate at The University of Iowa from 2012 to 2013. He received his Ph.D. in Environmental Engineering from the University of Illinois at Urbana-Champaign (2012), and his M.E. and B.E. in Environmental Engineering from Tsinghua University (2007, 2005). Dr. Shuai’s research focuses on developing novel materials to address the water-energy nexus, including water purification, renewable energy production, and resource recovery. In particular, Dr. Shuai has expertise in environmental chemistry, catalysis, and nanotechnology, and his group aims to (1) integrate chemical reactions and physical separations to enhance water treatment performance with reduced energy footprint and (2) efficiently produce renewable energy and recover resources from waste. More information about Dr. Shuai is available at materwatersus.webnode.com/.

Dr. Brooke Mayer Joins Marquette University

Dr. Brooke Mayer joined the Marquette University Department of Civil, Construction and Environmental Engineering as an assistant professor in August 2012. She was previously a lecturer in the School of Sustainable Engineering and the Built Environment at Arizona State University, where she earned her B.S., M.S., and Ph.D. degrees. She has experience teaching an array of courses, including engineering fundamentals, water and wastewater treatment, and sustainability. Mayer’s research interests focus on the development of sustainable technologies for water treatment applications. She uses environmental microbiology, chemistry, and engineering to design and test systems for the detection and treatment of emerging microbial and chemical contaminants, including pathogenic viruses, disinfection byproducts, and nutrients. In particular, Brooke has researched alternative strategies for the detection and quantification of infectious viruses, including enteroviruses and norovirus. She has also examined treatment approaches focused on balancing the risks posed by microbial pathogens and chemical carcinogens using unit operations such as enhanced coagulation, ultraviolet disinfection, and advanced oxidation processes. Brooke is currently involved in researching and designing innovative technologies to remove and recover nutrients from water/wastewater in a readily reusable form. This work focuses on turning the costs of pollution abatement into an economic benefit for society.
University of Colorado Boulder: New Faculty Hire—Zhiyong “Jason” Ren

Dr. Zhiyong “Jason” Ren joined the Department of Civil, Environmental, and Architectural Engineering at the University of Colorado Boulder as an Associate Professor in August 2013. Prior to joining CU Boulder, he worked at the University of Colorado Denver as an assistant/associate professor from 2008-2013 and served as the Director of the Center for Sustainable Infrastructure Systems from 2012-2013. Jason received his Ph.D from Penn State University in 2008. Prior to that, he worked as an environmental engineer for two years after graduating from Tianjin University in China.

Jason’s research and teaching focuses on energy and resource recovery during waste treatment, remediation, and water desalination processes. His lab works on developing new microbial electrochemical approaches to transform aging environmental infrastructure from simple treatment only processes to integrated energy and value-added chemical recovery systems. His group also uses molecular microbiology, electrochemistry, and system engineering tools to understand the fundamental determinant factors to enhance system design, operation, and monitoring in concert with traditional approaches. In the past five years, he has published one book chapter, 25 journal articles, two patent disclosures, and directed more than $2.5 million dollars in research projects for NSF, ONR, EPA, Gates Foundation, and industrial sponsors. He received the 2012 University Award for Faculty Research and Creative Activities, Junior Faculty Achievement Award, and ES&T Excellence in Review Award. More information on his group and research activities can be found at spot.colorado.edu/~zhre0706/

Navid Saleh Joining UT Austin

The Environmental and Water Resources Engineering (EWRE) faculty at the University of Texas–Austin are delighted to announce that Dr. Navid B. Saleh will be joining the Department of Civil, Architectural, and Environmental Engineering at the University of Texas at Austin as an Assistant Professor in January, 2014. Currently, Navid is an Assistant Professor of Civil and Environmental Engineering at University of South Carolina. Prior to joining USC, he was a postdoctoral scholar in the laboratory of Professor Meny Elimelech, Environmental Engineering Program, Department of Chemical Engineering, Yale University. Navid received his MS and PhD under Professor Greg Lowry’s supervision from the Department of Civil and Environmental Engineering at Carnegie Mellon University.

Navid’s research interests center around application and implications of nanomaterials. His recent work has focused on fundamental aggregation and deposition behavior of nanomaterials in complex environmental and biological systems. Use of nanomaterials for water treatment and environmental remediation has also been a focus of his research. Recently, Navid’s students at USC have been investigating engineering applications of nanomaterials in sustainable composite materials and in environmental sensors. These research efforts have been funded from several sources, including NSF, NIH, and industrial sources.

Navid will be joining a collaborative group of faculty within EWRE developing innovative treatment technologies, consisting of Lynn Katz, Kerry Kinney, Mary Jo Kirisits, Des Lawler, Howard Liljestrand, and Jerry Speitel.
The University of New Mexico has hired Dr. José Manuel Cerrato and Dr. Ricardo González-Pinzón as assistant professors in the Civil Engineering Department. Dr. Cerrato earned a Ph.D. from Virginia Tech in 2010 with Dr. William Knocke and Dr. Andrea Dietrich as co-advisors, and worked as a postdoctoral scholar at Washington University in St. Louis under the supervision of Dr. Daniel Giammar. His interests are related to interdisciplinary research of biogeochemical processes occurring at the interface of water and energy that affect the cycling of metals and radionuclides in the environment. His research group will use a combination of spectroscopy, microscopy, aqueous chemistry, culturing, and molecular biology tools for the study of complex interactions affecting natural and engineered environments. Dr. Cerrato can be reached at jcerrato@unm.edu.

Dr. González-Pinzón earned a Ph.D. at Oregon State University in 2013 under the supervision of Dr. Roy Haggerty. His research interests are hydrologic transport, stream ecology, groundwater-surface water interactions, smart tracers, and mathematical and computational modeling. Dr. González-Pinzón’s lab couples experimental observations with mathematical, numerical, and uncertainty modeling to investigate biogeochemical processes and scaling techniques. Dr. González-Pinzón can be reached at gonzaric@unm.edu.

Dr. Cerrato’s and González-Pinzón’s research will support the newly-formed Center for Water and the Environment, a new UNM School of Engineering Research Center. The mission of the Center for Water and the Environment is to conduct cutting-edge research into technological and engineering-based solutions to problems with water and the environment within a framework that considers the social, economic, policy, and legal implications. Practical solutions to problems related to water availability in arid environments and in times of drought, and problems associated with energy generation and consumption are a particular focus of the center, given the criticality of these issues to the state of New Mexico and their global importance. The Center Director is Dr. Kerry Howe.

Dr. Woo Hyoung Lee, P.E., joined the faculty of the Department of Civil, Environmental, and Construction Engineering at The University of Central Florida (UCF) as an assistant professor this fall. Prior to joining UCF, he was an ORISE postdoctoral research fellow at U.S. Environmental Protection Agency, Cincinnati, OH.

Dr. Lee obtained his B.S. in Environmental Engineering from Chonnam National University, Gwangju, South Korea in 1996 and his M.S. in Environmental Engineering from Korea University, Seoul, South Korea in 2001. He also acquired practical experience working on various environmental engineering projects including water/wastewater treatment plant design, sanitary sewer distribution system modeling, and development of advanced water/wastewater treatment technologies in GS E&C Co. (Seoul, South Korea). He received his Ph.D. in Environmental Engineering from The University of Cincinnati, Cincinnati, OH in 2009 and is a currently registered professional engineer.

To date, his professional work and research has encompassed development and use of electrochemical microsensors for water quality monitoring, advanced water/wastewater treatment processes, and bio-plastic production using organic wastes. His previous USEPA research involved evaluating biofilm control strategies in drinking water distribution systems and establishing a microsensor laboratory for biofilm research. His current primary research interests include environmental micro/nanosensors for in situ biofilm process and water quality monitoring, and nitrification prevention and biofilm control in drinking water through the use of microelectrodes, molecular tools, microscopic observation, and kinetics modeling. Dr. Lee teaches Chemical Process Control (EES 4202C).
Dr. Zhen (Jason) He joined the Via Department of Civil and Environmental Engineering at Virginia Tech as an Associate Professor in August 2013. Prior to joining VT, he was an Assistant Professor in the Department of Civil Engineering and Mechanics at the University of Wisconsin–Milwaukee for four years. Dr. He received his PhD from Washington University in St. Louis (2007), MSc degree from Technical University of Denmark (2003), and BSc degree from Tongji University in China (2000), all in environmental engineering. He completed a postdoctoral training at University of Southern California.

His research focuses on energy-efficient water and wastewater treatment. Specifically, he is working on the development of bioelectrochemical systems such as microbial fuel cells and microbial desalination cells for wastewater treatment and water desalination. His team integrates membrane technologies such as ultrafiltration and forward osmosis into bioelectrochemical systems for enhancing water quality and recovery, and also develops photo-bioelectrochemical reactors by taking advantage of algal growth for providing oxygen and producing valuable biomass. They scale up bioelectrochemical systems to a transitional stage (200-500 L) as a new research platform for studying system scaling up. His research has been supported by National Science Foundation, Binational Agricultural Research and Development Fund, US EPA, Qatar National Research Fund, and various industrial sponsors. More information about his research is available at: www.ebbl.cee.vt.edu/

Danny Reible to Lead New Water Initiative at Texas Tech University

The Department of Civil and Environmental Engineering is pleased to announce the appointment of National Academy Member Dr. Danny Reible as the new Donovan Maddox Distinguished Chair of Engineering. Dr. Reible will be leading a major University water initiative with an emphasis on the Water-Energy-Agriculture Nexus. Dr. Reible’s appointment will be complemented with the addition of 5 new faculty positions in the area of Environmental Engineering and Water Resources which will complement the 9 current positions. He received his MS and PhD in Chemical Engineering in 1979 and 1982, respectively, from the California Institute of Technology after a BS in Chemical Engineering in 1977 from Lamar University, Beaumont, TX. He is a Board Certified Environmental Engineer, a Professional Engineer (LA) and in 2005 was elected to the National Academy of Engineering for the “development of widely used approaches for the management of contaminated sediments.” He is a fellow of the AAAS and AIChE and received the L.K. Cecil Award from AIChE in 2001 and the Malcolm Pirnie Frontiers in Research Award from the Association of Environmental Engineering and Science Professors in 2011. His research is focused on the fate and transport of contaminants in the environment, particularly the applications to the assessment and remediation of contaminated sediments and the sustainable management of water resources.

Bill Cooper to Direct NSF Environmental Engineering Program

Bill Cooper joined the National Science Foundation’s Chemical, Bioengineering, Environmental and Transport (CBET) Systems Division as the Environmental Engineering Program Director on Sept 9, 2013. His email is wjcooper@nsf.gov. He succeeds Dr. Debbie Reinhart, who served in the position for two years. Debbie will be returning to the University of Central Florida as Assistant Vice President for Research and Commercialization and Pegasus Professor of Civil and Construction Engineering.

Bill is a Professor of Civil and Environmental Engineering and Director of the Urban Water Research Center at the University of California, Irvine. Prior to moving to California he was in the Department of Chemistry and Biochemistry at the University of North Carolina Wilmington and prior to that the Director of the Drinking Water Research Center at Florida International University. Bill received his B. S. from Allegheny College, a M. S. from the Pennsylvania State University and a Ph. D. from the University of Miami. He is a Fellow of the American Association for the Advancement of Science and a Board Certified Environmental Scientist of AAEES. He served on the AEESP Board and the AEESP Foundation Board from 2008–2011.
Jaehong Kim has joined Yale University as the newly named Barton L. Weller Associate Professor of Chemical and Environmental Engineering. Kim’s is the first of several hirings aimed at expanding the Environmental Engineering Program at Yale University.

Professor Kim is nationally and internationally recognized as a leader in the field of environmental nanotechnology and water quality engineering. His research interests include environmental implications and applications of carbonaceous nanomaterials; development of upconversion phosphor technology for environmental application; ozone and UV disinfection process optimization and design; and high-pressure membrane process evaluation and simulation for the removal of emerging organic and inorganic contaminants.

Kim received B.S. and M.S. degrees in chemical and biological engineering from Seoul National University in Korea in 1995 and 1997, respectively, and a Ph.D. degree in environmental engineering from the University of Illinois at Urbana-Champaign in 2002. He joined the School of Civil and Environmental Engineering at the Georgia Institute of Technology in 2002 as an assistant professor, rising through the ranks to associate professor with tenure in 2009 to full professor in 2013. From 2009 to 2012, he held the Carlton S. Wilder Endowed Professorship and most recently held the Georgia Power Distinguished Professorship. Since 2012, he served as associate chair for undergraduate programs at the School of Civil and Environmental Engineering.

Kim, who has published 65 peer-reviewed journal articles, has delivered over 80 conference presentations and has been an invited lecturer and keynote speaker numerous times. He is the recipient of various awards, including a Bill Schultz Junior Faculty Teaching Award from the School of Civil and Environmental Engineering at Georgia Tech (2013), a Walter L. Huber Civil Engineering Research Prize from the American Society of Civil Engineers (2013), a Top Environmental Technology Paper Award from the American Chemical Society (2012), a Paul L. Busch Award from the Water Environment Research Foundation (2009), an Excellence in Research Award from the School of Civil and Environmental Engineering at Georgia Tech (2009), and a CETL/BP Junior Faculty Teaching Excellence Award from Georgia Tech (2007).
Environmental Engineering Faculty Position

University of Maryland, Department of Civil and Environmental Engineering seeks applicants for a tenure-track position in environmental engineering, preferably at the assistant professor level, but appointment at other ranks will be considered. We are especially seeking candidates with an academic background in water sustainability and biological processes, possibly including biological energy conversion processes. Candidates should demonstrate the ability to: teach effectively at the undergraduate and graduate levels, guide an active scholarly research program, and obtain funding from competitive external funding agencies. Of specific interest is expertise that would complement existing research programs. UMD has a strong Engineers Without Borders program and EWB experience is a plus. All applicants must hold a PhD in Civil or Environmental Engineering or a related field by September 2014 for appointment in fall 2014.

For best consideration applications should be received by December 20, 2013, but later applications may be reviewed. Applications should include a cover letter, curriculum vitae, statement of research and teaching interests, and four names of references with contact information. Applicants should apply electronically at https://jobs.umd.edu/applicants/jsp/shared/Welcome_css.jsp, position number 116995.

Questions should be referred to:
Ms. Janet Alessandrini
Department of Civil and Environmental Engineering
University of Maryland
College Park, MD 20742, USA
Tel: +1 301-405-1974
Fax: +1 301-405-2585
Email: jalessan@umd.edu

The University of Maryland is an equal opportunity and affirmative action employer. Women and under-represented minority candidates are particularly encouraged to apply.

Faculty Position in Environmental Engineering at Colorado

The University of Colorado Boulder, Environmental Engineering Program invites applications for a non-tenure-track, instructional faculty position to begin January 2014. We seek candidates with teaching interests in environmental engineering fundamentals and processes, treatment laboratories, treatment of water, wastewater, reuse, and hazardous waste, and the capstone project design course. Applicants will be expected to teach and develop curriculum for approximately five undergraduate/graduate courses per academic year among recruiting and retention activities. Must hold at least an M.S. in engineering or related discipline in addition to substantial professional experience. Current professional registration or the ability to become a registered professional engineer within two years is required. Applicants with a PhD degree and the interest to submit grants for engineering education will receive special consideration.

Our environmental engineering program includes 15 tenure-line faculty members who advise and teach 220 undergraduate students and 100 graduate students. The multidisciplinary faculty specializes in natural and engineered systems—covering primarily water and air with a strong grounding in fundamental sciences—and applied engineering studies, serving the needs of industrialized and developing communities around the world. The EVEN BS degree was ABET accredited in 2003 and is among the top five largest programs nationally. More information at: www.colorado.edu/engineering/EnvEng/.

Review of applications will begin September 15, 2013. Applications will be accepted until the position is filled. View the full announcement at www.jobsatcu.com. Job Posting Number F00672. For more information, contact R. Scott Summers; Program Director, Environmental Engineering Program: Tel 303-492-6644; r.summers@colorado.edu
Washington University in St. Louis
Department of Energy, Environmental and Chemical Engineering
Aerosol Science and Engineering Faculty Search in the field of Energy and Environment
Fall 2013

The School of Engineering and Applied Sciences (SEAS) at Washington University in St. Louis invites nominations and applications for a tenure-track faculty position in Aerosol Science and Engineering at all levels (Assistant, Associate or Full Professor) in the Department of Energy, Environmental and Chemical Engineering (www.eece.wustl.edu). Endowed Professorial appointments are available for exceptional applicants. Joint appointments with other SEAS and university departments are also possible. Washington University in St. Louis has embarked on university-wide initiatives related to energy and the environment and this position is meant to complement this effort. The search is open to all areas of aerosol science and technology, with preference given to individuals whose research and teaching complement energy and environmental foci at the University. Some areas of emphasis include climate change, instrumentation, nanomaterial synthesis, clean energy, ambient air quality, combustion and others (http://engineering.wustl.edu/facultyopenings.aspx).

The successful candidates should have an earned Ph.D. in chemical engineering, or another related engineering or science discipline. The selected candidate will be expected to teach classes at the undergraduate and graduate level. Senior faculty will be expected to play a leadership role within the Department, and to promote interdisciplinary research within the School of Engineering and throughout the University in the field of energy and environment.

Washington University in St. Louis, founded in 1853, is a medium-sized, independent research university dedicated to challenging its faculty and students to seek new knowledge and greater understanding of an ever changing, multi-cultural world. The university is counted among the world’s leaders in teaching and research and draws students (with 6,509 undergraduates and 5,579 graduate and professional students, as well as 1,384 part time students) and faculty to St. Louis from all 50 states and more than 90 other nations. The Department has 18 tenure track faculty members, several research faculty and staff, 200 UG students and 80 full time PhD students.

Interested applicants should provide a detailed curriculum vitae, statements of research and teaching interests, transcripts (for candidates who are currently pursuing or have recently earned a doctoral degree), and a list of three references (with telephone numbers and email addresses). Application materials must be submitted electronically by email as a single file in editable (e.g. not password protected) pdf format to aerosolfaculty@seas.wustl.edu. Questions regarding the search process can be addressed to the chair of the search committee, Dr. Brent Williams, or Dr. Pratim Biswas; The Lucy and Stanley Lopata Professor & Chair, Department of Energy, Environmental and Chemical Engineering (Tel: 314-935-5548).

Review of applications will begin immediately, but applications will be received until the positions are filled. We request that applications be submitted by November 15, 2013. Washington University is an Equal Opportunity and Affirmative Action Employer. Applications from women and under-represented minority groups are strongly encouraged.
New faculty positions at University of Southern California

The Sonny Astani Department of Civil and Environmental Engineering (ceed.usc.edu), as part of its initiative to pursue socially relevant water sustainability challenges, is searching for two faculty candidates in the area of Environmental Engineering, with an emphasis on water quality, supply, and treatment. Nominations and applications for tenure-track or tenured faculty positions at all levels are requested. Candidates should have a doctorate in environmental engineering or a related field of study and those applying for Associate or Full Professor must have a well-established academic record.

The intellectual depth, innovation, and promise of the candidates are of higher priority than their specific research area; however, some areas of interest include: microbiological aspects of water quality and treatment; molecular tools for microbial community analysis; contaminant characterization, transport and fate in the environment; sensing and big-data enabled computation in engineered and natural systems. Applications are especially encouraged from transformative scholars, those who are transforming the field, and from interdisciplinary scholars, those who are engaged in research that aligns with the interests of the Department as well as cuts across other department areas in the School and University.

Positions are available starting August 16, 2014. To receive full consideration, candidates should apply on-line at: viterbi.usc.edu/facultyapplications/ by October 31, 2013. Application materials include a cover letter, a curriculum vitae, a statement of research and teaching interests, and contact information for five references. All application materials will be held in the strictest 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 KAP 210, Los Angeles CA 90089-2531 (email: amyec@usc.edu).

The Astani Department (ceed.usc.edu) has 22 tenured/tenure track faculty members, including four chaired professorships, six 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 (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.

The University of Southern California values diversity and is committed to equal opportunity in employment. Women and men, and members of all racial and ethnic groups are highly encouraged to apply.

Graduate Student Position Available at UIUC

A Ph.D. student position in environmental engineering/air quality is available with the air quality engineering and science group (aqes.cee.illinois.edu), at the department of Civil and Environmental Engineering (cee.illinois.edu), at the University of Illinois at Urbana-Champaign (UIUC) (illinois.edu), starting Spring 2014. Engineering at the UIUC in general and the department of Civil and Environmental Engineering department, in particular, are top ranked in the world, and they offer a multitude of resources and opportunities for high level interdisciplinary research.

Candidates holding a B.S. or M.S. in Environmental Engineering, or related field of engineering or biogeosciences will be given priority consideration. Students with previous experience on air quality measurement and strong interest in land-atmosphere interactions are particularly encouraged to apply. The research project pertains to measuring NH₃ fluxes in an agricultural field managed by UIUC. The Ph.D. student will also collaborate with research staff at NOAA and another Ph.D. student who is modeling NH₃ emissions from agricultural areas and its impact on air quality on a regional basis. Please forward cover letter describing your interest in the project, CV, and names of three references to Dr. Sotiria Koloutsou-Vakakis, co-PI of the project, at sotiriak@illinois.edu.
**Postdoctoral Opportunity**

The Institute for Environmental Science and Policy at the University of Illinois at Chicago is seeking a post-doctoral scholar to work in the area of life cycle assessment of nano-enabled products. The ideal candidate will have experience in a research environment on areas related to nanotechnology, life cycle assessment, material flow analysis, agent-based modeling, and integrative science. Ph.D. required.

The successful candidate will have the opportunity to work with an emergent group of scholars from several universities who are concerned with the environmental, social, and economic implications of nanotechnology and nano-enabled products. Competitive salary and benefits will be offered, along with funding to attend conferences to deliver papers and interact with fellow researchers.

The position starts as early as January 2014. Interested applicants should send a cover letter, CV, the names of three references, and at least one published manuscript to Professor Thomas L. Theis, Director (theist@uic.edu).

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**Faculty Position in Environmental Engineering**

*University of Nevada, Reno, Department of Civil and Environmental Engineering*

The Department of Civil and Environmental Engineering at the University of Nevada, Reno invites applications for a tenured faculty position in the area of environmental engineering. The position is expected to be filled at either the full or associate professor level with a start date of July 1, 2014. Candidates must have a Ph.D. in environmental engineering, civil engineering, or a closely related field of study.

The selected candidate must have a strong research background in environmental engineering and have demonstrated leadership ability with proven interpersonal skills. In accordance with the University’s mission as a land grant institution, the candidate is expected to continue a sustained and dynamic externally funded research program, to supervise Ph.D. and M.S. students, to teach undergraduate and graduate courses, and to participate in university and professional service and outreach. To be considered for the rank of full professor, applicants must have an exceptional research record and be widely considered as a distinguished scholar and teacher, while for the rank of associate professor, applicants must have a documented record of funded, quality research, and excellent teaching.

Applicants should submit their curriculum vitae, statement of research interest, teaching philosophy, and contact information for five references electronically at: https://www.unrsearch.com/postings/12960. Application materials will be held in the strictest confidence. All other inquiries may be directed to Prof. Ahmad Itani (itani@unr.edu), Department Chair. Full consideration will be given to all applications received by November 15, 2013.

Further information about the Department of Civil and Environmental Engineering may be found at: www.unr.edu/cee/. Reno is located in the scenic Eastern Sierra region, with a wide variety of world-class outdoor recreation opportunities nearby. These include the Lake Tahoe watershed, with exceptional skiing, snowboarding, sailing, mountain biking, kayaking, rock climbing, and hiking trails such as the 165-mile Tahoe Rim Trail, Pacific Crest Trail, and the Truckee River system from Lake Tahoe through downtown Reno.
The widely-used textbook *MWH’s Water Treatment: Principles and Design* has been updated as a third edition. The authors are John Crittenden of Georgia Tech, Rhodes Trussell of Trussell Technologies, David Hand of Michigan Tech, Kerry Howe of University of New Mexico, and George Tchobanoglous of the University of California at Davis. The 3rd edition has a number of important improvements, including a new chapter on advanced oxidation; an expanded chapter on adsorption to provide additional detail on competitive adsorption, kinetics, and modeling of both fixed-bed and flow-through adsorption systems; a new section on enhanced coagulation; a new section on pharmaceuticals and personal care products; and updated material on advanced treatment technologies such as membrane filtration, reverse osmosis, and side-stream reactors for ozone addition. In addition, the book now contains a table of important nomenclature at the beginning of each chapter to provide a resource for students and practitioners learning the vocabulary of water treatment.

While updating the MWH book, the authors also produced an abridged version called *Principles of Water Treatment*. Principles of Water Treatment contains information on all the same unit processes as the MWH book, but is only 650 pages long compared to 1900 pages for the MWH book and is focused more on principles and less on design. Kerry Howe is the lead author for the shorter book. The shorter length makes it ideal as a classroom text when specific topics and readings are assigned for individual lectures. Each chapter of this book contains a section on sustainability and energy considerations for treatment processes and an end-of-chapter summary and study guide, features that are not present in the larger book. Both books were published in 2012 and are ideal as textbooks for upper-division undergraduate or graduate courses in water treatment, and the larger book is also a valuable reference for practicing professionals.

**A&WMA Award Announcements**

Submitted by GEORGE SORIAL (UNIVERSITY OF CINCINNATI)

**A&WMA MS Thesis and PhD Dissertation Awards**

Air and Waste Management Association acknowledges up to two exceptional Masters Thesis and up to two exceptional Doctoral Dissertations each year. Nominations should be made by the student’s faculty advisors, who are members of A&WMA, only. Works nominated shall be original work that makes an unusually significant contribution to the fields of air quality, all types of waste, or sustainability/management pertaining to air quality or waste. 2013 awards will be presented at the student awards ceremony during the Annual Conference & Exhibition in Long Beach, California June 24-27, 2014. Nominations for the Thesis and Dissertation Awards will be accepted in mid-September 2013 at the A&WMA Website (www.awma.org/Public/) and are due by Monday, January 13, 2014.

**Nominations for the A&WMA Education Council Award to the “2014 Exceptional Education Contributor”**

The award recognizes exceptional long-term and innovative educational contributions to A&WMA. Nominations are encouraged for individuals from all backgrounds who have contributed to A&WMA’s educational mission as implemented through its Education Council. Select examples of exceptional educational contributions include:

- Development of scholarships for students, education outreach, professional development for underrepresented groups, development of K-12 environmental education modules, and leading major educational initiatives. Criteria used to evaluate the nominations are:
  - A&WMA leadership positions with educational responsibilities (40%)
  - Specific initiatives and/or contributions that have supported A&WMA’s educational mission (60%)

One exceptional candidate per year will be selected for this award. An Education Council committee will review the nominations and provide recommendations each year to the Education Council. The recipient will be recognized and given a plaque at the Student Awards Ceremony of A&WMA’s Annual Conference and Exhibition (Long Beach, California June 24-27, 2014).

Please submit electronic nominations that include the candidate’s contact information, professional background, and contributions pertaining to the two award criteria cited above. Self-nominations are also encouraged. Please submit a nomination that is no more than 2 pages long with 11 point font. Include up to 3 letters of support that are no more than 1 page each. Nominations should be submitted to Robin Lebovitz (rlebovitz@awma.org) by January 10, 2014.
Want to . . .

• enhance your resume?
• get in front of potential employers?
• share your knowledge?
• become an ACE Presenter by submitting an abstract for ACE14?

ACE14 Call for Papers opens June 17, 2013
Submittal deadline is October 17, 2013

Use AWWA’s online service to submit your abstract.
www.awwa.org/conferences-education/presenter-resources/call-for-papers.aspx

You’ll need the following information to create your online submission:

• Paper Title (128 Characters max.).
• Categories (1 Young Professionals Track, 3 University Forum Tracks (24 speaking opportunities open)).
• Abstract (3,000 Characters max.).
• Corresponding Author (one only), including position, company, address, phone, fax, and email address.
• If the abstract is associated with a project, please indicate the date the project was/will be completed.
• Has the work been published, or will it be published or presented by June 2014? If so, when and where?
• Has the abstract been submitted to AWWA under the general call for papers for ACE14, and if it has, which topic?
• Young Professionals are defined as individuals under 35 years old and/or with less than 10 years of service in the water industry.
• Students are defined as persons taking at least a nine-hour course load.

Be sure to share this opportunity with your peers!

American Water Works Association

awwa.org
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