AWARDS

WORLD ENVIRONMENTAL & WATER RESOURCES CONGRESS 2014

PORTLAND, OREGON / JUNE 1-5, 2014

AWARDS PRESENTATION EVENTS:

WELCOME CEREMONY, KEYNOTE LECTURE, BREAKFAST, AND AWARDS

MONDAY, JUNE 2 / 7:30 - 9:15 A.M. (Oregon Ballroom 203-204)

ENVIRONMENTAL AND WATER, WASTEWATER & STORMWATER COUNCILS BREAKFAST, AWARDS, AND LECTURE

TUESDAY, JUNE 3 / 7:30 - 8:45 A.M. (Oregon Ballroom 204)

IRRIGATION & DRAINAGE COUNCIL BREAKFAST, AWARDS, AND LECTURE

TUESDAY, JUNE 3 / 7:30 - 8:45 A.M. (Oregon Ballroom 203)

STUDENT AWARD LUNCHEON

TUESDAY, JUNE 3 / 12:30 - 1:30 P.M (Oregon Ballroom 203)

HYDRAULICS & WATERWAYS COUNCIL BREAKFAST, AWARDS, AND LECTURE

WEDNESDAY, JUNE 4 / 7:30 - 8:45 A.M. (Oregon Ballroom 203)

PLANNING & MANAGEMENT COUNCIL BREAKFAST, AWARDS, AND LECTURE

WEDNESDAY, JUNE 4/ 7:30 - 8:45 A.M. (Oregon Ballroom 204)

WATERSHED COUNCIL BREAKFAST, AWARDS, AND LECTURE

THURSDAY, JUNE 5/ 7:30 - 8:45 A.M. (Oregon Ballroom 203)

The Environmental & Water Resources Institute (EWRI) of the American Society of Civil Engineers (ASCE) is proud to recognize the 2014 recipients of the Society's Career Achievement Awards and Paper Awards, and EWRI's Career Achievement, Service, and Paper Awards.

WELCOME CEREMONY, KEYNOTE LECTURE, BREAKFAST, AND AWARDS

EWRI LIFETIME ACHIEVEMENT AWARDS

Established in 2001, the Environmental & Water Resources Institute Lifetime Achievement Award is presented to members who are judged to have advanced the profession, exhibited technical competence, and significantly contributed to public service, research, or practice in the environmental and water resources profession.

The **2014 LIFETIME ACHIEVEMENT AWARDS** are presented to **Steven R. Abt, Ph.D., P.E., D.WRE, F.ASCE; Michael A. Ports, P.E., P.H., BCEE, D.WRE, D.NE, F.EWRI, F.ASCE;** and **Jery R. Stedinger, Ph.D., Dist.M.ASCE.**

Dr. Steven R. Abt is Emeritus Professor of Civil and Environmental Engineering in the College of Engineering at Colorado State University. He earned a BCE, an MS in Water Resources, and a Ph.D. in Hydraulics from Colorado State University. He is a registered Professional Engineer in Colorado and a Diplomate of the American Academy of Water Resources Engineers.

Dr. Abt has over 40 years of general engineering experience. After graduation, he worked as a consulting water resource engineer in Denver, then joined the Civil Engineering faculty at Colorado State University in 1977. He has published over 475 journal articles, proceedings, and reports, and has served as Principal/Co-Principal Investigator on research projects worth over $16 million. In addition, he spent 14 years as a contract Research Station Facility Engineer for the USDA Forest Service and served 11 years as a consultant to the U.S. Nuclear Regulatory Agency as a hydrologic and surface water hydraulic subject matter expert.

Dr. Abt served as a Major General in the U.S. Army/Army Reserve from 1973 to 2011. His assignments included Deputy Chief of Engineers, USACE; Deputy Commander, U.S. Army Accessions Command; and Director of Operations and Deputy Director, Iraq Reconstruction Management Office in the U.S. Embassy in Baghdad, Iraq in 2006-2007. Major General Abt retired in June 2011.

Dr. Abt has been active as a Fellow of the American Society of Civil Engineers. He has served as Chairman of the Executive Committee, Hydraulics Division, ASCE and President of the Environmental and Water Resources Institute, ASCE, as well as a member of several Board-level committees. He currently serves as a member of the Board of Trustees for the American Academy of Water Resources Engineers.

Michael A. Ports has more than 45 years of planning, analysis, design, and construction experience in a broad spectrum of water resources engineering applications, including surface water hydrology and hydraulics, storm water management, master planning, soil and water conservation, urban drainage and flood control, river training works, fishery and wildlife habitat mitigation and design, stream channel restoration, erosion and sediment control, environmental impact assessment, water law, sediment transport modeling, bridge scour analysis, and environmental regulatory compliance. He has represented the American Society of Civil Engineers on water resources issues before the U.S. Environmental Protection Agency, U.S. Bureau of Land Management, and the United States Congress. In addition, he has served as an expert witness before state courts in Georgia, Iowa, Louisiana, Maryland, Texas, and West Virginia, and federal courts in Louisiana, Maryland, and Washington, DC. In addition, he has advised the national governments of Argentina, Bangladesh, China, Egypt, India, Paraguay, and Taiwan on water resources issues.

Dr. Jery R. Stedinger is Professor of Environmental and Water Resources Systems Engineering in the School of Civil and Environmental Engineering at Cornell University.

Dr. Stedinger received a BA from the University of California at Berkeley in 1972, and a Ph.D. in Environmental Systems Engineering from Harvard in 1977. Since that time, he has been at Cornell, and his research has focused on statistical and risk issues in hydrology and the operation of water resource systems. Projects have addressed flood frequency analysis, including the use of historical and paleoflood data, regional hydrologic regression analyses, risk and uncertainty analysis of flood-risk reduction projects, effective discharge and watershed characterization, pathogen modeling, dam safety, and climate change. Water resource system studies have considered design models, system simulation, and efficient hydropower systems operation.

Dr. Stedinger is a Distinguished Member of the American Society of Civil Engineering, and a member of the National Academy of Engineering. He was a 1984-89 NSF Presidential Young Investigator, a 1989 ASCE Huber Civil Engineering Research Prize winner, the 1997 winner of the ASCE Julian Hinds Award, and the 2014 winner of the ASCE Ven Te Chow Award. In 2004, he received the Prince Sultan Bin Abdulaziz International Prize for Water for the Surface Water Branch for his work on flood risk management, and in 2011 he received the Warren A. Hall Medal from the Universities Council on Water Resources for his accomplishments and distinction in the water resources field though research and education. He is a fellow of the American Geophysical Union.

Dr. Stedinger was lead author of the frequency analysis chapter in the 1993 McGraw-Hill *Handbook of Hydrology* and an author of the 1981 textbook *Water Resource Systems Planning and Analysis*. He is an author of over 120 professional referred papers. He has served on National Research Council Committees on Dam Safety, Water Resources Research, and Flood Risk Management and the American River, and USACE Risk-based Analyses; and advisory committees on flood frequency analysis for the U.S. Bureau of Reclamation, the U.S. Army Corp of Engineers, and the interagency committee for all federal agencies (HFAWG – Hydrologic Frequency Analysis Work Group).

WELCOME CEREMONY, KEYNOTE LECTURE, BREAKFAST, AND AWARDS

MARGARET PETERSEN AWARD

The Margaret S. Petersen Award is sponsored by EWRI's Education Council and the Emerging and Innovative Technology Committee. It honors the life-long professional accomplishments of Margaret S. Petersen, P.E., F.ASCE, Hon.D.WRE, a female pioneer in hydraulics and water resources engineering. The award is presented to a female member of ASCE and/or EWRI who has demonstrated exemplary service to the water resources and environmental community.

The **2014 WOMAN OF THE YEAR** is **Christine A. Shoemaker, Ph.D., NAE, Dist.M.ASCE,** for her technical achievements, ASCE leadership, and commitment to mentoring women pursuing engineering careers and mirroring the ideals that the award's namesake championed throughout her life.

Christine Shoemaker, Ripley Professor in CEE at Cornell University, was one of the first women in the United States to be a department chair in any engineering field. Professor Shoemaker has produced many women Ph.D. students in EWRI and has worked to recruit and retain women in engineering for decades. Her research involves the development of optimization and uncertainty algorithms for use with complex, realistic nonlinear hydrologic simulation models for management optimization or for the purpose of picking model parameters that generate good model forecasts (e.g., calibration). She has done applications for groundwater remediation, carbon sequestration (involving multi-phase, multi-constutient models), and phosphorus and sediment transport in watersheds. She has open source code available for her algorithms. She is a Distinguished Member of ASCE and is a Fellow in AGU, SIAM, and INFORMS. She has received a number of other awards including the EWRI Julian Hinds Award and membership in the National Academy of Engineering.

EWRI SERVICE-TO-THE-INSTITUTE AWARD

The EWRI Service-to-the-Institute Award is given in recognition of extensive and outstanding service to the Institute and/or its predecessor divisions.

The **2014 EWRI Service-to-the-Institute Award** is presented to **Udai P. Singh, D.Engr., BCEEM, PMP, M.ASCE**

Dr. Udai Singh of CH2M Hill served on the Institute Governing Board (2004-2011), as Institute President (2009-2010) and Chair of the Operations Executive Committee (2004-2008). He was instrumental in expanding the national and international presence of EWRI, including originating our International Perspective on Water Resources & the Environment (IPWE) Conference Series; chairing EWRI conferences in Hawaii, New Mexico, and an IPWE conference in India; leading an EWRI delegation in China; and overseeing the expansion of EWRI individual and chapter memberships. He continues to contribute to the strategic planning of the Institute and the Student and New Professionals Activities Council.

WELCOME CEREMONY, KEYNOTE LECTURE, BREAKFAST, AND AWARDS

EWRI VISITING INTERNATIONAL FELLOWSHIP AWARDS

The International Council (IC) established the Visiting International Fellowship (VIF) program to promote cultural and technical exchange between U.S. and Canadian EWRI members and international colleagues – water/environmental resource faculty, professionals, and student researchers – from developing countries. This marks the VIF program's 12th year.

Visiting International Fellows are competitively selected by the IC's Visiting International Fellowship Task Committee. The 2014 EWRI Visiting International Fellows will participate in the Congress and in additional professional and cultural exchange activities during their visit to the United States. The 2014 Visiting International Fellows will be recognized during the Congress at this meeting.

Haifeng Jia, Ph.D., Associate Professor, School of Environment, Tsinghua University, Beijing, China

Dr. Haifeng Jia received his Ph.D. in Environmental Science and Engineering from Tsinghua University in 1999, and has worked at the university ever since. He has conducted research and teaches in the fields of watershed/urban water environmental planning and management, water quality and hydrologic modeling, urban runoff control and LID BMPs, and Environmental Remote Sensing and GIS. He has finished more than 70 research projects related to urban water environmental planning, urban runoff control, water quality simulation modeling, urban river rehabilitation, and water resources management. He has published 20 peer-reviewed journal papers in English, 90 peer-reviewed journal papers in Chinese, 49 international conference papers, 41 Chinese conference papers, and 9 books. He has also obtained 7 patents and software copyrights. He has received 34 different academic and engineering awards and honors, and is active in international academic activities and collaborations. He has organized and attended many international conferences, including ASCE-EWRI and IWA, and was the first Chinese scholar to be named a Diplomate of Water Resources Engineer (D.WRE) by the American Academy of Water Resources Engineers (AAWRE). He serves as a control group member of the ASCE-EWRI International Urban Watershed Management Standing Committee, member of the ASCE-EWRI International Committee, member of the Consulting Expert Board of Foshan Government, and Director of the Beijing Hydraulic Society.

Festus Anane Mensah, Research Scientist, CSIR-BRRI, Kumasi, Ghana

From Ghana, **Festus Anane Mensah** is a research scientist with Ghana's Council for Scientific and Industrial Research Building and Road Research Institute (CSIR-BRRI). His cultural background and focus on humanitarian, environmental, and water quality issues have led him to a number of volunteer opportunities and community leadership roles. Mr. Mensah received his Bachelor of Science in Geological Engineering at the Western University College of Kwame Nkrumah University of Science and Technology, Tarkwa, Ghana (now the University of Mines and Technology, Tarkwa) and his Master of Science in Petroleum Geoscience at the University of Ghana, Legon-Accra, Ghana.

Sayyed-Hassan Tabatabaei, Ph.D., Associate Professor, Department of Water Engineering, Shahrekord University, Iran

Dr. Sayyed-Hassan Tabatabaei has been a faculty member of Shahrekord University since 2004, and he collaborates with water engineering consultancies in the area of water resources, irrigation, and drainage. Prior to joining the faculty (1995-2004), he was a consultant/designer member of several engineering companies. He has supervised the Irrigation and Drainage section of Behabsad Engineering Consultants since 2009. Dr. Tabatabaei received a Ph.D. in Irrigation and Drainage Engineering in 2004 from the University of Tehran. His Ph.D. research included (1) Removal of heavy metal from wastewater; (2) Preferential flow of water and solute transport; and (3) Seasonal variation of infiltration parameters in furrow irrigation affected by soil texture and field management. He wrote his MS thesis on "Mathematical and Management Model of Groundwater with Emphasis on Artificial Recharge Using MODFLOW Software (Case Study)" in the Department of Irrigation, College of Agriculture, Isfahan University of Technology, Isfahan, Iran in 1998, and received a BSc Degree in Irrigation in 1995 from the University of Tehran.

His research interests in water science are in the areas of soil infiltration, surface and subsurface irrigation, flow in porous media, groundwater modeling, water and solute transport in soil, wastewater reuse, evapotranspiration, Ferttigation in surface irrigation, and new challenges in soil physics. Use of unconventional water (such as saline water and wastewater reuse) is a topic that he has focused on in recent years. Generally speaking, he is interested in soil and water contamination and modeling.

At Shahrekord University, Dr. Tabatabaei teaches undergraduate and postgraduate courses in water engineering and soil sciences. He supervises theses of graduate students both at Ph.D. and MSc levels, and is the author of some 65 journal papers, 85 conference papers, and 6 books. He serves on the Editorial Board of the Journal of IWRJ, IJROWA (Springer). He is a member of IRNCID, IAID, IAHS, IHA, and ASCE.

Included for all Full, Student, Monday-daily, and Corporate Registrants. Additional tickets: $25.

ENVIRONMENTAL AND WATER, WASTEWATER & STORMWATER COUNCILS BREAKFAST, AWARDS, AND LECTURE

Lecture Title: The Water-Energy Nexus in Electric Power Production

SIMON W. FREESE ENVIRONMENTAL ENGINEERING AWARD AND LECTURE

The Simon W. Freese Environmental Engineering Award and Lecture is awarded to a distinguished person in the field of environmental engineering.

The **2014 SIMON W. FREESE ENVIRONMENTAL ENGINEERING AWARD** Is presented to **David A. Dzombak, Ph.D., P.E., BCEE, NAE, F.ASCE, for his outstanding record as researcher/educator/administrator.**

Dr. David Dzombak is the Walter J. Blenko, Sr. University Professor of Environmental Engineering in the Department of Civil and Environmental Engineering at Carnegie Mellon University. His research and teaching encompass water quality engineering, environmental remediation, and energy-environment issues. At Carnegie Mellon, he is also Director of the Steinbrenner Institute for Environmental Education and Research. In November 2012, he was appointed Interim Vice Provost of Sponsored Programs for the university.

Dr. Dzombak received his Ph.D. in Civil Engineering (environmental engineering focus) from the Massachusetts Institute of Technology. He also earned both MS and BS in Civil Engineering from Carnegie Mellon and BA in Mathematics from Saint Vincent College.

Dr. Dzombak's research and professional interests include: aquatic chemistry; fate and transport of chemicals in water, soil, and sediment; water and wastewater treatment; in situ and ex situ soil and sediment treatment; hazardous waste site remediation; abandoned mine drainage remediation; river and watershed restoration; energy and environment; population and environment; and public communication of environmental engineering and science. He has published numerous articles in leading environmental engineering and science journals; book chapters; articles for the popular press; and three books. He also has a wide range of consulting experience.

His professional service activity has included: EPA Science Advisory Board (2007-present); Environmental Engineering Committee (2002-2010); EPA National Advisory Council for Environmental Policy and Technology, Environmental Technology Subcommittee; National Research Council; Associate Editor, *Environmental Science & Technology* (2005-2012); Editorial Board, *Water Environment Research* (1993-1998) and *Ground Water* (1991-1993); Chair, Board of Directors, AEESP Foundation (2012-present); Board of Directors and Treasurer, Association of Environmental Engineering and Science Professors; Committee Chair, American Academy of Environmental Engineers, American Society of Civil Engineers, and Water Environment Federation; and advisory committees, Allegheny County and the Commonwealth of Pennsylvania. He also has served in various advisory roles for Saint Vincent College since 1990, and was elected to the Board of Directors in 2012.

ASCE-EWRI SOCIETY PAPER AWARDS

SAMUEL ARNOLD GREELEY AWARD

The Samuel Arnold Greeley Award is presented for excellence in papers on the design, construction, operation, or financing of water supply pollution control, storm drainage, or refuse disposal projects.

2014 GREELEY AWARD is presented to **Dennis G. Grubb, Ph.D., P.E., M.ASCE, Mahmoud Wazne, Ph.D., M.ASCE, Santhi Chandra Jagupilla, Ph.D., A.M.ASCE, Nicholas E. Malasavage, Ph.D., M.ASCE,** and **William B. Bradfield, P.G.**, for "Aging Effects in Field-compacted Dredged Material: Steel Slag Fines Blends," in the *Journal of Hazardous, Toxic, and Radioactive Waste,* 17(2), 107-119 (April 2013).

Dr. Dennis G. Grubb has more than 25 years' combined academic, research, and engineering consulting experience in environmental remediation, beneficial use, stabilization/solidification (S/S), environmental forensics, and litigation support, with over 35 refereed journal publications in these areas. Dr. Grubb's beneficial use expertise includes foundry sands; scrap tires; municipal solid waste incinerator, bottom, and fly ashes; concrete and asphalt; roof shingles; plasphalt; glass cullet; dredged material; steel, blast furnace, electric arc, and AOD slags; lime and cement kiln dusts; iron rich and industrial powders. Dr. Grubb has served as Technical Lead for S/S mix design work for the Atlantic Wood Industries (VA), Eagle Zinc (IL), Gowanus Canal (NY), Raritan Bay Slag (NJ) USEPA Superfund sites, and for clients such as Honeywell, Tyco, Dow, multi-PRP groups, and others. Dr. Grubb has also served as technical lead on stabilized dredged material for clients such as Lafarge, Carmeuse, Dominion Power, U.S. Army Corps of Engineers, and the Maryland Port Administration. He launched the environmental geotechnics program at Georgia Tech (1996-2000) and served as Senior Research Associate/Consultant in the Center for Environmental Systems at Stevens Institute of Technology (2005-2010). His prior consulting experience (2000-2010) included geotechnical, environmental, and landfill engineering firms, and service as the Chief Technical Liaison to the PENNDOT Strategic Recycling Program (2000-2005). A prior NSF CAREER, NSF-NATO Postdoctoral, and Fulbright Fellowship awardee, he has served on editorial boards for the Journal of Hazardous Materials and ASCE Journals of Geotechnical and Geoenvironmental Engineering and Hazardous, Toxic, and Radioactive Waste. Dr. Grubb was Project Manager for Schnabel Engineering's 2011 Outstanding Project Award for Engineering Excellence (American Council for Engineering Companies, MD Section) and 2012 TransOvation Award (American Road and Transportation Builders Association – Transportation Development Foundation, ARTBA-TDF) based on the Innovative Reuse of Dredged Material with the Maryland Port Authority in the Baltimore Harbor. It is the final journal paper on this project that has earned the Greeley Award.

ENVIRONMENTAL AND WATER, WASTEWATER & STORMWATER COUNCILS BREAKFAST, AWARDS, AND LECTURE

Dr. Mahmoud Wazne is affiliated with the Lebanese American University, Byblos, Lebanon.

Dr. Nicholas E. Malasavage is a Geotechnical Engineer with the U.S. Army Corps of Engineers, San Francisco District, San Francisco, CA. Nick serves as lead and geotechnical lead on a number of the district's projects targeting flood control and flood risk management, environmental restoration, and navigation. Nick earned his B.S., M.S., and Ph.D. from Drexel University, Philadelphia, PA and is a registered engineer in California. Prior to federal service, Nick worked for TRC Inc., in Mount Laurel, NJ and Schnabel Engineering in West Chester, PA.

Dr. Santhi Jagupilla works as an Environmental Engineer in TRC Environmental Corporation, Millburn, NJ. Dr. Jagupilla has more than 8 years of research experience in the areas of soil and groundwater characterization, fate, transport, and remediation/immobilization of heavy metals in contaminated media, and the beneficial use of dredged material. She has spent the past year working as an environmental engineering consultant, advising on design, installation, operation, maintenance, and monitoring of remedial systems. Dr. Jagupilla has produced 9 refereed journal publications and 10 peer-reviewed conference proceedings in these areas. She serves as a reviewer for the Journal of Hazardous Materials, Science of the Total Environment; ASCE Journal of Hazardous, Toxic, and Radioactive Waste Management; and the Soil, Sediment, and Contamination Journal.

William Bradfield, P.G., is a Project Geologist with Schnabel Engineering Consultants, Inc. Mr. Bradfield has more than 10 years' experience in the fields of engineering geology/geotechnical engineering and environmental geology. Part of his responsibilities at Schnabel include the expansion of the beneficial reuse market where materials normally considered industrial byproducts/wastes are combined to create materials that can be substituted for higher cost virgin materials. His experience in the beneficial reuse of contaminated dredged material includes the permitting of a barge-mounted, on-the-water, stabilized dredged material processing unit that allows for greater mobility in the highly developed and tightly confined ports and harbors of the Mid-Atlantic region. Prior to joining Schnabel Engineering, Mr. Bradfield worked for URS Corporation where he was responsible for monitoring and remediation oversight of several Superfund and retail gasoline sites. He received a BS in Geology from Bucknell University and is currently working on his Master of Engineering in Geotechnics from Missouri University of Science and Technology.

RUDOLPH HERING MEDAL

The Rudolph Hering Medal recognizes outstanding papers that contribute to the advancement of the environmental branch of the engineering profession.

2014 RUDOLPH HERING MEDAL is presented to **Jeff A.K. Silva, Ph.D., P.G., Matthew W. Liberatore, Ph.D.,** and **John E. McCray, Ph.D., M.ASCE for** "Characterization of Bulk Fluid and Transport Properties for Simulating Polymer-Improved Aquifer Remediation," in the *Journal of Environmental Engineering*, 139(2), 149-159 (February 2013).

Dr. Jeff A.K. Silva has worked in the fields of groundwater remediation, consulting, and environmental research for the past 15 years. His background includes groundwater and surface water hydrology, geochemistry, subsurface contaminant transport and fate processes in vadose zone and phreatic systems, surface/interfacial phenomena, and forced gradient in situ groundwater remediation applications. He is currently a Senior Consulting Hydrogeologist for Environet, Inc., Boulder, CO.

Dr. Matthew W. Liberatore is as an Associate Professor in the Department of Chemical and Biological Engineering at the Colorado School of Mines. He earned a BS degree from the University of Illinois at Chicago and MS and Ph.D. degrees from the University of Illinois at Urbana-Champaign, all in chemical engineering. His current research involves the rheology of complex fluids especially traditional and renewable energy fluids and materials, polymers, and colloids. His teaching interests include developing problems from YouTube videos as well as active and self directed learning such as personalized online homework.

Dr. John E. McCray is a Professor and Head of the Civil & Environmental Engineering Department at Colorado School of Mines, and a Principle Investigator of the NSF Engineering Research Center for Reinventing America's Urban Water Infrastructure (the first NSF-funded ERC in environment and water). He is the founding Director of Mines' interdisciplinary hydrology graduate program, and was responsible for a recent $3 million gift from ConocoPhillips to start a center at Mines to promote the joint sustainability of water resources and unconventional energy production in the arid west. His current research interests include urban water renewal and blue infrastructure, the impact of forest fires on water quality, influences of the mountain pine beetle on mountain hydrology and water quality, geological carbon sequestration, and western water resources. He was recently the Shimizu Visiting Professor of Civil Engineering at Stanford University and was awarded a Fulbright Scholarship to Chile.

ENVIRONMENTAL AND WATER, WASTEWATER & STORMWATER COUNCILS BREAKFAST, AWARDS, AND LECTURE

WESLEY W. HORNER AWARD

The Wesley W. Horner Award recognizes papers that have contributed to the areas of hydrology, urban drainage, or sewerage.

The **2014 WESLEY W. HORNER AWARD** is presented to **Elizabeth Fassman-Beck, Ph.D., A.M.ASCE** and **Robyn Simcock, Ph.D., F.ASCE** for "Moisture Measurements as Performance Criteria for Extensive Living Roof Substrates," in the *Journal of Environmental Engineering,* 138(8), 841–851 (August 2012).

Dr. Elizabeth Fassman-Beck is a civil engineer, specializing in research on urban stormwater management with green infrastructure. After almost 10 years at the University of Auckland (New Zealand), she recently joined Stevens Institute of Technology in Hoboken, NJ. She is an active member of the ASCE/EWRI Urban Water Resources Research Council and the IAHR-IWA Joint Committee on Urban Drainage. Working closely with Dr. Robyn Simcock has provided invaluable lessons in "engineering" living systems for better stormwater outcomes, promoting biodiversity, and establishing expectations for dynamic, living technologies.

Dr. Robyn Simcock is a soil scientist and ecologist at Landcare Research NZ (a Crown-owned Research Institute). She has collaborated with Dr. Elizabeth Fassman-Beck and University of Auckland Faculty of Engineering students since 2006 to understand the interrelationships of plants, media, and stormwater in living roofs and raingardens. The team's combination of detailed laboratory work with construction and monitoring of living roofs from 2 to 200 m2 provided data and experience that underpins stormwater policy and technical guidance for living roofs in Auckland.

JOURNAL OF HAZARDOUS, TOXIC, AND RADIOACTIVE WASTE

2014 BEST THEORETICAL-ORIENTED PAPER

Meenal A. Mategaonkar, A.M.ASCE and T.I. Eldho

"Simulation-optimization Model for In-situ Bioremediation of Groundwater Contamination Using Mesh-free PCM and PSO," 16(3), 207-218

2014 BEST PRACTICE-ORIENTED PAPER

Rajendra Kumar Kaushal and Arvind K. Nema

"Game Theory–based Multistakeholder Planning for Electronic Waste Management," 17(1), 21–30

WATER, WASTEWATER & STORMWATER COUNCIL AWARDS

The **WATER, WASTEWATER, AND STORMWATER COUNCIL OUTSTANDING ACHIEVEMENT AWARD** is presented to **Berrin Tansel** for her significant contribution to the book *Concentrate Management in Desalination, Case Studies* and her excellent leadership as the Chair of the Desalination and Water Reuse Committee and the Wastewater Engineering Technical Committee.

The **WATER, WASTEWATER, AND STORMWATER COUNCIL OUTSTANDING ACHIEVEMENT AWARD** is presented to **Dennis Martenson** for his exceptional contributions to the Water Supply Engineering Committee and for the time and effort he exhibited on the re-write of the 5th Edition of the *Water Treatment Plan Design Book.*

The **WATER, WASTEWATER, AND STORMWATER COUNCIL EXPRESSION OF APPRECIATION AWARD** is presented to Arnold Strasser, P.E., M.ASCE for outstanding work for the Water Supply Engineering Committee.

Your choice of Council breakfasts is included for all Full, Student, Tuesday-daily, and Corporate Registrants. Additional tickets: $25.

IRRIGATION & DRAINAGE COUNCIL BREAKFAST, AWARDS, AND LECTURE

Lecture Title: Progress and Challenges of Sustainable Irrigation and Drainage

ROYCE J. TIPTON AWARD

The Royce J. Tipton Award recognizes outstanding contributions to the advancement of water and soil aspects of irrigation by software development, promoting application or new technologies, and through public and professional service.

The **2014 ROYCE J. TIPTON AWARD** is presented to **Robert G. Evans, Ph.D., M.ASCE,** for outstanding research in irrigation design and water management, development of innovative techniques to modify the crop environment resulting in significant crop yield and quality benefits, and significant outreach worldwide providing education on crop protection and site specific water management.

Dr. Robert G. Evans is an internationally recognized authority in irrigation water management. The considerable impact of Dr. Evans' research on science and technology has been demonstrated in a number of different areas. He has made major contributions to the areas of crop specific water management, plant environmental modifications with irrigation, arid region irrigation and nutrient management, and site-specific sprinkler and drip irrigation. He is recognized internationally for his work on frost protection of orchard and vine crops and the use of sprinkler systems for evaporative cooling and continues to be invited to make presentations in these areas. His work in water requirements of wine grapes, hops, apples, and sweet cherries is used around the world. The value of his research to the scientific community is evident in his extensive list of peer-reviewed publications and invited presentations, documented in over 80 refereed journal articles, 18 book chapters, and more than 100 published proceedings articles in addition to 21 extension publications and 28 popular press articles. He accepted invitations to deliver more than 130 technical presentations across the globe, and served as Chief Editor of *Irrigation Science* (2003-July 2012). Within the scientific community, he was elected a Fellow of the American Society of Agricultural and Biological Engineers, chaired professional committees, organized international conferences, served on journal editorial boards, authored book and monograph chapters, and served as an expert information source for other researchers, as well as for magazine writers and regulatory/action agencies.

Educated at Colorado State University, Dr. Evans retired from his decade-long research position with the USDA-ARS in 2012. He spent the bulk of his career as an Agricultural Engineer and Professor at Washington State University.

JOURNAL OF IRRIGATION AND DRAINAGE ENGINEERING

2014 BEST PAPERS

Albert J. Clemmens, Ph.D., P.E., D.WRE, M.ASCE
"Water-level Difference Controller for Main Canals," Vol. 138: 1-8

Ahmed El Deiry, Ph.D. and Luis Garcia, Ph.D., M.ASCE
"Using Disjunctive Kriging as a Quantitative Approach to Manage Soil Salinity and Crop Yield," Vol. 138, p. 211-224

2014 HONORABLE MENTION PAPERS

Eric D. Morway and Timothy K. Gates, Ph.D., M.ASCE
"Regional Assessment of Soil Water Salinity Across an Intensively Irrigated River Valley," Vol.138(5), p. 393(13)

Kristoph-Dietrich Kinzli, M.ASCE, Nkosinathi Manana, and Ramchand Oad, Ph.D.
"Comparison of Laboratory and Field Calibration of a Soil-Moisture Capacitance Probe for Various Soils," Vol. 138(4), p. 310–321

2014 BEST REVIEWERS

Iacopa Carnacina, Ph.D.
Thomas Lowry

Your choice of Council breakfasts is included for all Full, Student, Tuesday-daily, and Corporate Registrants. Additional tickets: $25.

STUDENT AWARD LUNCHEON AND AWARDS

Guest Presentation: My Accidental Career by David C. Curtis, Ph.D., Vice President, WEST Consultants, Inc.

PB STUDENT DESIGN COMPETITION

2014 COMPETITORS

University of Seattle

"Coffee Wastewater Treatment for San Antonio Nicaragua"

Students: Karl Clocksin, Bobbie Gilmour, Brandon Moss

Advisors: Dr. Michael D. Marsolek and Dr. Nirmala Gnanapragasam

California State Polytechnic University, Pomona

"The Removal of Nitrate and Perchlorate from a Reverse Osmosis Concentrate Stream"

Students: Blanca Calderon, Raffi Dermendjian, Nathan Dominguez, Daniel Espinoza, Amir Kashfi, Kenneth Kozovich, Connie Tsui, Samayyah Williams, Han Yang

Advisors: Dr. Ali Sharbat and Dr. Monica Palomo

University of Seattle

"Tidal Impacts on Wastewater Pumps Stations and CSO Facilities in the Puget Sound"

Students: Justin Barnes, Gabrielle Lefebvre, Codee Samala-Passos

Advisor: Dr. Phillip Thompson

STUDENT PHOTO COMPETITION WINNER

Jacob M. Torres, P.E., Rice University, Houston, TX

Title: "Water: A Treasure for All"

Jacob Torres is a Ph.D. student at Rice University. He obtained his B.S. and M.S. in Civil Engineering from Texas A&M University in 2006 and 2008, respectively, with a focus in water resources engineering. Afterward, he spent four years at AECOM working on a variety of engineering projects that included floodplain impact and mitigation analyses, flood damage modeling, sediment transport modeling in open channels, hydraulic transient mitigation of pressurized conduits, and water distribution system modeling. As a Ph.D. student, his research focuses on coastal resiliency. This includes quantifying the benefits from a proposed storm surge barrier and levee system at the Houston Ship Channel in combination with non-structural mitigation alternatives. His winning photo appears on the back cover of the Congress Program and on the cover of the Congress Proceedings. Mr. Torres took the photo in the United Kingdom while on a boat tour with his wife across Scotland's River Forth. See photo on page 76.

EWRI STUDENT POSTER COMPETITION

2014 COMPETITORS

The Student Poster Competition provides additional opportunities for interested students to participate in the Congress. Chosen authors will present their poster content on a designated poster board at the Congress. The Student Poster Presentations will be judged onsite, and winners will be awarded a certificate at the Student Luncheon, which immediately follows the Poster Competition session.

EWRI STUDENT TECHNICAL PAPER COMPETITION

UNDERGRADUATE LEVEL

FIRST PLACE

1049 "Pervious Concrete: A Testing of Traits and Methodology"

Susan Limberg, Norwich University, Northfield, VT

GRADUATE LEVEL

FIRST PLACE

248 "Correlating Human Preferences and Optimized Watershed Management Plans"

Adriana Piemonti, Oregon State University. Corvallis, OR

SECOND PLACE (tie)

934 "Classifying Streams on the Basis of Elevation above Mean Sea Level – A Statistical Approach"

Rajan Jha, Virginia Polytechnic Institute and State University, Roanoke, VA

1061 "The Efficacies of Centralized versus Distributed Chlorinated Treatment on Inhibiting Microbial Regrowth and Biofilm Potential for Water Distributions Systems"

Jacob Torres, P.E., Rice University, Houston, TX

THIRD PLACE

1052 "Modeling the Co-evolution of Potable and Reclaimed Water Distribution Systems"

Venu Kandiah, P.E., North Carolina State University, Raleigh, NC

Included for all Student Registrants.

HYDRAULICS & WATERWAYS COUNCIL BREAKFAST, AWARDS, AND LECTURE

Lecture Title: Connecting Landscapes with Rivers: Stream Restoration and "Smart" Hydraulic Structures

HUNTER ROUSE HYDRAULIC ENGINEERING AWARD AND LECTURE

The Hunter Rouse Hydraulic Engineering Award is presented, upon recommendation of the Executive Committee of the Environmental & Water Resources Institute Hydraulics & Waterways Council, to a distinguished person in the field of hydraulic engineering.

The **2014 HUNTER ROUSE AWARD** is presented to **Thanos Papanicolaou, Ph.D., M.ASCE** for outstanding research and leadership in sediment transport dynamics and carbon sequestration, from the scale of a turbulent eddy to the scale of an entire watershed.

Professor Thankos Papanicolaou's research has focused on sediments and soil and their interactions with flow and precipitation. His contributions to hydraulics and waterways engineering encompass a wide spectrum of topics extending from the study of micro-scale fundamental mechanisms of fluid mechanics and sediment transport to macro-scale problems of water sediment interaction at the watershed scale. He has carried out experimental investigations in the laboratory and developed novel measurement methods, worked on field measurements, dealt with theoretical aspects of interaction of sediments with fluid flow across a wide range of scales, performed original research on the impact of agriculture and other anthropogenic activities on the watershed processes of sediment and water, performed numerical modeling of watershed upland processes and its interaction with the drainage network, developed field measurement methods to track the source of sediments, and studied environmental aspects of sediment transport. One of the most interesting and original aspects of his research is the way he applies his broad knowledge and expertise in fundamental processes of sediment-fluid interaction to solving real-life hydraulics and waterways engineering problems at the watershed scale by combining theoretical approaches with field experiments and numerical modeling. As clearly indicated by the impressive number of citations of his papers during a short span of time, his research has had a strong impact on the field and on the work of other researchers.

HYDRAULIC STRUCTURES MEDAL

The Hydraulic Structures Medal is awarded to an individual or individuals for significant contributions to the advancement of the art and science of hydraulic engineering as applied to hydraulic structures.

The **2014 Hydraulic Structures Medal** is present to **Steven J. Wright, Ph.D., P.E., M.ASCE** for his significant contributions to the hydraulic engineering community in the areas of spillway design, fuse plug design criteria, landslide wave generation criteria, hydraulic modeling methods, sediment transport scaling in physical models, and hydraulic measurements and experimental methods.

Professor Steven J. Wright received his BSE degree in agricultural engineering and MSE in hydraulic engineering from Washington State University. He then earned a Ph.D. in Civil Engineering from the California Institute of Technology in 1977 and thereafter joined the faculty in Civil and Environmental Engineering at the University of Michigan. His Ph.D. research considered mixing processes from marine outfalls and was awarded the Lorenz G. Straub award. Subsequent research on density effects on mixing processes in outfall discharges evolved into additional work on density intrusions. At the same time, he developed the hydraulic laboratory facilities at the University of Michigan and conducted numerous physical hydraulic model studies on coastal structures as well as pumping stations and other control structures in sewer and stormwater systems. He was awarded the ASCE Civil Engineer of the year award from the Ann Arbor Branch and the Michigan Section in 1999. Around that time, he became interested in the problem of surging in rapidly filling combined sewer systems and began to investigate the role of air in eruptions from such systems. Laboratory studies confirmed the many ways in which discrete volumes of air could become trapped in a rapidly filling pipeline and how this air could migrate and subsequently erupt as a "sewer geyser" from a vertical shaft. He has published extensively on the results of laboratory studies of the phenomena associated with rapidly filling pipelines and the numerical modeling of the same.

HYDRAULICS & WATERWAYS COUNCIL BREAKFAST, AWARDS, AND LECTURE

KARL EMIL HILGARD HYDRAULIC PRIZE

The Karl Emil Hilgard Hydraulic Prize is presented to the author or authors of the paper that is judged to be of superior merit in dealing with a problem of flowing water, either in theory or in practice.

The **2014 KARL EMIL HILGARD HYDRAULIC PRIZE** is presented to **Lieutenant R. James Gensheimer, USN, A.M.ASCE, E. Eric Adams, Ph.D., P.E., M.ASCE,** and **Adrian W-K. Law, Ph.D.** for "Dynamics of Particle Clouds in Ambient Currents with Application to Open-water Sediment Disposal," in *Journal of Hydraulic Engineering*, 139(2), 114-123. (February 2013).

Born in Portland, Maine, **Lieutenant R. James (Jim) Gensheimer, USN,** was appointed to the United States Naval Academy in 2004. While at Annapolis, he studied Ocean Engineering and graduated with distinction in 2008. He was also recognized as a Chief of Naval Operations Distinguished Midshipman Graduate and was awarded the Ocean Engineering Class of 1924 Prize.

Lieutenant Gensheimer placed his naval career on pause after being accepted into the Massachusetts Institute of Technology to pursue a Master of Science degree in Civil and Environmental Engineering. He completed his graduate studies in 2010. His thesis, "Dynamics of Particle Clouds in Ambient Currents with Application to Open-water Sediment Disposal," focused on the mechanics of sediment disposal when discharged in currents with application to land reclamation and dredged material disposal.

Lieutenant Gensheimer reported to the USS FARRAGUT and filled a number of leadership positions between 2010 and 2013. He reported back to the Naval Academy in 2013 to begin his current assignment as an Instructor in the Naval Architecture and Ocean Engineering Department. He teaches undergraduate engineering courses during the academic year and provides leadership training to Midshipmen during the summer.

His personal and unit awards include the Navy and Marine Corps Commendation Medal, three Navy and Marine Corps Achievement Medals, Meritorious Unit Commendation, Defense Meritorious Service Medal, Global War on Terror Expeditionary Medal, and Global War on Terror Service Medal.

Dr. E. Eric Adams is a Senior Research Engineer in the Department of Civil and Environmental Engineering at the Massachusetts Institute of Technology. He is also the Director of the department's Master of Engineering Program and Associate Director for Research with MIT's Sea Grant College Program. His areas of expertise include physical and mathematical modeling of chemical fate and transport processes in the natural and built environment, and the design and environmental evaluation of effluent disposal systems. He has authored or co-authored over 150 journal articles, conference proceedings, papers, and book chapters; consulted with numerous private and public concerns; served as a panelist on committees commissioned by the National Research Council, U.S.G.S., U.S. EPA, U.S. Army Corps of Engineers, and various state agencies. He holds degrees in hydrodynamics from MIT (Ph.D., 1975), in civil engineering from MIT (S.M., 1972), and in engineering from Harvey Mudd College (B.S., 1970).

Adrian Wing-Keung Law received his Ph.D. from the University of California at Berkeley. He was a practicing engineer in the United States for more than 7 years, before joining the School of Civil and Environmental Engineering, Nanyang Technological University (NTU), Singapore, as an academic faculty. At NTU in addition to teaching courses in environmental hydraulics and coastal engineering, he is also the Director of the DHI-NTU Water and Environment Research Centre under the Nanyang Environment and Water Research Institute (NEWRI).

HANS ALBERT EINSTEIN AWARD

The Hans Albert Einstein Award is given to a member who has made a significant contribution to the engineering profession in the area of erosion control, sedimentation, and/or waterway development either in teaching, research, planning, design, or management.

The **2014 HANS ALBERT EINSTEIN AWARD** will be presented to **Jonathan Nelson, USGS**, for outstanding contributions to the advancement of river sediment transport and morphodynamics, and exceptional service to the community by co-founding the International River Interface Cooperative, developing innovative software for it, and tirelessly making it available to others through short courses. This award is being presented at the ASCE Annual Congress in Panama City, Panama, in October.

HYDRAULICS & WATERWAYS COUNCIL BREAKFAST, AWARDS, AND LECTURE

J.C. STEVENS AWARD

The J.C. Stevens Award is given to the best discussion of a paper, the discussion having been published by the Society in a journal overseen by EWRI during the twelve-month period ending with June of the year preceding the year of award.

The **2014 J.C. STEVENS AWARD** is presented to **Marian Muste VI, Ph.D., D.WRE, A.M.ASCE** and **Kyutae Lee, Ph.D.**, for their Discussion of the paper: "Uncertainty Model for In Situ Quality Control of Stationary ADCP Open-channel Discharge Measurement" by Hening Huang. The Discussion appeared in the *Journal of Hydraulic Engineering*, 13(1), 102-104 (January 2013).

Dr. Marian Muste is Research Engineer with IIHR-Hydroscience & Engineering and Adjunct Professor in the Civil & Environmental Engineering Department at The University of Iowa. He is author or co-author of more than 175 peer-reviewed journal and conference papers and 75 technical reports. Dr. Muste's main area of research and consulting is environmental river hydraulics. His activities range from laboratory investigations on micro-scale structures (turbulence, sediment-fluid interaction) to field studies on natural-scale river processes (flows in confluences, ice-covered river flows, thermally stratified flows, sediment-control, and flow-conditioning structures). The experimental research has been mainly conducted with laser- and acoustic-based non-intrusive techniques (image velocimetry, lidar, Doppler velocimetry). Extensive research efforts have been dedicated to uncertainty analysis, risk, and reliability of various protocols used in monitoring flow and transport processes in rivers. His experience and expertise in experimental hydraulics is continuously shared through teaching and development of teaching aids for student instruction. His most recent area of research aims to develop cyberinfrastructure for supporting research and education on sustainable use of water and land resources (web-based expert systems, large-scale data/information management systems, and sensors and sensor networks). Dr Muste is expert for UNESCO's International Hydrologic Program and World Meteorological Organization Commission for Hydrology projects. He has extensive international experience as a researcher (three-time Fulbright Fellow, and grantee of the Japan Society for the Promotion of Science) and the instructor of an international perspective course.

Dr. Kyutae Lee focuses on research in the field of river hydraulics. While pursuing his Ph.D., he dedicated extensive effort toward uncertainty analyses associated with river discharge measurements and unsteady flows (hysteresis in the stage-discharge rating curve). He has years of experience in hydrodynamic measurements using ADCPs, ADVs, PIV, and Pressure transducers, and employing instrument calibrations and standardized uncertainty analysis assessments. He is also dedicated to develop an analytical tool to solve 1D unsteady flow that is applicable to streams of all sizes, and he is currently working to design and test index-velocity, slope-area, and numerical methods for accurate estimation of river discharges.

Dr. Lee holds a Ph.D. in Civil and Environmental Engineering from The University of Iowa, an MS from North Carolina State University, and a BS from Chung-Ang University in South Korea. In 2011 while pursuing his Ph.D., he was selected for the prestigious Chateaubriand fellowship from the Embassy of France to conduct research in France, where he worked at the Université Claude Bernard Institute National des Sciences Appliquées in Lyon. He was subsequently a Visiting Researcher at Insa de Lyon Université. He was most recently a Postdoctoral Research Associate, IIHR, at The University of Iowa, and is presently a Postdoctoral Research Associate at the Oak Ridge National Laboratory.

JOURNAL OF HYDRAULIC ENGINEERING

2014 BEST TECHNICAL NOTE

J. Buhler, C.H. Oehy, and A.J. Schleiss

"Jets Opposing Turbidity Currents and Open Channel Flows," 39(1), 55-59. (2013)

Your choice of Council breakfasts is included for all Full, Student, Wednesday-daily, and Corporate Registrants. Additional tickets: $25.

PLANNING & MANAGEMENT COUNCIL BREAKFAST, AWARDS, AND LECTURE

Lecture Title: Realities of Water Resources Sustainability, Traditional Knowledge, and the Future of the Poor

JULIAN HINDS AWARD AND LECTURE

The Julian Hinds Award recognizes the author or authors of a paper that is judged to make the most meritorious contribution to the field of water resources development. The award may also be made to an individual for notable performance, long years of distinguished service, or specific actions that advanced engineering in the field of planning, development, and management of water resources.

The **2014 JULIAN HINDS AWARD** is presented to **Larry W. Mays, Ph.D., P.E., P.H., D.WRE, F.ASCE** for his research on water resources and hydro systems addressing optimization and risk/reliability analysis for their design, management, and operation, and his authoritative text and reference books that have had world-wide impact.

Dr. Larry Mays is Professor of Civil, Environmental, and Sustainable Engineering in the School of Sustainable Engineering and the Built Environment at Arizona State University. Professor Mays' academic career has spanned 38 years, starting at the University of Texas in Austin in 1976, followed by the last 25 years at Arizona State, where he served as Chair of the Civil and Environmental Engineering Department (1989-1996). Prior to that, he was Director of the Center for Research in Water Resources at The University of Texas at Austin. Professor Mays received B.S. and M.S. degrees in civil engineering from the University of Missouri at Rolla, then served in the U.S. Army, stationed at the Lawrence Livermore Laboratory in California. He received the Ph.D. in civil engineering from the University of Illinois at Urbana-Champaign. His research in the area of hydrosystems engineering has focused on the application of optimization and risk/reliability analysis to the design, management, and operation of water infrastructure systems. The mentoring of graduate students has been a major focus in his career having supervised to completion 31 Ph.D. students and many master's degree students. In addition to his many journal and proceeding publications, Professor Mays is the author, co-author, or editor-in-chief of 23 books, including the well-known textbooks *Water Resources Engineering; Groundwater Hydrology; Applied Hydrology; Hydrosystems Engineering and Management; Ground and Surface Water Hydrology*; and handbooks. His interests have expanded to visiting archaeological sites around the world to photograph and study ancient water structures. He has published several articles on this topic and a book, *Ancient Water Technologies*. He volunteered with several organizations, including UNESCO-IHP, to develop the book, *Integrated Urban Water Management in Arid and Semi-Arid Regions*. Professor Mays is a Fellow of the International Water Resources Association and a Fellow of the American Society of Civil Engineers and a lifetime member of ASCE. He has served on the Board of Directors of UCOWR. Among his honors, he has received a Distinguished Alumnus Award from the Department of Civil Engineering at the University of Illinois at Urbana-Champaign.

PLANNING & MANAGEMENT COUNCIL SERVICE-TO-THE-PROFESSION AWARD

The Planning and Management Council Service-to-the-Profession Award is given to recognize and honor a person or persons for outstanding leadership, activities, and achievement in service to the profession in the field of water resources planning through the institute, councils, local sections, or other organizational units of the Society.

The **2014 PLANNING & MANAGEMENT COUNCIL SERVICE-TO-THE-PROFESSION AWARD** is presented to **Laurel S. Saito, Ph.D., P.E., M.ASCE,** in recognition for her unselfish dedication to the welfare of the profession, its members, and the public through her efforts with the Institute, the International and Planning & Management Councils, the Visiting International Fellowship Program, the 2050 Futures Monograph, as *Journal of Water Resources Planning and Management* Associate Editor, and other activities.

Dr. Laurel Saito is Associate Professor in the Department of Natural Resources and Environmental Science and also Director of the Graduate Program of Hydrologic Sciences at the University of Nevada Reno. She received her MS and Ph.D. in Civil Engineering from Colorado State University. Dr. Saito has served as Chair of the International Cooperation Council (now the International Council) and the Emerging and Innovative Technologies Committee of EWRI. Dr. Saito and others from the International Cooperation Council developed and implemented the Visiting International Fellowship, which has brought 36 water and environmental professionals from 18 developing countries to the EWRI Congress over the past 11 years. Dr. Saito was also a co-editor of the book *Toward a Sustainable Water Future: Visions for 2050* in which over 50 water experts provide optimistic visions for environmental and water resources in the future.

PLANNING & MANAGEMENT COUNCIL BREAKFAST, AWARDS, AND LECTURE

JOURNAL OF WATER RESOURCES PLANNING AND MANAGEMENT

2014 BEST RESEARCH-ORIENTED PAPER AWARD

Amin Rasekh and Kelly Brumbelow

"Probabilistic Analysis and Optimization to Characterize Critical Water Distribution System Contamination Scenarios," Vol. 139, No. 2, pp. 191-199

2014 QUENTIN MARTIN BEST PRACTICE PAPER AWARD

Guangtao Fu, Ph.D., Joseph R. Kasprzyk, Ph.D., Zoran Kapelan, Ph.D., Patrick M. Reed, Ph.D., P.E., A.M.ASCE

"Optimal Design of Water Distribution Systems Using Many-objective Visual Analytics," Vol. 139, No. 6, pp. 624-633

Dr. Guangtao Fu is Senior Lecturer in Water and Environmental Engineering at the Centre for Water Systems, University of Exeter. He has bachelors and masters degrees in hydraulic engineering from Shandong University, and a Ph.D. in water resources engineering from Dalian University of Technology, China. He worked in various research positions at University of Bristol (2003-2005), Imperial College London (2005-2006), and University of Exeter (2006-2010), and became a member of the academic staff at the University of Exeter in 2010. Dr. Fu's research focuses on conducting fundamental and applied research at the interface between water systems and decision making by combining simulation, optimization, and information technologies to tackle water and environmental issues. He has authored/co-authored over 40 journal papers. He was a member of the organizing committees for several conferences including CCWI 2011 and 13th IWA UK Young Water Professionals Conference.

Dr. Joseph Kasprzyk is Assistant Professor in the Civil Environmental and Architectural Engineering Department at the University of Colorado Boulder. He obtained a Ph.D. in Civil Engineering from the Pennsylvania State University and also worked with the firm AECOM on a study of the effects of climate change on the United States National Flood Insurance Program. Dr. Kasprzyk's work focuses on multiobjective decision support for water systems. His research has been published in the journals *Water Resources Research, Journal of Water Resources Planning and Management*, and *Environmental Modelling and Software*. Presenting his research internationally, he won an award at the International Environmental Modelling and Software Society meeting in Leipzig, Germany in 2012. Kasprzyk is active in EWRI as a member of its Water Resources Systems Committee, and Vice Chair of the Task Committee on Improving Water Resources Systems Education.

Dr. Zoran Kapelan is Professor of Water Systems Engineering and Academic Lead for the Water and Environment Group at the University of Exeter. He is a chartered engineer with 25 years of research and consulting experience in water engineering, both in the UK and abroad. He graduated at the University of Belgrade in 1989 as the top student in his class and obtained his Ph.D. at the University of Exeter in 2002. Prior to joining the University in 1999, he worked for 10 years as a full-time consultant in the water industry abroad and was responsible for the design of various complex water engineering systems. His research interests and expertise are centered around the development of novel methodologies for addressing a wide range of issues in urban water systems. Recently, Professor Kapelan pioneered the award-winning technology for automated detection of bursts and other events in distribution systems by processing sensor data in real-time. This technology is now used companywide in one of the largest UK water utilities, resulting in major operational cost savings. He has been the investigator on more than 20 EPSRC, EU and industry funded research projects. Professor Kapelan is an IWA Fellow, member of the EWRI Emerging and Innovative Technologies Task Committee, ASCE WDSA Standing Committee, and several IWA specialist groups. He is current Associate Editor for the *Journal of Water Resources Planning and Management*, and has to his credit over 250 technical publications.

Dr. Patrick Reed's primary research interests relate to sustainable water management given conflicting demands from renewable energy systems, ecosystem services, expanding populations, and climate change. The tools developed in Dr. Reed's group bridge sustainability science, risk management, economics, multi-objective decision making, operations research, computer science, and high performance computing. Engineering design and decision support software developed by Dr. Reed has been used broadly in governmental and industrial application areas (e.g., water resources planning and management, logistics, and U.S. satellite constellation design and management). His open source and free academic software related to multi-objective optimization has thousands of users across the world.

WEDNESDAY, JUNE 4 / 7:30 - 8:45 A.M.
(Oregon Ballroom 204)

PLANNING & MANAGEMENT COUNCIL BREAKFAST, AWARDS, AND LECTURE

2014 BEST POLICY-ORIENTED PAPER

N. Riegels, M. Pulido-Velazquez, C. Doulgeris, V. Sturm, R. Jensen, F. Møller, P. Bauer-Gottwein

"Systems Analysis Approach to the Design of Efficient Water Pricing Policies under the EU Water Framework Directive," Vol. 139, No. 5, 574-582

2014 BEST REVIEWER

Joseph R. Kasprzyk, Ph.D. and Theodore Grantham, Ph.D.

2014 BEST ASSOCIATE EDITOR

Yves Filion, Ph.D., P.Eng.

STANDARDS DEVELOPMENT COUNCIL AWARDS

The **STANDARDS DEVELOPMENT COUNCIL OUTSTANDING MERIT AWARD** is presented to **S. David Graber, P.E., F.ASCE,** for Completion of ANSI/ASCE/EWRI 12, 13, 14-2013 while serving as the Corresponding Editor during 2012-2013, and for Approval by ANSI in less than one year.

The **STANDARDS DEVELOPMENT COUNCIL OUTSTANDING MEMBER RECOGNITION** is presented to **Thomas P. DeFelice, Ph.D., M.ASCE,** for Completion of ANSI/ASCE/EWRI 44-2013 while serving as the Corresponding Editor for the Supplement to ASCE 44-05 and the Reaffirmation of the remainder of ASCE 44-05 during 2012-2013.

Your choice of Council breakfasts is included for all Full, Student, Wednesday-daily, and Corporate Registrants. Additional tickets: $25.

THURSDAY, JUNE 5 / 7:30 - 8:45 A.M.
(Oregon Ballroom 203)

WATERSHED COUNCIL BREAKFAST, AWARDS, AND LECTURE

Lecture Title: Hydrology in the Public Interest

VEN TE CHOW AWARD

Established in 1995, the Ven Te Chow Award recognizes individuals whose lifetime achievements in the field of hydrologic engineering have been distinguished by exceptional achievement and significant contributions in research, education, or practice.

The **2014 VEN TE CHOW AWARD** is presented to **Jery R. Stedinger, Ph.D., Dist.M.ASCE** for his pioneering contributions to hydrologic science and statistical methods used world-wide to quantify flood risk, address dam safety issues, evaluate water resource system operation, and evaluate drought risk.

Dr. Stedinger's photo and biography appear on page 57.

WALTER L. HUBER CIVIL ENGINEERING RESEARCH PRIZE

The Walter L. Huber Civil Engineering Research Prizes are awarded to members of the Society, in any grade, for notable achievements in research related to Civil Engineering. Preference is given to younger members (generally under 40 years of age) of early accomplishment who can be expected to continue fruitful careers in research.

The **2014 Walter L. Huber Civil Engineering Research Prize** is presented to **Enrique R. Vivoni, Ph.D., P.E., M.ASCE** for contributions to our understanding of ecohydrologic processes in semi-arid areas, including the moderating role of vegetation and interactions among water, energy, and carbon cycling, and to the development of high-resolution hydrologic models, including the use of parallel computing systems.

Enrique R. Vivoni is trained as a civil and environmental engineer with a specialization in hydrology from M.I.T. (BS 1996; MS 1998; Ph.D. 2003). He is currently an Associate Professor at Arizona State University. Since 2003, Professor Vivoni has taught courses in water resources and geological sciences at the undergraduate and graduate levels. In his research activities, he has published 100 papers in peer-reviewed publications and given over 300 presentations. His research group focuses on studying hydrological processes and developing engineering solutions within natural and urban environments and their interactions with social, ecological, atmospheric, and geomorphic phenomenon. Professor Vivoni is internationally recognized in the fields of distributed hydrologic modeling, ecohydrology of semiarid regions, North American monsoon studies, and integration of engineering tools for advancing hydrologic science. He has won numerous major awards including the Presidential Early Career Award for Scientists and Engineers, U.S. Fulbright Scholar and Kavli Fellow.

WATERSHED COUNCIL BREAKFAST, AWARDS, AND LECTURE

ARID LANDS HYDRAULIC ENGINEERING AWARD

The Arid Lands Hydraulic Engineering Award is given in recognition of original contributions in hydraulics, hydrology (including climatology), planning, irrigation and drainage, hydroelectric power development, navigation specially applicable to arid or semi-arid climates, or contributions to the understanding and development of new technology in river basins.

The **2014 ARID LANDS HYDRAULIC ENGINEERING AWARD** is presented to **Donald Woodward, P.E., F.ASCE,** for outstanding contributions advancing arid lands hydrology and hydraulic engineering and associated water policy, and particularly the development of the methodology for estimation of runoff from rainfall using curve numbers in both arid and humid regions around the world.

Donald Woodward worked an entire career – 39 years – for the National Resource Conservation Service (NRCS), retiring as the National Hydraulic Engineer on the Conservation Engineering Division Staff. In his various roles, he was responsible for directing hydrologic studies for NRCS, preparing national policy, preparing hydrologic technical materials, training of NRCS staff, and directing efforts to develop/upgrade hydrologic/hydraulic computer programs for the evaluation and design of dams. Mr. Woodward's experience with the preparation of NRCS technical manuals includes: Member of the teams that prepared the National Engineering Manual and Chapter 2 – Estimating Peak Rates and Volume of Runoff of the NRCS Engineering Field Manual; team leader in preparing eight chapters of Section 4 – Hydrology for the National Engineering Handbook (NEH-630); and efforts to upgrade NRCS computer programs. Mr. Woodward co-authored more than 30 technical publications, and prepared hydrology handbooks for various other agencies, including the country of The Gambia. An Honorary Badge of SGGW was presented to Mr. Woodward for developing and contributing to research at Warsaw Agricultural University. He has worked on various ASCE committees, contributed to several ASCE publications, and gained recognition as an outstanding reviewer for the *Journal of Hydrology*. He is a graduate of the University of Idaho and is a Registered Engineer in Oregon.

JOURNAL OF HYDROLOGIC ENGINEERING

2014 BEST PAPER

Daniel López Garcia de la-Barrera, Ph.D., Pilar García-Navarro, Ph.D., M.ASCE, Pilar Brufau, Ph.D., J. Burguete, Ph.D.

"Diffusive-wave Based Hydrologic-Hydraulic Model with Sediment Transport. I: Model Development and II: Validation and Practical Application," 17(10), 1093-1104 and 17(10), 1105-1122

2014 BEST CASE STUDY

M. Mizanur Rahman, Ph.D., M.ASCE, Norendra Kumar Goel, Ph.D., Dhyan Singh Arya, Ph.D.

"Development of the Jamuneswari Flood Forecasting System: Case Study in Bangladesh," 17(4), 565-577

2014 BEST TECHNICAL NOTE

Zekai Sen, Ph.D.

"Innovative Trend Analysis Methodology," 17(9), 1042-1046

2014 BEST DISCUSSION

Witold G. Strupczewski, Ph.D., Ewa Bogdanowicz, Ph.D., Krzysztof Kochanek, Ph.D.

"Discussion of 'Synthetic Design Hydrographs Based on Distribution Functions with Finite Support' by Francesco Serinaldi and Salvatore Grimaldi," 18(1), 121-126

2014 OUTSTANDING ASSOCIATE EDITOR

Don K. Frevert, Ph.D., P.E., D.WRE, M.ASCE

The WSC breakfast is included for all Full, Student, Thursday-daily, and Corporate Registrants. Additional tickets: $25.