WORLD ENVIRONMENTAL & WATER RESOURCES CONGRESS 2016

West Palm Beach, Florida | Palm Beach Convention Center | May 22-26

AWARDS PROGRAM

The Environmental & Water Resources Institute (EWRI) of the American Society of Civil Engineers (ASCE) is proud to recognize the 2016 recipients of the Society's Career Achievement Awards and Paper Awards, and EWRI's Career Achievement, Service, and Paper Awards.

AWARD PRESENTATIONS WILL OCCUR AT THE FOLLOWING LUNCHEONS:

WELCOME LUNCHEON & VIF AWARDS
MONDAY, MAY 23 / 12:15 – 1:45 P.M.

ENVIRONMENTAL COUNCIL / WATER, WASTEWATER & STORMWATER LECTURE
TUESDAY, MAY 24 / 12:15 – 1:45 P.M.

HYDRAULICS & WATERWAYS COUNCIL LECTURE AND LUNCHEON
TUESDAY, MAY 24 / 12:15 – 1:45 P.M.

WATERSHED COUNCIL LECTURE AND LUNCHEON
WEDNESDAY, MAY 25 / 12:15 – 1:45 P.M.

IRRIGATION & DRAINAGE COUNCIL LECTURE AND LUNCHEON
WEDNESDAY, MAY 25 / 12:15 – 1:45 P.M.

STUDENT LUNCHEON
WEDNESDAY, MAY 25 / 12:15 – 1:45 P.M.

PLANNING & MANAGEMENT COUCIL LECTURE AND LUNCHEON
THURSDAY, MAY 26 / 12:15 – 1:45 P.M.

GROUNDWATER LECTURE COUNCIL AND LUNCHEON
THURSDAY, MAY 26 / 12:15 – 1:45 P.M.

CRITICAL INFRASTRUCTURE NEEDS: WATER AND THE ENVIRONMENT

2016 ASCE Walter L. Huber Civil Engineering Research Prize Winners

Awards will be presented at ASCE's 2016 Annual Convention in Portland, OR, September 29 – October 1, 2016

Dr. Claudia Gunsch, Ph.D., A.M.ASCE

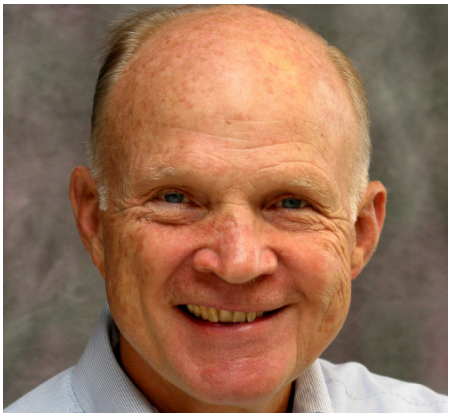
Dr. Claudia Gunsch began her academic career at Purdue University where she earned her B.S. in Civil Engineering in 1998. She then matriculated to Clemson University where she earned her M.S. in 2000 and immediately entered the doctoral program at the University of Texas at Austin. Gunsch's research has primarily focused on pollutant degradation as applied to groundwater and air pollution treatment. As part of her innovative research, she incorporates quantitative molecular biological techniques into her research to link macroscale vapor-phase bioreactor performance to phenomena occurring at the microscale in the biofilm. In addition to her research interests, she teaches basic and advanced classes in environmental engineering such as such as environmental molecular biotechnology, environmental microbiology and biological processes in environmental engineering.

Alexandria Boehm, Ph.D., A.M.ASCE

Alexandria Boehm's primary research areas are coastal water quality and sanitation. The work on coastal water quality is focused on understanding the sources, transformation, transport, and ecology of biocolloids - specifically fecal indicator organisms, pathogens, DNA markers for key marine species, and phytoplankton, as well as sources and fate of nitrogen and phosphorus. Alexandria's work on sanitation aims to develop microbial risk assessment models to gain a better understanding of how pathogens are transmitted to humans through their contact with water, feces, and contaminated surfaces. Her research is focused on key problems in developed and developing countries. The goal is to design and test effective interventions and technologies for reducing the burden of infectious disease.

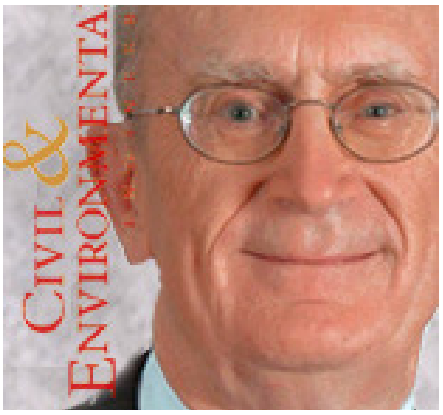
Monday, May 23 - Welcome Luncheon, Keynote Lecture, and Awards 12:15 – 1:45pm

EWRI Lifetime Achievement Award



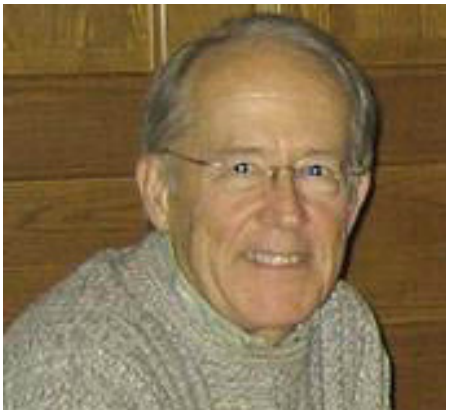
Neil Grigg, Ph.D., P.E.

Neil Grigg is a Professor of Civil and Environmental Engineering at Colorado State University, where he has also been department head and director of the state water institute. Prior to joining Colorado State, he was Assistant Secretary for Natural Resources and Director of the Division of Environmental Management for North Carolina, as well as director of the state water institute. He focuses on water and infrastructure systems in technical, political and financial arrangements. His recent books include Integrated Water Resources Management (Macmillan, October 2016 release); Water and Wastewater Workforce Planning, Design, and Action for Organizational Excellence (AWWA); Economics and Finance of Infrastructure and Natural Resources: A Guide for Engineers (ASCE); Infrastructure Finance: The Business of Infrastructure for a Sustainable Future and The Water Business: From the Global Environment to Your Tap (Wiley); Governance and Management for Sustainable Water Systems (IWA Press); and Water and Sewer Infrastructure Management (CRC Press). He is a graduate of the US Military Academy, Auburn University, and Colorado State University.



Gerald Galloway, P.E., Ph.D., D.M.ASCE

Dr. Gerald E. Galloway, Jr. is a Glenn L. Martin Institute Professor of Engineering, Department of Civil and Environmental Engineering and an Affiliate Professor, School of Public Policy, University of Maryland, College Park, Maryland, where his focus is on water resources policy and management. He is also a Visiting Scholar at the US Army Corps of Engineers Institute for Water Resources. He joined the faculty of the University of Maryland following a 38 year career in the U.S. Army, retiring as Brigadier General, and served eight additional years in the federal government, most of which was associated with water resources management. He served for three years as District Engineer for the USACE in Vicksburg, MS and later, for seven years as a Presidential appointee to the Mississippi River Commission.



George Pinder, Ph.D.,NAE, Hon.D.WRE, Dist. M. ASCE

George Pinder is a Professor of Civil and Environmental Engineering with a secondary appointment in Mathematics and Statistics at the University of Vermont. He also served as a professional witness in various notable environmental cases including Love Canal and Woburn, cases that achieved considerable media attention. He was featured as a character in the movie A Civil Action, based on the Woburn toxic waste case and starring John Travolta. Pinder was portrayed by British actor Stephen Fry. He and his wife Phyllis were also featured in the book on which the film is based. Pinder was elected Member of the National Academy of Engineering in 2010.

Service to the Institute Award

Daene McKinney, Ph.D.

Daene McKinney is an Associate Professor in the Environmental and Water Resources Engineering program of the Department of Civil Engineering at The University of Texas at Austin. He earned his Ph.D. in Civil Engineering with a major in Water Resources Engineering at Cornell University in 1990. Dr. McKinney held the position of Team Leader and Senior Environmental Policy Advisor for the USAID Environmental Policy and Institutions for Central Asia (EPIC) Program in Almaty, Kazakhstan from 1998-2000. He was responsible for the EPIC program implementation and USAID, regional and host country collaborations. Dr. McKinney has also worked for the US EPA as an environmental engineer and hydrogeologist. He has been Chair of the ASCE Water Resource Systems Committee, and a member of the Board of Directors and the International Committee of the Universities Council on Water Resources (UCOWR). Dr. McKinney's research interests include developing and applying numerical methods for simulation, optimization, and uncertainty analysis of water resources management problems, and the development of laboratory and field experimental techniques for the characterization and remediation of aquifer and groundwater contamination.

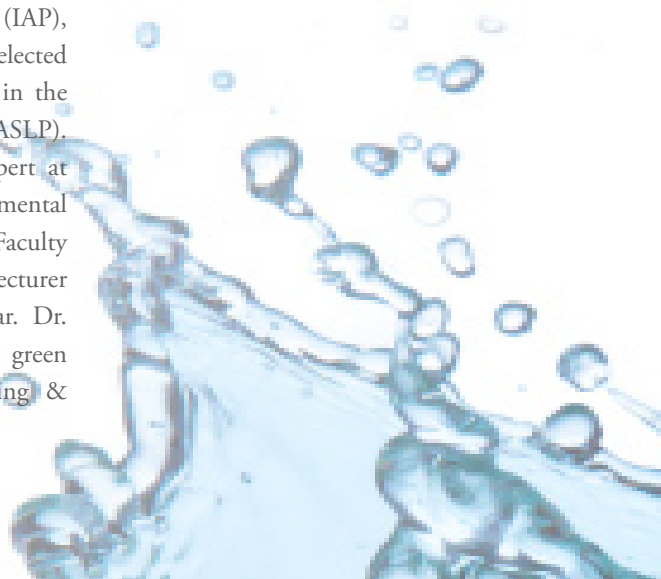
Visiting International Fellows Award

Mohamed El Zayat, Ph.D.

Dr. Mohamed El Zayat holds a Bachelor Degree in Civil Engineering from Cairo University and a Master Degree in Environmental engineering from the American University in Cairo. He has also earned his Ph.D. with a specialization in Environmental Engineering from the American University in Cairo. Dr. Zayat has published many researches in the field of Environmental Engineering especially in water and wastewater treatment . Dr. Zayat has been awarded from the American University in Cairo for his academic achievements. He has awarded as VIF in EWRI Congress 2016. He is an editorial board member of Austin Chemical Engineering Journal. He has also participated in a funded research project for Global Young Academy (GYA), International Academy Partnership (IAP), and Leopoldina. He has been selected as well by the GYA to participate in the Africa Science Leadership Program (ASLP). Currently he is Environmental Expert at INTEGAL-Consult for Environmental Solutions and he acts as Adjunct Faculty at Cairo University and a guest lecturer at Texas A&M University at Qatar. Dr. El Zayat is also a member in the green building committee of the Housing &

Ritesh Vijay, Ph.D.

I,Ritesh Vijay working as a Senior Scientist in Environmental Systems Design and Modeling Division of CSIR-National Environmental Engineering Research Institute (NEERI), Nagpur, India and faculty in AcSIR Academy, New Delhi, India. My area of research is application of resmote sensing and GIS in environmental science and engineering for Environmental Impact Assessment, Land Use Land Cover, assessment of pollution in water and development of GIS based environmental modelling tools and information systems. My research work has been published in various peer reviewed journals. I have published about 100 research papers, out of which 52 are in Journals.



Visiting International Fellows Award

Tonni Agustiono Kurniawan, Ph.D.

Dr. Tonni Kurniawan is an Associate Professor at the Xiamen University in the People's Republic of China. Kurniawan's research focuses on wastewater treatment and water purification, specifically the applications of water technologies to remove heavy metals from contaminated water. His work seeks to capture water directly from non-traditional sources such as municipal wastewater and restore it to near drinking water quality using low-cost absorbents to remove aquatic pollutants. Significant contribution to research and applied technology in the field of water treatment has earned him special recognition from scientific organizations. Recently, Kurniawan has been identified by the Institute for Scientific Information-Thompson Reuters among the top 1% of researchers in the field of engineering. He received his PhD from the Hong Kong Polytechnic University with a specialization in applied technology.

Saied Yousefi, Ph.D., PMP

Mr. Saied Yousefi, has more than 22 years of working experience, educational background, and academic studies in the management of megaprojects in the construction industry. He is formally an Assistant Professor of project management at the University of Tehran in Iran and also, a Faculty Team Member of the Conflict Analysis Group in the Department of Systems Design Engineering at the University of Waterloo in Ontario, Canada, where he received his MASc, PhD, and Postdoctoral between 2002 and 2010. Received his Project Management Professional (PMP) Designation from PMI Institute in the USA, Dr. Yousefi's major research interests are the development of project planning/control, negotiation, conflict resolution, and project management soft skills techniques from a systems thinking perspective with applications in water resources management, environmental engineering, and sustainable development. In addition to his academic endeavor, he has consulted and advised government organizations in water industry in Iran, particularly, the development, operation, and maintenance of hydropower projects. As a member of some international institutions, he is a Steering Committee Member of the international conference on water resources and environmental research. Dr. Yousefi is also the recipient of the prestigious award for the best paper in 2011 from the American Society of Civil Engineers (ASCE).

Tuesday, May 24 – Environmental Council Lecture & Water, Wastewater, and Stormwater Council Awards Luncheon 12:15 – 1:45pm

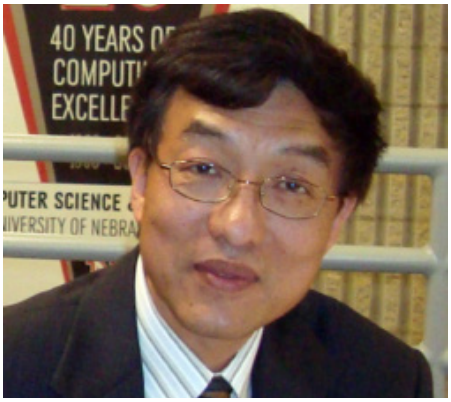
ASCE Rudolph Hering Medal

Meng Hu, Aff.M.ASCE *Lead Author

Meng Hu was recently awarded the Ann G. Wylie Dissertation Fellowship, a one-semester award to support outstanding doctoral students who are in the final stages of writing their dissertation. Advised by CEE Assistant Professor Baoxia Mi, Hu has focused his research on membrane technologies to promote the water-energy nexus. Most recently, he has worked on synthesizing next-generation high-performance graphene-based membranes for water purification, desalination and salinity-gradient power generation. The graphene-based membranes are found to outperform their commercial counterparts by a factor of four to 10, Hu noted. Additionally, this new type of membrane also presents fascinating transport mechanisms. Hu and Mi are filing a patent on their exciting research and looking for industrial partners to commercialize the technology to alleviate the water and energy crisis.

Tian Zhang, Ph.D., P.E., D.WRE, F.ASCE

Tian Zhang is a Professor at the College of Engineering at the University of Nebraska-Lincoln. He completed his undergraduate and post-graduate education in China before completing his doctorate degree at the University of Cincinnati in 1994. His areas of research include non-point source pollution control technologies, constructed wetlands for wastewater treatment, and biofilm processes for water and wastewater treatment. He was the 1999 recipient of the UNL College of Engineering Research Award and the 2011 recipient of the ASCE/EWRI State of the Art in Civil Engineering Award.w



You Zhou, Ph.D.

You Zhou began his career as an instructor at Louisiana State University from 1996-1998. He then moved on to the University of Nebraska-Lincoln where he became a Research Assistant Professor at the Center for Biotechnology and Veterinary & Biomedical Sciences. Within the same center, he became an Associate Professor until 2009. Zhou is currently a Research Professor at the University of Nebraska-Lincoln.

Standards Development Council Merit Award

S. David Graber, P.E., F.ASCE

For Completion of ANSI/ASCE/EWRI 45, 46, 47-2015 while serving as the Corresponding Editor during 2013-2015.

Darin Langerud

For Completion of ANSI/ASCE/EWRI 39-2015 while serving as the Chair of the Atmospheric Water Management Standards Committee and as the Corresponding Editor for standard guideline from 2012-2015.

ASCE Rudolph Hering Medal

Han Chen & Jill Neal (not pictured)

Han Chen and Jill Neal are the authors involved in the paper, "Contributions of Internal and External Fouling to Transmembrane Pressure in MBRs: Experiments and Modeling". In this nominated work, researchers investigated a novel approach to understanding membrane fouling in membrane bioreactors (MBR). The foulants were categorized into those inside the membrane (internal fouling) and those on the membrane forming an external fouling layer (external fouling). In addition, a mathematical model was developed to dynamically link TMP with the basic filtration parameters (e.g., porosities of the membrane and external fouling layer, thickness of the external fouling layer, pore size inside the membrane, and size of the particles forming the external fouling layer). The model quantitatively describes the contributions of both internal and external fouling and further supports the experimental results.

Environmental Council Awards

2016 Best Theoretical-Oriented Paper

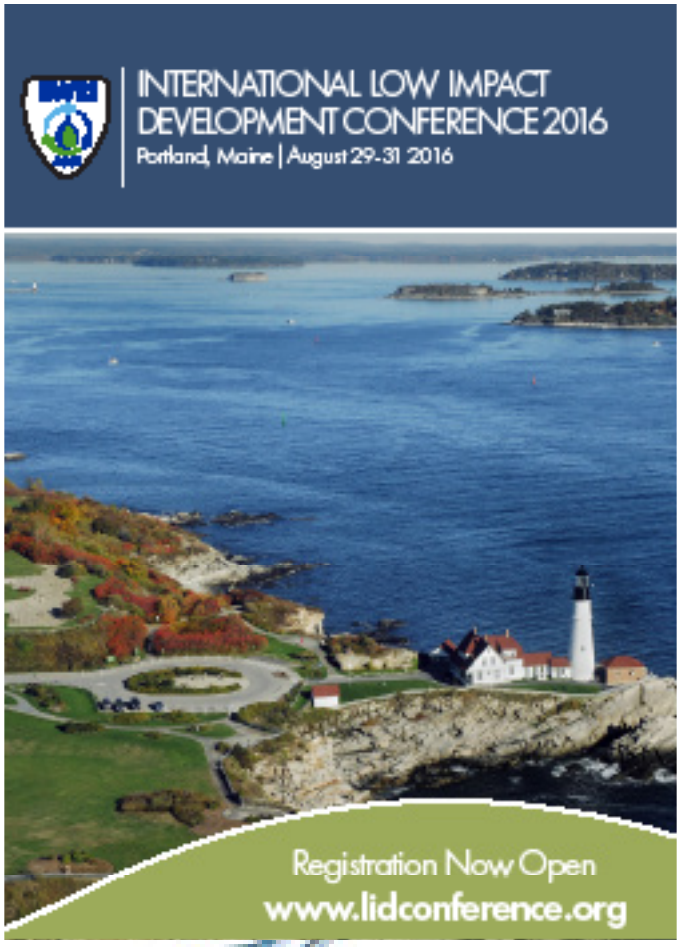
Zhu Jianting, P.Eng, M. ASCE

"Dissolution Dynamics and Temporal Variations of Groundwater Flux in the Subsurface Source Zone of Nonaqueous Phase Liquids"

2016 Best Practice-Oriented Paper

Morgan Bruno
Dusty R.V. Berggren
Christos D. Tsiamis
Michael R. Niemet
Jeff L. Gentry

"Gowanus Ganal Superfund Site. I: NAPL Mobility Testing of MGP-Impacted Sediments."



ASCE Samuel Arnold Greeley Award

James Stribling, Ph.D.

James Martin, Ph.D., P.E., D.WRE, F.ASCE

René Camacho, Ph.D., M.ASCE
*Lead Author

Michael Paul, Ph.D.

Not Pictured:

Brian Watson

Lei Zheng

"Modeling the Factors Controlling Phytoplankton in the St. Louis Bay Estuary, Mississippi and Evaluating Estuarine Responses to Nutrient Load Modifications".

James Stribling, James Martin, Brian Watson, René Camacho, Michael Paul, and Lei Zheng are contributing authors for the paper "Modeling the Factors Controlling Phytoplankton in the St. Louis Bay Estuary, Mississippi and Evaluating Estuarine Responses to Nutrient Load Modifications". In this selected work, researchers investigated the factors controlling phytoplankton productivity in a tributary estuary of the northern Gulf of Mexico, the St. Louis Bay estuary, Mississippi, and the system responses to nutrient load alterations are studied. For this purpose a coupled hydrodynamic and water quality model based on U.S. EPA computer models was implemented. The writers present an evaluation of the model predictive capacity, and its implementation to study the processes controlling phytoplankton dynamics, nutrient cycling, and oxygen availability. The results suggest that primary productivity is limited by nitrogen availability. Under current nutrient load conditions the concentrations of nitrogen fall below 0.025 mg/L, and the rates of primary productivity vary between 0.5 and 1.8 gO/m2/day with a mean of 0.65 g/m2/day. The simulation of four different nutrient load scenarios suggests a low sensitivity of the estuary to the evaluated conditions in the watershed. The results also indicate that the coupled model is a cost-effective strategy to investigate the impacts of different management strategies. At a regional scale, the implemented approach can contribute to the design of integrated strategies to reduce hypoxia and algal bloom problems in the Gulf of Mexico.

Expression of Appreciation Water, Wastewater & Stormwater Council

Jeff Glenn, PE, D.WRE, CFM, M.ASCE

Chittaranjan Ray, Ph.D., P.E., D.WRE, F.ASCE

ASCE Simon W. Freese Environmental Engineering Award Lecture

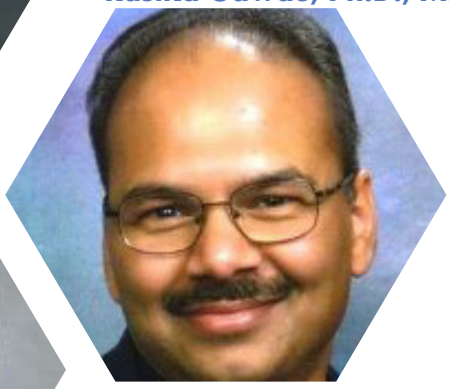
Dr. George Tchobanoglous, Ph.D., P.E., N.A.E., F. WEF, M.ASCE

Dr. George Tchobanoglous has made significant contributions to our professional society through his publication of 500 technical publications including 22 textbooks and 8 reference works. His books are well known for successfully bridging the gap between academia and the day-to-day world of the engineer. He has given more than 500 technical presentations, both in the United States and abroad. He is a Past President of the Association of Environmental Engineers and Science Professors. Among his many honors, in 2003 he received the Clarke Prize from the National Water Research Institute. In 2004, he received the Distinguished Service Award for Research and Education in Integrated Waste Management from the Waste-To-Energy Research and Technology Council. In 2004, he was also inducted into the National Academy of Engineering. In 2005, he was awarded an honorary Doctor of Engineering from the Colorado School of Mines. In 2007, he received the Frederick George Pohland Medal awarded by American Association of Engineering Educators and Association of Environmental Engineering and Science Professors.

ASCE Wesley W. Horner Award

Steven Chapra, Ph.D., F.ASCE *Lead Author

Rasika Gawde, Ph.D., M. ASCE



Rakesh Gelda, Ph.D.

Noel Urban, Ph.D.

Martin Auer, Ph.D., M.ASCE

Steven Chapra, Rasika Gawde, Noel Urban, Rakesh Gelda, and Martin Auer, are contributing authors for the paper "Sed2K: Modeling Lake Sediment Diagenesis in a Management Context". In this nominated work, researchers describe the development of a vertically-segmented, mechanistic mass balance model (Sed2K) for particulate organic matter (POM) diagenesis in lake sediments is described. The model is parsimonious in its requirements for input data and versatile in its accommodation of kinetic formulations. An application is provided for hypereutrophic Lake Alice, Minnesota, which includes a well-constrained calibration to downcore POM constituents (carbon, nitrogen, and phosphorus) and their efflux at the sediment-water interface. The application then considers the system response to a reduction in POM deposition to the sediments.

Tuesday, May 24 - Hydraulics & Waterways Council Lecture & Luncheon 12:15 – 1:45pm

ASCE Karl Emil Hilgard Prize

Terry Sturm, Ph.D., P.E., M.ASCE

Dr. Terry W. Sturm received B.S. and M.S. degrees in civil engineering from the University of Illinois and a Ph.D. in mechanics and hydraulics from the University of Iowa at the Iowa Institute of Hydraulic Research. A licensed professional engineer (PE), he holds the rank of professor in the School of Civil and Environmental Engineering at the Georgia Institute of Technology where he teaches a graduate course sequence in open channel hydraulics and sediment transport. In addition, he has taught continuing education courses on river hydraulics, culvert design, and bridge scour. His most recent experimental research centers around the sediment-water interface in natural watercourses and the hydrodynamic processes that occur there such as flow resistance, cohesive sediment resuspension, and local bridge and spillway scour. He is the author of numerous research publications on thermal hydraulics, open channel flow resistance, compound channel hydraulics, bridge abutment scour, and resuspension of cohesive sediments, and he has written a textbook on open channel hydraulics published by McGraw-Hill which is in its second edition.

Seung Ho Hong, Ph.D., P.E., M.ASCE

Seung Ho Hong received M.S. and Ph.D. degrees in Civil Engineering from Georgia Institute of Technology. After a postdoctoral research position at Georgia Institute of Technology, he joined the Faculty at West Virginia University as an assistant professor. Dr. Hong's research expertise lies in environmental fluid mechanics, with an emphasis on the sediment-water interface in natural watercourses and the hydrodynamic processes that occur sediment suspension/ transport and local bridge scour.

Thorsten Stoesser, Ph.D., A.M. ASCE

Thorsten Stoesser is a professor at the Cardiff School of Engineering in the UK. His teaching discipline is architectural, civil, and environmental engineering. He is part of the Hydro-environmental Research Centre Research Group.

ASCE Hydraulic Structures Medal

Dr. Steven Abt, Ph.D., P.E., F.ASCE

Dr. Steven Abt has been a leader in Hydraulic Engineering research and practice. He directed the hydraulics laboratory at CSU for many years and successfully brought important projects from Departments of Transportation, FHWA, and elsewhere to conduct experiments that would help to establish hydraulic structure design, provide guidelines for protection of hydraulic structures or using hydraulic structures effectively, and to understand better the nature of flows around these structures. He also served as the President of EWRI, and has always been very active in ASCE and EWRI leadership, leading a variety of initiatives related to hydraulic engineering.

ASCE Hunter Rouse Hydraulic Engineering Award

Dr. Gary Parker, Ph.D., M.ASCE, F.AGU

Dr. Gary Parker's research accomplishments are truly unique as most of them contribute to the rigorous refinement of the foundation of fluvial hydraulics and river engineering, and are already widely regarded as classical. His strong international visibility and reputation emerged when Prof. Gary Parker was at the beginning of his thirties and since then he has become a truly legendary figure in hydraulics and sedimentation research and applications. As mentioned in the support letters, it is difficult to think of somebody else that has contributed so much to the profession and that has done so in such an unselfish way. Prof. Parker's publication record includes more than 200 journal papers (all in the leading journals) plus numerous conference papers and research reports. His Web of Science h-index is 54, reflecting the impact of Prof. Parker's work, being the highest among hydraulic researchers and one of the highest in the whole engineering area. Over 50 papers of Prof. Parker have been cited over 100 times.

ASCE Hans Albert Einstein Award

Dr. Peggy Johnson, Ph.D., F.EWRI, M. ASCE

Peggy Johnson is a pioneer on the use of sediment transport for evaluation and design of in-line control structures and stream restoration projects. Her work also laid the foundation for the use of Uncertainty and Risk Management for scour analyses. Besides her many important contributions to the fields of Sedimentation and Hydraulic Engineering, Peggy has devoted a substantial amount of her time and energy to serve the profession. She has participated in numerous ASCE committees and activities, including her tenure as President of the ASCE's Environmental and Water Resources Institute Governing Board in 2012-2013.

Hydraulics & Waterways Council Awards

2016 Best Technical Note

Ziyi Huang, Ph.D.

Jiin-Jen Lee

Modeling the Spatial Evolution of Roll Waves with Diffusive Saint Venant Equations. Journal of Hydraulic Engineering. 141(2):06014022.Huang, Z., and J.-J. Lee. 2015.

2016 Best Associate Editor

Mohsen M. Sherif, Ph.D., M.ASCE, D.WRE

2016 Best Case Study

Prem Lal Patel, Ph.D.

Prakash Devidas Porey, Ph.D.

Prafulkumar Vasharambhai Timbadiya, Ph.D.

"A 1D-2D Coupled Hydrodynamic Model for River Flood Prediction in a Coastal Urban Floodplain." J. Hydrol. Engrng,

2016 Best Discussion

Fadoua Houssa, M.ASCE

Guillaume Lamothe

Musandji Fuamba, Ph.D.

"How to Select a Reference Basin in the Ungauged Regions." J. Hydrol. Engrng,

Hydraulics & Waterways Council Awards Continued

2016 Best Technical Note

Javad Farhoudi, Ph.D.

Dr. Ing. Sven Hartmann

Abdolhossein Hoorfar, Ph.D.

Hassan Rahimi, Ph.D.

Mohammad Sedghi-Asl, Ph.D.

"One-Dimensional Fully Developed Turbulent Flow through Coarse Porous Medium." J. Hydrol. Engrng,

2016 Best Technical Paper

Su-Hyung Jang, Ph.D.

Levent Kavvas, Ph.D.,P.H., F.ASCE

"Downscaling Global Climate Simulations to Regional Scales: Statistical Downscaling versus Dynamical Downscaling." J. Hydrol. Engrng.

Wednesday, May 25 – Irrigation & Drainage Council Luncheon and Awards 12:15 – 1:45pm

ASCE Tipton Award

Dr. Thomas Trout, Ph.D., P.E., M.ASCE

Thomas Trout worked in Pakistan for a USAID funded project that assessed water losses in irrigation delivery systems. That work provided the basis for an assistance program for improving irrigation systems in that country. Dr. Trout joined ARS in 1982 and first worked in the Snake River basin where he dealt with the design of cablegation systems, flow measurement, and infiltration variability in furrow irrigation systems. Working still in that region, he researched various aspects of irrigation induced erosion, including seminal work on the development of surface seals. His research produced recommendations for managing the soil to mitigate surface seal formation and enhance infiltration. Dr. Trout transferred in the mid-1990s to the Central Valley of California. His arrival there as a Research Leader coincided with the phase out of methyl bromide, a soil fumigant widely used in many production systems. Thus, he was tasked with addressing this major environmental concern. He led a team research on the application of soil fumigants through drip irrigation systems and the management of soils and irrigation to reduce the emissions of those fumigants.

Irrigation & Drainage Council Awards

2016 Best Paper

Aymn Elhaddad, Ph.D.

Luis A. Garcia, Ph.D., M.ASCE

"Using Surface Energy Balance Model (ReSET-Raster) to Estimate Seasonal Crop Water Use in Large

2016 Best Paper

Aymn Elhaddad, Ph.D.

Luis A. Garcia, Ph.D., M.ASCE

"Using Surface Energy Balance Model (ReSET-Raster) to Estimate Seasonal Crop Water Use in Large Agricultural Areas: Case Study of Palo Verde Irrigation District"

S. Irmak, Ph.D.

Daran Rudnick, S.M.ASCE

"Impact of Nitrogen Fertilizer on Maize Evapotranspiration Crop Coefficients Under Fully Irrigated, Limited Irrigated and Rainfed Settings".

Irrigation & Drainage Council Awards Continued

2016 Best Discussion

Jean-Pierre Baume, Ph.D.

Ludovic Cassan, Ph.D.

G. Belaud, Ph.D.

"Revisiting the Energy-Momentum Method for Rating Vertical Sluice Gates Under Submerged Flow Conditions" by Oscar Castro-Orgaz, Luciano Mateos and Subhasish Dey.

2016 Honorable Mention Paper

Mackenzie J. Boyer

Michael D. Dukes, Ph.D., P.E., M.ASCE

Linda J. Young, Ph.D.

Shu Wang

"Irrigation Conservation of Florida-Friendly Landscaping Based 0n Water Billing Data". Vol. 140 (12)

Karl Pohlmann, Ph.D.

Jianting Zhu, Ph.D.

"Effective Approach to Calculate Groundwater Return Flow to a River from Irrigation Areas"

2016 Best Reviewer

James Ayars, Ph.D.

Wednesday, May 25 – Watershed Council Luncheon and Awards
12:15 – 1:45pm

Arid Lands Hydraulic Engineering Award

Dr. Hugo Loaiciga, Ph.D., P.E. F. ASCE

Dr. Hugo Loaiciga has contributed prolifically for three decades to the advancement of arid-lands hydrologic research. His work on the operation of reservoir systems, drought analysis, and climate variability and change effects on regional aquifers has received wide acclaim. He is a Professor of Geography in the Department of Geography at the University of California, Santa Barbara.

Ven Te Chow Award

Larry Mays, Ph.D., P.E., P.H., F.ASCE, D.WRE

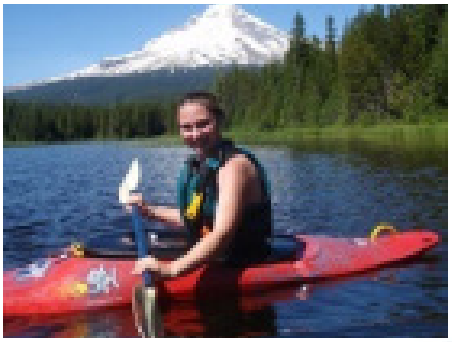
Larry Mays has been a Professor in the School of Sustainable Engineering and the Built Environment at ASU since 1989. He served as Chair from 1989 - 1996. Prior to that he was Director of the Center for Research in Water Resources and holder of an Engineering Foundation Endowed Professorship at the University of Texas at Austin, where he was on the faculty since 1976. Dr. Mays has published his works extensively with over 115 refereed journal publications; 23 books as author, co-author, or editor-in-chief; over 150 national and international proceeding papers and research reports; and 66 chapters in the books that he was editor-in-chief. He teaches both undergraduate and graduate courses in the area of hydrosystems engineering and has supervised 34 Ph.D. students, 31 M.S. students with theses, and many MSE students.

Wednesday, May 25- Student Luncheon and Awards 12:15 – 1:45pm

Graduate Technical Paper Competition

FIRST PLACE:
Nur H. Orak, MSc

Implications of a Statistical Occurrence Model for Mixture Toxicity Estimation



SECOND PLACE:
Laura Bond

Impacts of Hydraulic Fracturing Infrastructure on Storm Runoff Characteristics

THIRD PLACE:
John Arthur Greene

Optimization of Well Placement for Engineered Injection and Extraction During in Situ Groundwater Remediation

Undergraduate Technical Paper Competition

FIRST PLACE:
Emily Farrar (not pictured)

Water Quality Monitoring of the Catalpa Creek Watershed

SECOND PLACE:
Hayden Leland Strickling (not pictured)

An Agent-Based Modeling Approach for Simulating the Use of Short Message Service Warnings During a Water Contamination Event

THIRD PLACE:
John Brackins

Using ADvanced-CIRCulation and Hydrologic Engineering Center Flood Impact Analysis Modeling to Predict Storm Surge Impact on Coastal Infrastructure

WSP Parsons Brinkerhoff Competition

Alex J. Buescher

Undergraduate Student, Seattle University, Seattle, Washington

Natasha S. Howe

Undergraduate Student , Seattle University, Seattle, Washington

Jack H. Lasley

Student, Seattle University, Washington

Kelsey Hopkins

Student, Seattle University , Beaverton, Oregon

Auburn Narrows Process-Based Restoration

Abbie Lorensen, Senior, Civil Engineering

Student, Seattle University, Seattle, Washington

Kristin Ramey, Senior

Civil Engineering Student, Seattle University, Seattle, Washington

Isabella Schwartz, Senior

Civil Engineering Student, Seattle University, Seattle, Washington

Larissa Ann Grundell

Civil/Environmental Engineering Student, Seattle University, Bellevue, Washington

Alderwood Water and Wastewater Outfall Upgrade

Thursday, May 26 – Planning & Management Council Luncheon & Awards 12:15 – 1:45PM

Julian Hinds Award

Lindell Ormsbee, P.E., P.H., Ph.D., D.WRE, F.ASCE, F.EWRI

Lindell Ormsbee is probably best known for his research on water distribution systems. He has coauthored papers with leaders in this important field including Paul Boulos, Jacques Delleur, Mark Houck, Kevin Lansey, Uri Shamir, and Tom Walski. Post 9/11 concerns with terrorism activities related to water distribution systems necessitated major advances in this area to improve water quality modeling and develop more refined real time control strategies. Also, linking simulation and optimization became a reality thanks to advances of Professor Ormsbee and his colleagues. These optimization techniques have proven invaluable in calibrating complex water distribution system models. Dr. Ormsbee has also addressed watershed management issues including stormwater runoff in his other research.

Service to the Profession

Avi Ostfeld, P.E., D.WRE, F.ASCE, F.EWRI, Fellow IWA

Avi Ostfeld is a Professor at the Faculty of Civil and Environmental Engineering at the Technion – Israel Institute of Technology. Dr. Ostfeld was a Senior Engineer and Project Manager at TAHAL – Consulting Engineers Ltd. in Tel – Aviv from 1997 to 2000; a Research Associate at the Department of Civil Engineering, the University of Arizona, Tucson, AZ, from 1996 to 1997; and a Research Associate at the Technion Water Research Institute from 1994 to 1996. Dr. Ostfeld's research contributions and professional activities are in the fields of water resources systems, and in particular in the area of water distribution systems optimization using evolutionary computation: water distribution systems security through optimal monitoring, water quality event detection, and booster chlorination station allocations, optimal design and operation of water distribution systems, and integrating water quality and reliability into water distribution systems management and control.

Planning & Management Council Awards

2016 Best Research-Oriented Paper

Matteo Giuliani
Andrea Castelletti
Francesco Amigoni
Ximing Cai, Ph.D., P.E., M.ASCE

"Multiagent Systems and Distributed Constraint Reasoning for Regulatory Mechanism Design in Water Management." J. Water Resour. Plann. Manage.

2016 Best Policy-Oriented Paper

Cynthia Carlson, P.E., M.ASCE
Oliver Barreteau
Paul Kirshen, M.ASCE
Kim Foltz

"Storm Water Management as a Public Good Provision Problem: Survey to Understand Perspectives of Low-Impact Development for Urban Storm Water Management Practices under Climate Change."

2016 Quentin Martin Best Practice-Oriented Paper

Jonathan D. Herman, A.M.ASCE
Patrick M. Reed, Ph.D., A.M.ASCE
Harrison B. Zeff
Gregory W. Characklis, Ph.D., M.ASCE

"How Should Robustness Be Defined for Water Systems Planning under Change?."

2016 Best Reviewer

Carla Tricarico, Ph.D.
Jonathan Herman, Ph.D.

2016 Best Associate Editor

Kaveh Madani, Ph.D., A.M. ASCE

2016 Associated Editor Award

Xuefeng Chu, Ph.D A.M.ASCE

2016 Certificate of Appreciation

Avi Ostfeld, P.E., D.WRE, F.ASCE, F.EWRI, Fellow IWA