AEESP Newsletter

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Highlights

Need to renew your 2016 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 September 2016

President's Letter

by GREG CHARACKLIS
University of North Carolina at Chapel Hill

Dear AEESP Members:

I hope the spring semester ended well and that everyone is poised for at least a little relaxation between now and the fall. Summer has also brought an end to a year-long NSF-AEESP initiative to "Redefine Environmental Engineering and Science in the 21st Century". This effort began with the Grand Challenges workshop at the Yale AEESP meeting last June and continued through a series of three national workshops, the last of which was held May 19-20 at Virginia Tech's Arlington (VA) campus. Response to this east coast workshop was, as with the California and Texas events that preceded it, quite enthusiastic, as registration for the three workshops climbed to nearly 250 people (not counting the 200+ participants at Yale). Overall, a sizeable portion of the current AEESP membership took the time to contribute to the workshops, a sign of an active and engaged community that was enhanced by the insightful talks and spirited discussions that took place at all three venues. I would like to thank my fellow organizers, Peter Vikesland from Virginia Tech and Amy Childress from USC, for all the time and effort they contributed to help bring these workshops together. I would also like to thank Bill Cooper at NSF for his energetic support, both financial and otherwise. I don't think any of us fully understood what we were taking on when we first committed to this initiative, but the strong response from AEESP members has made it all worthwhile.

Now that the workshops have concluded, I've had some time to think about the important insights that might be gleaned from them. There were many good points made in the talks, discussions and breakout groups, all of which will be detailed in a forthcoming report to NSF, but I also felt there were some general observations that should be shared with those of you that were unable to attend.

The first of these is that the context within which environmental engineers and scientists operate is changing - and we know it. Surveys conducted at all three workshops were very consistent in showing that participants viewed environmental challenges related to climate change, energy and developing country issues as the highest research priorities for our community. Meanwhile, separate surveys asking participants which challenges currently receive the most attention within their programs, in terms of both research and teaching, showed a strong bias toward more traditional topics related to drinking water and wastewater issues in the developed world. While not a perfect comparison, these results strongly hint at a mismatch between where we believe the field needs to be in the future, and where we are now, one that we will need to actively address as we move forward.

Second, there is a strong desire on the part of our junior faculty, particularly our assistant professors, to figure out how environmental engineering and science should evolve in the coming decades. Junior faculty easily outnumbered full professors among workshop participants, which should not be surprising given that they likely have the most at stake; nonetheless, it was very encouraging to see them turn out in such numbers and participate so actively. The energy they displayed during the workshops, as well as their willingness to think creatively about the future, provide strong reasons to be optimistic regarding the ability of our discipline to adapt and thrive in the years to come.

Third, despite our collective awareness of the need for change and the enthusiasm of many, particularly our younger faculty, to contribute to these changes, we do not yet know how to effect these changes. Workshop participants described many incentives for change related to issues such as increased/broader research funding, greater societal impact and attracting the best students, but also cited a number of challenges related to

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President's Letter

continued from page 1

institutional inertia and curricular constraints, among others. Furthermore, during the final workshop, each participant was asked to describe what actions the funding agencies, AEESP and they themselves should be prepared to take in order to bring about change (the latter provided some entertaining responses), but there was certainly no consensus nor anything that might be construed as a plan for moving forward. Clearly, there is still work to do.

Fortunately, this is not the end of this introspective effort, as the momentum built over the past year will now be directed toward a new Committee on Grand Challenges in Environmental Engineering being formed by the NRC's Water Science and Technology Board. I am confident that the Committee will be able to use the results of these workshops as input for their deliberations as they seek to develop a roadmap for successfully guiding our community into the future — one in which we can continue to prosper by contributing to solving the world's most pressing environmental challenges.

As for me, I am about to begin the transition to Past-President, leaving AEESP in the very capable hands of President-elect Peter Vikesland and the other talented members of the AEESP Board. It has been a pleasure to serve the membership over the past four years as both President and Board member, and I hope to have contributed in some small way to the continued success of our profession. Best wishes to everyone for a healthy and productive summer. I hope to see you at an AEESP event sometime soon.

Greg

Interested in Participating on an AEESP Committee?

If you are not currently serving on a Committee of AEESP and have considered joining one, now is your opportunity to do so! Service on Committees is another benefit of AEESP membership and provides members with the ability to demonstrate leadership and advance many of the important activities of the organization.

Committee members serve 3-year terms, with incoming members beginning terms on July 1st. Now is your chance to take the next step within your membership and join an AEESP Committee! Joining is easy. Simply visit AEESP's Committee webpage at **www.aeesp.org/about/committees** for a list of all the Committees of this organization, along with a link to an online application.

Due to size limitations, Committee appointments will be made based on the number of vacancies available within your top three preferences. We look forward to your participation!

AEESP Journal Environmental Engineering Science Spotlight

DOMENICO GRASSO (EES Editor-in-Chief), CATHERINE A. PETERS (EES Deputy Editor), and SUSAN MASTEN (Chair, AEESP Publications Committee)

This "Spotlight" draws attention to selected articles in *Environmental Engineering Science,* the official journal of the Association of Environmental Engineering and Science Professors (AEESP). This is the second piece in a column that now appears regularly in the AEESP newsletter, as well as in the journal as an Editor's Note. Through publication of high-quality research, the EES journal helps AEESP achieve its mission of developing and disseminating knowledge in environmental engineering and science. In this entry, we shine the spotlight on articles from the December 2015 issue through the March 2016 issue of EES. Congratulations to all whose work is being highlighted.

Weber-Shirk M.L. and Lion L.W. (Cornell University) "Fractal Models for Floc Density, Sedimentation Velocity, and Floc Volume Fraction for High Peclet Number Reactors" *Environmental Engineering Science*. 2015, 32(12): 978-982. Weber-Shirk and Lion developed fractal models of floc properties in hydraulic flocculators, a water treatment approach with a low carbon footprint. Combining theoretical analysis with published data, they determined the fractal dimension as well as the particle size at which application of fractal geometry to aggregates is appropriate.

Kim B., Miller J.H., Monsegue N., Levard C., Hong Y., Hull M.S., Murayama M., Brown G.E. Jr., Vikesland P.J., Knocke W.R., Pruden A., and Hochella M.F. Jr. (Temple University) "Silver Sulfidation in Thermophilic Anaerobic Digesters and Effects on Antibiotic Resistance Genes" *Environmental Engineering Science.* 2016, 33(1): 1-10. Kim et al. studied silver nanoparticles (AgNPs) in wastewater and used TEM and EXAFS to characterize silver sulfidation products resulting from thermophilic anaerobic digestion. Their measurements of digester performance led to the important conclusion that sulfide-rich anaerobic environments, like digesters, have the capacity to mitigate the biological effects of Ag nanoparticles.

Alvarez-Corena J.R., Bergendahl J.A., and Hart F.L. (Worcester Polytechnic Institute) "Photocatalytic Oxidation of Five Contaminants of Emerging Concern by UV/TiO2: Identification of Intermediates and Degradation Pathways" Environmental Engineering Science. 2016, 33(2): 140-147. These authors studied TiO2/UV photocatalytic degradation of complex chemical mixtures of emerging contaminants. Through identification of by-products and first-time reporting of several reaction pathways, they discovered the importance of gemfibrozil (GEM) for which the oxidation derivatives are especially reactive. Their work illustrates the importance of controlling reaction conditions to avoid accumulation of intermediates that may be even more toxic than the parent contaminants.

Yang B., Pignatello J.J., Qu D., and Xing B. (The Connecticut Agricultural Experiment Station) "Activation of Hydrogen Peroxide and Solid Peroxide Reagents by Phosphate Ion in Alkaline Solution" *Environmental Engineering Science.* 2016, 33(3): 193-199. Yang et al. are investigating the potential of hydrogen peroxide and solid peroxides for decomposition of organic chemical pollutants in water, with a focus on the activation mechanism. In this paper, they report novel findings of the significant activation potential of alkaline phosphate and its capacity to accelerate organic chemical decomposition.

Highlights of the AEESP Board of Directors Spring 2016 Meeting

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

The AEESP Board of Directors met on February 4 and 5 at the University of North Carolina at Chapel Hill. The Board was joined by Brian Schorr, AEESP's manager of business operations from Technology Transition Corporation (TTC). The following is a summary of highlights from the meeting.

Awards: In evaluating AEESP's portfolio of awards and endowed awards, the board voted to keep the AEESP Award for Outstanding Teaching in Environmental Engineering & Science, the AEESP Outstanding Publication Award, and the AEESP Award for Outstanding Contribution to Environmental Engineering & Science Education as AEESP signature awards. As such, these awards will not be renamed. The board discussed a strong desire to have these awards endowed and values having the awards that reflect the three pillars of a faculty member's activities (teaching, research, and service) be named solely in AEESP. Future requests to propose new awards will be considered by the board through a formal application process.

Business office: As AEESP is settling in with TTC as the new administrator, we are fine tuning the level of service and fees to best match our needs. The level of service will remain but our fees will increase slightly to match the level of effort by TTC. The board will evaluate if membership fees are set at an appropriate level.

Student Video Competition: The board authorized the release of the video winners. Check out all of the great videos at: https://aeesp.org/news/2015-16-aeesp-student-video-competition-announcement-winners and the AEESP Youtube page.

NSF workshops: Redefining Environmental Engineering: Greg Characklis, Peter Vikesland, and Amy Childress along with local organizers have had workshops at USC, Rice, and VA Tech's campus near NSF, each with more than 70 registrants. Presentation slides from workshops are available online under the workshop tab on AEESP's website.

Committees: After an update on the many committee activities run by great AEESP volunteers, the board discussed whether AEESP is providing enough support to different committees, particularly during transition of committee chairs. Similarly, the board discussed whether AEESP is doing enough for members or if there are other activities that AEESP could/should provide.

The next meeting of the AEESP Board of Directors will be held in the fall. At that meeting, the Board will be joined by new members. These new board members are elected to the board in the Spring 2016 election. Thanks to all of the Board of Directors candidates for their willingness to support AEESP!

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AEESP 2016-2017 Distinguished Lecturer Announcement

The AEESP Lecturers Committee is proud to announce the selection of the 2016-2017 Distinguished Lecturer:

Professor Menachem (Meny) Elimelech, Ph.D., NAE
Department of Chemical and Environmental Engineering
Yale University

Lecture Tour Dates: September 2016 through April 2017

Expenses: Please note that all expenses associated with the lecture tour are paid by the AEESP Foundation and host schools must agree to pay a flat fee of $1,200 (U.S. and Canadian schools) or $1,500 (international schools) to the Foundation in order to be placed on the lecture schedule. Failure to pay the lecture fee will preclude your institution from further participation as a host school until any outstanding invoices are paid.

About Professor Elimelech: Menachem (Meny) Elimelech is the Roberto Goizueta Professor at the Department of Chemical and Environmental Engineering at Yale University. Professor Elimelech received his BS and MS degrees from Hebrew University in Israel and PhD from Johns Hopkins University in 1989. His research is in the area of physicochemical and membrane processes at the water-energy nexus. Professor Elimelech has received numerous awards in recognition of his research and mentoring. Notable among these are his election to the National Academy of Engineering in 2006, the Eni Prize for 'Protection of the Environment' in 2015, and the Clarke Prize in 2005. Webpage: http://www.yale.edu/env/elimelech/bio.html

Professor Elimelech will present two lectures in the 2016-2017 Tour

LECTURE 1:

The Global Challenge for Water Supply: Is Seawater Desalination a Sustainable Solution?

Water scarcity is one of the greatest global crises that we currently face. In recent years, numerous large-scale seawater desalination plants have been built in water-scarce countries to augment available water resources, and construction of new desalination plants is expected to increase significantly in the near future. Despite the major advancements in reverse osmosis desalination technology, the production of freshwater by seawater desalination is still more energy-intensive than conventional technologies for the treatment of freshwater sources. Furthermore, there are concerns about the environmental impacts of desalination and uncertainty about the potential effects on the marine environment. This presentation will review the energy efficiency, the state of the technology, and the environmental challenges of seawater desalination. A discussion will be presented on the possible reductions in energy demand by state-of-the art seawater desalination technologies; the potential role of advanced materials and innovative technologies in improving energy use, reliability, and environmental impact of seawater desalination; and the sustainability of desalination as a technological solution to global water shortages.

LECTURE 2:

High-Performance Membranes for Energy-Efficient Desalination and Wastewater Reuse

Water scarcity is one of the greatest global crises of our time. Increasing water supply beyond what is obtainable from the hydrological cycle can be achieved by seawater desalination and wastewater reuse. Highly effective, low-cost, robust technologies for desalination and wastewater reuse are needed, with minimal impact on the environment. Recent advances in the science and technology of desalination and wastewater reuse will be presented, focusing on membrane-based processes. Major developments in these technologies are possible due to recent advances in materials science, nanotechnology, and the fundamental understanding of the solid-water interface. In this presentation, we will show how we can exploit novel nanomaterial and polymer architectures to develop better approaches to design and fabricate membranes. By integrating the facile processability, light-weight, and low-cost features of organic polymers with functionality provided by inorganic nanostructures, we can develop a new membrane materials platform with applications in desalination and wastewater reuse. Among the examples that will be discussed in this presentation are the development of antifouling membranes, biofouling-resistant membranes, and next-generation membranes that overcome inherent limitations of existing technologies.

Faculty Appointments

Treavor Boyer Joins the School of Sustainable Engineering and the Built Environment at Arizona State University

Dr. Treavor Boyer will join the School of Sustainable Engineering and the Built Environment (SSEBE) at Arizona State University (ASU) as an Associate Professor in July 2016. He will also have an appointment as the Program Chair of the new Environmental Engineering program that is being created. Before joining ASU, he was an Associate Professor in the Department of Environmental Engineering Sciences at the University of Florida. Dr. Boyer received his B.S. in Chemical Engineering (2002) from the University of Florida, and his M.S. in Environmental Engineering (2004) and Ph.D. in Environmental Engineering (2008) from the University of North Carolina at Chapel Hill. Dr. Boyer's research is broadly focused on water sustainability, and spans drinking water and wastewater treatment, and natural aquatic systems. Specifically, his research takes a systems thinking approach to water quality and treatment that considers global drivers such as urbanization, climate change, biogeochemical cycles, sustainable engineering, and disruptive innovation. Examples of recent research projects include innovative ion exchange treatment and regeneration for small drinking water systems, urine source separation as an alternative approach for nutrient recovery and pharmaceutical removal from wastewater, and impacts of sea-level rise and saltwater intrusion on drinking water treatment and disinfection. Dr. Boyer is the recipient of an NSF CAREER award and has been recognized for his commitment to teaching and mentoring by several departmental awards at the University of Florida.

Kimberly Parker to Join Washington University in St. Louis

Dr. Kimberly Parker will join the Department of Energy, Environmental, and Chemical Engineering at Washington University in St. Louis in January 2018. Her appointment continues the growth of the department's research on engineered aquatic processes.

Dr. Parker's research investigates the environmental chemistry of biomolecules and macromolecules and their function in environmental systems. In her doctoral research she applied laboratory, field, and computational techniques to advance our understanding of photochemical reactions in coastal waters and the environmental impacts of oil and gas-associated wastewaters. Dr. Parker is an active international environmental researcher, having served as the lead on an Engineers Without Borders project as an undergraduate and worked as a visiting researcher at the University of Western Australia during her doctoral studies. Dr. Parker has been a recipient of a National Science Foundation Graduate Research Fellowship, Environmental Protection Agency STAR Fellowship, and the Abel Wolman Fellowship of the American Water Works Association. In addition to her research, she is currently the president of the Stanford Chapter of the American Society for Engineering Education and received the Gerald J. Lieberman Fellowship for contributions to teaching at Stanford.

Dr. Parker defended her Ph.D. in Environmental Engineering & Science at Stanford University in May. She has her M.S. from Yale University and B.S. from the University of Illinois at Urbana-Champaign. Before joining Washington University in St. Louis, Dr. Parker will be supported by a Marie Curie Fellowship while conducting postdoctoral research at ETH Zurich.

David Hanigan will join the Department of Civil and Environmental Engineering at University of Nevada, Reno

The Department of Civil and Environmental Engineering at University of Nevada, Reno welcomes **Dr. David Hanigan** who will join as an Assistant Professor beginning Fall, 2016. Dr. Hanigan obtained a PhD in Environmental Engineering from Arizona State University in 2015 and holds a MS and BS in Civil Engineering from the University of Missouri. Dr. Hanigan was a post-doctoral associate at Arizona State University after completing his PhD and he focused on comparing the tradeoffs and environmental impacts of nanomaterials that have phased out organic chemicals (e.g. sunscreens). His dissertation focused on identifying anthropogenic precursors to N-nitrosodimethylamine, a carcinogen that occurs in drinking water as a by-product of disinfection. His recent work was featured in ACS Chemical and Engineering News, PBS Newshour, and several other news outlets.

While studying towards his PhD, Dr. Hanigan received the prestigious AWWA Abel Wolman and WEF Canham Fellowships, and the ACS Graduate Student Award in Environmental Chemistry. He is a member of AWWA, WEF, WaterReuse Association, ACS, and AEESP. Dr. Hanigan has recently passed the Professional Engineering (Environmental Engineering) exam. His expertise is in physical-chemical water treatment processes and environmental chemistry and he aspires to use these tools to reduce the occurrence of and exposure to anthropogenic environmental contaminants. His current interests are in direct and indirect potable reuse, point-of-use treatment, hydraulic fracturing issues, and greenhouse gas capture.

Drs. Lauren Sassoubre and Nirupam Aich recently joined the Department of Civil, Structural and Environmental Engineering at University at Buffalo

Dr. Lauren Sassoubre joined the Department of Civil, Structural and Environmental Engineering at University at Buffalo (SUNY) in January 2016. Dr. Sassoubre received her PhD in Civil and Environmental Engineering at Stanford University in 2014. Working with her advisor Dr. Alexandria Boehm, she studied the effect of sunlight on sewage-associated bacteria in marine waters to better understand and inform human health risks associated with coastal

microbial pollution. After receiving her PhD, Sassoubre worked as a postdoctoral fellow in the Civil and Environmental Engineering Department and as an Early Career Fellow at the Center for Ocean Solutions at Stanford University. Her postdoctoral research focused on applying molecular techniques to monitor marine fish by their DNA. At UB, Dr. Sassoubre will be ideally located in the Great Lakes region. Sassoubre's research will focus on applying molecular techniques to (1) determine the sources, transport and fate of microbial pollution into coastal waters and (2) improve molecular-based monitoring efforts for economically and environmentally important aquatic organisms. Her research will apply both traditional and novel techniques to address environmental issues in coastal waters with the goal of protecting human and ecosystem health.

Dr. Nirupam Aich joined the Department of Civil, Structural and Environmental Engineering at the University at Buffalo (UB) as an Assistant Professor in January 2016. Nirupam received his Bachelor's degree in Chemical Engineering (2009) from Bangladesh University of Engineering and Technology (BUET) in Dhaka, Bangladesh. Following that, he earned an M.S. in Environmental Engineering (2012) from the University of South Carolina (USC) under the supervision of Dr. Navid Saleh. As part of his M.S. research, he developed new characterization techniques for nano-reinforced building materials and smart structural health monitoring systems. He continued to pursue a Ph.D. in Environmental and Water Resources Engineering with Dr. Saleh at the University of Texas at Austin, completing in December 2015. Dr. Aich's Ph.D. dissertation focused on understanding the environmental fate and toxicity of hierarchical nanostructures including higher order fullerenes and complex multicomponent carbon-metallic nanohybrids. During his graduate studies, he received an Environmental Chemistry Graduate Student Award from the American Chemical Society (ACS) and a Sustainable Nanotechnology Organization (SNO) Student Award. At UB, Dr. Aich will pursue the green synthesis of novel nanomaterials for applications at the food-energy-water nexus, including low-cost water treatment. In addition, his work will examine the human and environmental health and safety of complex nanomaterials and nano-enabled products.

Online Academic Job Application Review Program for Graduate Students and Postdoctoral Researchers

Submitted by
RANDI BRAZEAU, Metropolitan State University of Denver on behalf of the Student Services Committee

The AEESP Student Services Committee is pleased to announce this year's Academic Job Application Review Program to take place in Summer 2016. The Program will link student and postdoctoral researchers who are interested in applying for academic jobs with faculty members who will provide individualized advice to strengthen academic job applications. Approximately 100 students and postdoctoral scholars benefited from this Program over the past three years. This year's Program will be conducted entirely online through email, phone, or teleconference correspondence. Student participants will interact with professors from different institutions to receive comments on their draft documents that comprise an application for a faculty position as well as to get perspectives on job expectations.

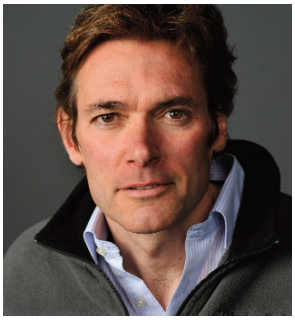
At this time, the Committee is opening registration to graduate students and postdoctoral researchers and soliciting faculty members to serve as volunteer Reviewers. Program registration is limited to 40 participants with application packages. All interested students, postdocs, and Reviewers are asked to email the Committee (ssc.ajar@gmail.com) by July 1, 2016 in order to register for the Program. Please indicate in your email if you plan on applying to research institutions or primarily undergraduate/teaching institutions as we hope to customize the reviews this year by institution type. Application packages will be due July 28, and reviews will take place during August.

Glenn Morrison Awarded Otto Mønsted Guest Professorship

Dr. Glenn Morrison, professor of environmental engineering at Missouri University of Science and Technology, was recently awarded the Otto Mønsted Guest Professor at the Technical University of Denmark (DTU), just north of Copenhagen. The Otto Mønsted Foundation supports research and education in scientific and commercial disciplines that contribute to the development of Danish trade and industry. This fellowship supports his work and time in Denmark for three months.

While at DTU, Morrison is studying the way that toxicants and endocrine disruptors present in indoor air movement through our skin into our bodies. Morrison would like to determine how much our built environment contributes to the "body burden" of these chemicals. Specifically, he believes that transfer from air-to-clothing-to-skin-to-blood is one of the most important routes. The Indoor Climate and Building Physics group at DTU has a large number of climate controlled chambers that are uniquely suited to the kinds of human subject studies necessary to understand the phenomenon. Morrison currently serves as President of International Society of Indoor Air Quality and Climate (ISIAQ) and is Interim director of the Environmental Research Center on the Missouri S&T campus.

Marc Edwards Named One of Time Magazine's 100 Most Influential People



Marc Edwards, the Charles Lunsford Professor of Civil Engineering at Virginia Tech, was recently named one of Time Magazine's 100 Most Influential People in recognition of his work to protect the people of Flint, Michigan from high concentrations of lead in their drinking water. Through Marc's leadership the Virginia Tech based Flint Water Study (flintwaterstudy.org), an interdisciplinary team of graduate and undergraduate students and faculty, worked with citizen scientists and Flint based health practitioners to definitively show that the absence of proper corrosion control led to dangerously high levels of lead in the residents' tap water. Through the collective efforts of Dr. Edwards, the Flint Water Study team, and local residents the threat was exposed and steps to address the damage are currently underway.

Marc is well known within the AEESP community – having served both as President of the organization and as a member of its Board of Directors. Furthermore, Marc is known the world over for his expertise in the study of the corrosion of drinking water pipe networks and his work has led to him being described as 'The Plumbing Professor' by Time Magazine in 2004, the award of a MacArthur Foundation 'Genius Award' in 2008, and a citation by Fortune Magazine as one of the World's 50 Greatest Leaders in 2016. Marc – you make all of us in AEESP, the current and former members of the AEESP Board of Directors, and at Virginia Tech proud to have you as a colleague.

Mark Rood Becomes AEESP Fellow

Mark J. Rood, Ph.D., BCEEM is the Ivan Racheff Professor of Environmental Engineering at University of Illinois at Urbana-Champaign. Mark's service to AEESP was started by his development and implementation of its membership directory to include expertise areas (1990-1994). This directory was distributed to AEESP members as hard-copies until it was provided online. Professor Rood was also the Treasurer and member of AEESP's Executive Board (1993-1995) and received an AEESP distinguished service award (1995) while an AEESP member since 1987. Improvement of AEESP's institutional memory was provided by Mark by developing "What AEESP's Treasurer Needs to Do" document for future treasurers. Mark actively participated with the hiring and guiding of AEESP's first business manager and initiated the development of electronic bookkeeping for AEESP. Mark also implemented the AEESP-AWMA Meet and Greet at AWMA annual meetings, which continues today, to improve collaboration between AEESP and other professional service organizations. Seven of Mark's PhD advisees have become members of AEESP. Professor Rood also actively contributes to International AWMA, ASTM International, NSF, DOD, and USEPA.

AEESP LECTURERS COMMITTEE: UPCOMING EVENTS

The AEESP Lecturers Committee has been hard at work this year and is coordinating the following upcoming lectures – Hope to see you there!

AEESP Lecture at AWWA ACE 2016

McCormick Place West, Chicago, Illinois,
Sponsored by Black & Veatch

Monday, June 20, 2016. 11:30–12:15 PM

Dr. Paul Westerhoff
Senior Sustainability Scientist, Julie Ann Wrigley Global Institute of Sustainability

Vice Provost for Academic Research Programming, Office of the University Provost

Professor, School of Sustainable Engineering and the Built Environment, Ira A. Fulton Schools of Engineering, Arizona State University

"Trends, Challenges, and Opportunities for Granular Activated Carbon to Remove Regulated and Emerging DBPs"

Contact: Detlef Knappe (knappe@ncsu.edu)

AEESP-AAEES-A&WMA Meet and Greet Lecture and Breakfast

Air & Waste Management Association's 109th Conference and Exhibition
Hyatt Regency, New Orleans, LA
Tuesday, June 21, 2016. 8:00 - 9:00 AM

Dr. John H. Pardue
Elizabeth Howell Stewart Professor, Department of Civil and Environmental Engineering

Director of the Hazardous Substance Research Center Louisiana State University

"The Bioremediation Option for Contaminated Sites: Moving from Laboratory Experience to Field Results"

Contact: David Ramirez (david.ramirez@tamuk.edu)

WEF/AEESP Scientists Luncheon (Lunch purchase required)

WEFTEC, New Orleans
Monday, September 27, 2016. 12:00 – 1:30 PM
Room 260

Dr. Bruce Rittmann, Ph.D.
Regent's Professor

School of Sustainable Engineering and the Build Environment Arizona State University

"From Treatment to Resource"

Contact: Ramesh Goel (ram.goel@utah.edu)

20th Annual WEF/AEESP Lecture and Utility Considerations

Monday, September 27, 2016. 10:30 AM - 12:00 Noon
Session 101| Room 253

Dr. Sudhir Murthy
Chief Technology and Innovation Officer

D.C. Water, Washington DC

"TITLE: TBD"

Contact: Ramesh Goel (ram.goel@utah.edu)

AEESP-AAAR Plenary Lecture at AAAR

Oregon Convention Center, Portland OR
October 18-21, 2016
Lecture Date and Time TBD

Dr. Christine Wiedinmyer, Ph.D.
Scientist, Atmospheric Chemistry Observations & Modeling Laboratory

National Center for Atmospheric Research

"Fire Aerosols: Exceptionally Common"

Contact: Rob Griffin (rob.griffin@rice.edu)

HOLD THE DATE!

2017 AEESP Research and Education Conference, Ann Arbor, Michigan

The University of Michigan is leading a consortium of universities in the Great Lakes Region, all with significant affiliations to AEESP (Michigan State University, Michigan Technological University, the University of Notre Dame, the University of Toledo, and Wayne State University) to host the **2017 AEESP Research and Education Conference** in Ann Arbor, Michigan. In a diversion from the past and attempt to be more family-friendly, the 2017 meeting will begin with workshops on **Tuesday, June 20** and with the conference on **Wednesday and Thursday, June 21-22.** The theme of the conference is ***Advancing Healthy Communities through Environmental Engineering and Science.*** We will emphasize a transdisciplinary program that highlights our traditional disciplinary skills but in new ways and in collaboration with complimentary disciplines and tools, such as: systems analysis, public health, governance and policy, economics, and social sciences.

Recently lauded by Forbes as the "Best College City in America," Ann Arbor, Michigan provides a fun and vibrant setting for the 2017 AEESP Conference. The city is less than a half hour drive from the Detroit's major metropolitan airport, and is home to numerous award-winning restaurants and the beautiful, family-friendly campus of the University of Michigan, which will be celebrating its bicentennial in 2017.

An invitation to submit abstracts for the 2017 AEESP Conference will be issued in the fall of 2016 and will be **due January 9, 2017**, and a final conference program will be announced by late February 2017. One page preconference workshop proposals will be **due February 1, 2017** and successful workshops will be announced by early March 2017.

We look forward to seeing you in Ann Arbor next summer!

New and Forthcoming Books

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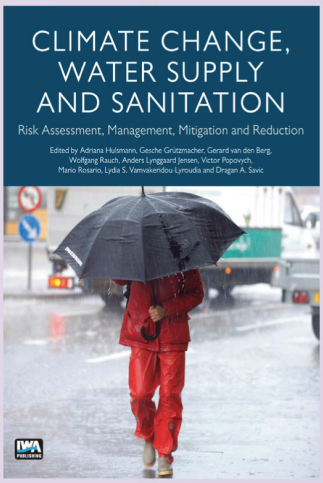

Climate Change, Water Supply and Sanitation: Risk Assessment, Management, Mitigation and Reduction

A. Hulsmann, G. Grützmacher, G. van den Berg, W. Rauch, A. Lynggaard Jensen, V. Popovych, M. Rosario, L. S. Vamvakeridou-Lyroudia & D. A. Savic

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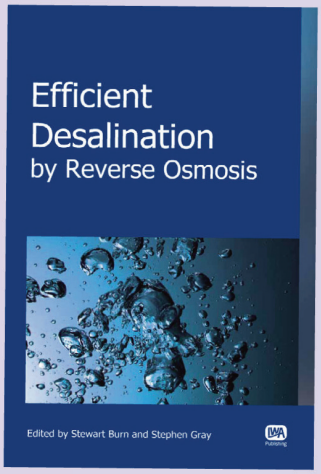

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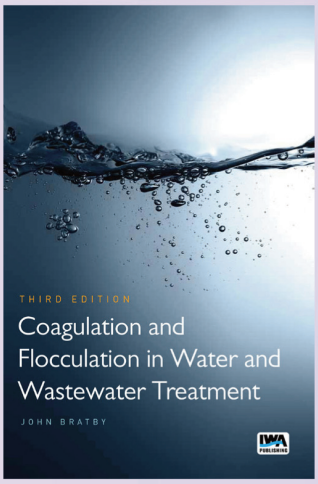

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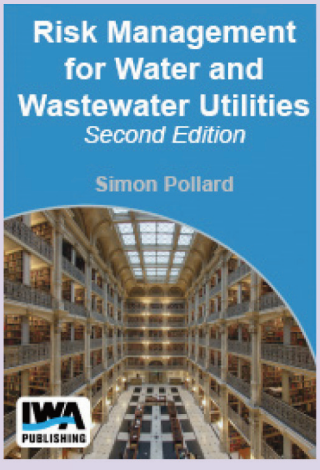

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