



2020 Awards Program



Awards Program

Margaret S. Petersen Award

For an outstanding woman in environmental and water resources



Teresa B. Culver, Ph.D., A.M.ASCE Teresa Culver, Ph.D., has impacted the field of water resources engineering through research, teaching, and service. She serves on the faculty of the University of Virginia (UVa), where she was the first female faculty member in the second oldest public civil engineering program in the United States. Through her research in the simulation and management of water quality, she

earned the Walter L. Huber Award, ASCE* and the National Science Foundation Career Award. Her teaching has been recognized in her school and university with the award for Outstanding Teaching in Civil Engineering and as a Lilly Teaching Fellow. While at UVa, she has taught 15 different courses in civil engineering and has directed the undergraduate civil engineering program for 17 years. Through mentorship, such as advising 48 female students on their undergraduate theses (44% of her advisees) and creating service-learning courses, she has supported the increase in female students at her institution, where the first class with majority women civil engineers will soon graduate. Beyond UVa, she has provided extensive service to the Environmental and Water Resources Institute (EWRI/ASCE). Her service includes serving on the Technical Advisory Executive Committee, chairing the Groundwater Council, serving on the Interdisciplinary Council, chairing the EWRI Awards committee, and representing EWRI to the ASCE national Huber Award selection committee. She was also the founding chair of the Hydraulic Fracturing Committee. For these contributions, she is being recognized with the Margaret S. Peterson award* and the Service to the Institute award (EVVRI).

Lifetime Achievement Award

The 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.



Rob Ettema, Ph.D., P.E., F.ASCE

Robert Ettema is active in several aspects of civil engineering hydraulics, including hydraulic structures, river hydraulics and cold-regions hydraulics. He pursued his engineering education at Auckland University, New Zealand, attaining the PhD degree in 1980.

Since August 2015, he is a professor in the Department

of Civil & Environmental Engineering at Colorado State University (ČSU). During July 2007- August 2013, Ettema served as Dean of the College of Engineering and Applied Science at the University of Wyoming and then served as a professor there, though collaborating with hydraulics researchers at CSU. From January 1999 to July 2007, he was head of the Department of Civil and Environmental Engineering at the University of Iowa (UI). He has been extensively active as a member of Ul's Iowa Institute of Hydraulic Research during August 1980 - July 2007.

Ettema, a member of ASCE since 1985, has served as Editor of the American Society of Civil Engineer's Journal of Hydraulic Engineering (1998-2002), and currently is an associate Editor for ASCE's Journal of Cold Regions Engineering. In 2002 he received ASCE's Hunter Rouse Award in engineering hydraulics. He was the Technical Program Chair for the 2009 World Congress of the International Association of Hydraulic Research and Engineering (IAHR). The Congress, held in Vancouver, was jointly organized by IAHR, ASCE, and the Canadian Society of Civil Engineers. He and two coauthors received ASCE's 2011 Karl Emil Hilgard Hydraulic Prize for best paper in the Journal of Hydraulic Engineering. Earlier, in 1991 he received the Gustave Willems Best Paper Award from the U.S. Section of Permanent Association for Navigation Congresses (PIANC). In 2015, he received ASCE's Hans Albert Einstein Award, and in 2019 he received ASCE's Harold R. Peyton Award for Cold Regions Engineering. He currently is a vice-president of IAHR.



Paul Bizier, P.E., BCEE, D.WRE, F.EWRI, F.ASCE

Paul Bizier is currently the senior engineering manager for the Water Group at Barge Design Solutions in Nashville, TN. He received a Master of Science degree in Environmental Engineering from the Georgia Institute of Technology and a Bachelor of Science degree in Civil Engineering from University of Central Florida. He is registered in Florida, Georgia, Texas and Tennessee and

is a Diplomate of the American Academy of Water Resource Engineers and a Fellow in both EWRI and ASCE.

Bizier has over 33 years of experience in engineering with over 25 years of experience in process design and analysis. His experience includes design roles in dozens of wastewater treatment facilities and process systems for activated sludge and biosolids treatment. This has included several unique and innovative projects in both Florida and Tennessee. He has participated in national-level committees for both the Water Environment Federation and the American Society of Civil Engineers, as well as EWRI.



M. Katherine Banks, Ph.D.

M. Katherine Banks, Ph.D., is vice chancellor of engineering and national laboratories for The Texas A&M University System and dean of the College of Engineering at Texas A&M University. Banks oversees coordination and collaboration among the engineering, academic and research programs at seven universities throughout the Texas A&M System, as well as three

state agencies: the Texas A&M Engineering Experiment Station (TEES), the Texas A&M Engineering Extension Service (TEEX) and the Texas A&M Transportation Institute (TTI).

Banks is also TEES director, overseeing research administration, technology commercialization and technology workforce development. Between the engineering agencies, she has oversight of \$310 million in sponsored research. As dean of Texas A&M's College of Engineering, University Distinguished Professor and holder of the Harold J. Haynes Dean's Chair in Engineering, Banks leads one of the largest engineering schools in the country, with 20,800 students and 700 faculty.

Banks is a member of the National Academy of Engineering and Fellow of the American Society of Civil Engineers. She leads the A&M System national laboratory engagement and serves as a board member and principal executive engaged with Triad National Security, LLC for the management and operation of Los Alamos National Laboratory. Banks is the principal investigator for the recent \$65 million cooperative agreement with the CCDC Army Research Laboratory. This cooperative agreement is part of the A&M System initiative with Army Futures Command and the new George H. W. Bush Combat Development Complex, a \$130 million investment by the System and State of Texas.

Service to the Institute Award

The Service to the Institute Award is given in recognition of extensive and outstanding service to the Institute.



Teresa B. Culver, Ph.D., A.M.ASCE See bio located for the Margaret Petersen award.

Visiting International Fellows

This fellowship is granted annually to increase the participation of water resources and environmental professionals from developing countries in EWRI conferences, and to promote sustained professional and cultural exchange.



Rahime Iclal Birtek – Turkey Hosted by Heidi Gough



Thailand Hosted by Zhenduo Zhu Chowdhary



Pranab Kumar Wenchao Xue -Mohapatra – India Hosted by Hemant

Khero Zarif -Pakistan Hosted by Haroon Stephan

EWRI Fellows

EWRI Fellowship is granted to those who have been a member of EWRI for 10 or more years and have demonstrated accomplishments that have contributed significantly to the advancement or application of water resources or environmental engineering, science, and technology.



Biman Gati Gupta, Ph.D., **F.EWRI**



Kaveh Madani, Craig Patterson, P.E., F.EWRI Ph.D., F.EWRI

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.



Vijay P. Singh, Ph.D., D.Sc., P.E., Hon.D.WRE, Dist. M.ASCE

V.P. Singh is a Distinguished Professor, a Regents Professor, and Caroline and William N. Lehrer Distinguished Chair in Water Engineering at Texas A&M University. He received his B.S., M.S., Ph.D. and D.Sc. degrees in engineering. He is a registered professional

engineer, a registered professional hydrologist, and an Honorary Diplomate of ASCE-AAWRE. He has published extensively in the area of irrigation engineering, hydrology, and water resources, including 30 textbooks; Handbook of Applied Hydrology; Encyclopedia of Snow, Ice and Glaciers; and hundreds of refereed journal articles. He has received 95 national and international awards, as well as three honorary doctorates. He is a fellow of seven professional societies, a distinguished member of ASCE, an Honorary Member of AWRA, a Distinguished Member of Association of Global Ground Water Scientists, and member or fellow of 11 international science/engineering academies. He has served as President of the American Institute of Hydrology (AIH), Chair of Watershed Council of American Society of Civil Engineers, Vice President of Indian Association of Hydrologists, Vice President of Association of Global Groundwater Scientists, and is currently President of American Academy of Water Resources Engineers. He has served/serves as editor-in-chief of three journals, including ASCE Journal of Hydrologic Engineering, and two book series and serves on editorial boards of more than 25 journals and three book series. He has given more than 300 invited lectures in the United States and overseas; delivered 95 invited keynote addresses; chaired 94 conference sessions at international conferences; lectured at 30 short courses, and organized 24 international conferences. He has served on panels for National Science Foundation, U.S. Geological Survey, U.S. Army Research Office, U.S. Department of Energy, U.S. Bureau of Reclamation, and U.S. Department of Homeland Security; National Research Council of Science and Engineering, Canada; Research Council of Brazil; European Commission; and Australian Research Council.

Journal of Irrigation and Drainage Engineering

Best Reviewer

Mark Dougherty, Ph.D., P.E.

Best Discussion

Pau Martí, Ph.D.

For the paper Discussion of "Estimating Evapotranspiration Using an Extreme Learning Machine Model: Case Study in North Bihar, India" by Journal of Irrigation and Drainage Engineering, Volume 143, Issue 4, April, 2017, doi.org/10.1061/(ASCE)IR.1943-4774.0001044

Honorable Mention Paper Awards

John R. Mecikalski W. Barclay Shoemaker Qinglong Wu Michael A. Holmes Simon J. Paech David M. Sumner

"High-Resolution GOES Insolation–Evapotranspiration Data Set for Water Resource Management in Florida: 1995–2015" Journal of Irrigation and Drainage Engineering Volume 144 Issue 9, September 2017. DOI: 10.1061/(ASCE)|R.1943-4774.00013122019

David A. Chin, F.ASCE

Eboné A. Ross

"Canonical Rainfall Distributions in the United States", Volume 144, Issue 11, November 2018, DOI: 10.1061/(ASCE)IR.1943-4774.0001350

Best Paper Awards

Omer Bilhan, Ph.D. M. Emin Emiroglu, Ph.D. M. Cihan Aydin, Ph.D. Carol J. Miller, Ph.D., P.E. "Experimental and CFD Analysis of Circular Labyrinth Weirs", Volume 144,

Issue 6, June 2018, DOI: 10.1061/(ASCE) IR.1943-4774.0001301

Thomas J. Trout, F.ASCE

Kendall C. DeJonge

Crop Water Use and Crop Coefficients of Maize in the US Great Plains" Journal of Irrigation and Drainage Engineering, Volume 144, Issue 6, June 2018, DOI: 10.1061/(ASCE)IR.1943-4774.0001309

Hunter Rouse Hydraulic Engineering Award & Featured Award Winner

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.



John S. Gulliver, Ph.D., P.E., F.ASCE

John S. Gulliver is a Professor in the Department of Civil, Environmental and Geo-Engineering at the University of Minnesota. He has taught courses in fluid mechanics, environmental mass transport and urban hydrology and water quality. From 1997 to 2007, he was Head of the Department of Civil Engineering at the University of Minnesota. Dr. Gulliver's primary research interests are

in the areas of environmental fluid mechanics, chemical transport and fate in environmental systems, and flow and mass transport at hydraulic structures. Current research involves interfacial mass transfer and remediation of nonpoint source pollution from urban runoff. Specific research projects include the measurement and prediction of air-water mass transfer at hydraulic structures, aeration of hydroturbine flows to improve dissolved oxygen content, and development of practices to remove dissolved contaminants from urban runoff. Gulliver has written two books, edited three books, and published over 139 refereed journal articles in these areas of research. Gulliver received the Rickey Medal 2003 from the American Society of Civil Engineers, an award given for a career of research and education related to hydroelectric energy, and was appointed the Joseph T. and Rose S. Ling Professor of Civil Engineering from 1999 through 2009 by the Department of Civil Engineering, University of Minnesota. Dr. Gulliver was elected to the grade of Fellow in ASCE in 1993.

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.

Daniel Valero, Ph.D.

Daniel B. Bung, Ph.D.

Valero, D., and D.B. Bung. 2018. Vectrino Profiler Spatial Filtering for Shear Flows Based on the Mean Velocity Gradient Equation. Journal of Hydraulic Engineering, ASCE. 144(7): 04018037

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.



Sebastien Erpicum, Ph.D.

After receiving a Master degree in Civil Engineering (2000) from the University of Liege, Sebastien Erpicum joined the Applied Hydrodynamics and Hydraulic Constructions (HACH) research unit, working as a research and teaching assistant. He served as a core member of the team that developed the new academic modeling system WOLF. His research on optimization

techniques and hydraulic numerical modeling earned him an Advanced Studies in Engineering (2001) degree and a Ph.D. (2006).

In 2006, S. Erpicum became the director of research and testing activities in the Engineering Hydraulics Laboratory (University of Liege). Starting from the strong international background in the use of physical scale hydraulic modeling as a problem-solving tool, he expanded the laboratory capability through the development of composite modeling techniques (coupled physical and numerical modeling). With the help of three colleagues (Dr. P. Archambeau, Prof. B. Dewals and Prof. M. Pirotton), Dr. Erpicum founded the Hydraulics in Environmental and Civil Engineering (HECE) research group, which currently continues the development of the WOLF modeling system and develops the Engineering Hydraulics Laboratory activities. Dr. Erpicum advanced to Associate Lecturer (2008) and became an Associate Professor in 2015. In the framework of his activities, he is strongly involved in the IAHR Hydraulic Structures Committee (Chairman since 2019). He is also active in the ICOLD Committee on Hydraulics for Dams (Belgian representative).

Since 2008, Dr. Erpicum has been one of the key pioneers in researching, understanding, and publishing information related to the development and implementation of the innovative Piano Key Weir concept and its application to several dam rehabilitation projects in France and abroad. Most recent research topics of Dr. Erpicum, still closely related to hydraulic structures and especially spillways, concern the operation of ogee-crested spillways above design head and thin nappe oscillation phenomenon associated with overflow crests.

Hans Albert Einstein Award

This award acknowledges significant contribution to the engineering profession in the areas of erosion control, sedimentation, and/or



waterway development either in teaching, research, planning, design, or management. Ronald R. Copeland, Ph.D., P.E., M.ASCE

Journal of Hydraulic Engineering

Best Paper

Daniel Valero, Ph.D.

Daniel B. Bung, Ph.D.

Valero, D., and D.B. Bung. 2018. Vectrino Profiler Spatial Filtering for Shear Flows Based on the Mean Velocity Gradient Equation. Journal of Hydraulic Engineering, ASCE. 144(7): 04018037

J. C. Stevens Award – Best Discussion Sarfaraz A. Ansari, Ph.D.

Discussion of "Using an improved jet-erosion test to study the influence of soil parameters on the erosion of a silty soil". Journal of Hydraulic Engineering, 144(11): 07018013.

Simon W. Freese Environmental Engineering Award & Keynote Speaker

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



John C. Crittenden, Ph.D., P.E., F.ASCE, NAE John C. Crittenden is the director of the Brook Byers Institute for Sustainable Systems and a professor in the School of Civil and Environmental Engineering at the Georgia Institute of Technology. He holds the Hightower Chair and is a Georgia Research Alliance Eminent Scholar in Environmental Technologies. Prof. Crittenden received his Bachelor's in Chemical Engineering and

his Master's and Ph.D. in Civil Engineering from the University of Michigan. Prof. Crittenden was elected to the National Academy of Engineering in 2002 and the Chinese Academy of Engineering in 2013. He is the co-holder of five patents and the primary author of the text book, Water Treatment: Principles and Design, now in its third edition (Wiley). He is the author more than 333 articles in refereed journal articles, more than 100 book chapters, reports, and symposia and has more than 22,500 citations and a H index of 72.

Crittenden's current research focus is on sustainable urban infrastructure systems. His colleagues and he are conducting research on alternative energy technologies, sustainable materials, food energy water nexus, advanced modeling of urban systems, sustainable engineering pedagogy, and urban form and policy. He also conducts research in various water and air treatment technologies (e.g., membrane technology, advanced oxidation processes, photocatalytic oxidation, adsorption, selective catalytic reduction) and energy harvesting technologies (photocatalytic water splitting and aqueous phase reforming of biomass).

Rudolph Hering Medal

This award recognizes outstanding papers that contribute to the advancement of the environmental branch of the engineering profession.



C.M. Kao, S.C. Chen, Ph.D., F.ASCE

Ph.D.



Y.T. Sheu, Ph.D.



Rao Surimpalli, Tian C. Zhang, Ph.D., Ph.D. F.ASCE

"Application of Microbial Transformation to Remediate Hg-Contaminated Water: Strain Isolation and Laboratory Microcosm Study", S. C. Chen; Y. T. Sheu; R. Y. Surampalli, Dist.M.ASCE; T. C. Zhang, F.ASCE; and C. M. Kao, F.ASCE, Journal of Environmental Engineering 144(7), 2018, 10.1061/(ASCE)EE.1943-7870.0001385.

The Rudolph Hering Medal will be presented at the 2020 ASCE Convention.

Wesley W. Horner Award

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

Lewis N. Lloyd G. Michael Éitch, Ph.D.

Tony S. Singh, Ph.D., P.E. James A. Smith, Ph.D., P.E.

"Characterization of Environmental Pollutants in Sediment Collected during Street Sweeping Operations to Evaluate its Potential for Reuse", Journal of Environmental Engineering, 145(2), 2019, 10.1061/(ASCE)EE.1943-7870.0001493.

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.

Mongkolaya Rungvetvuthivitaya, Ph.D. Rengao Song, Ph.D. Mark Campbell

Eric Zhu, Ph.D. Tian C. Zhan, Ph.D., F.ASCE Ray Chittaranjan, Ph.D., F.ASCE

"Decay Kinetics of Chlorite under Simulated Distribution System Conditions" Journal of Environmental Engineering, Vol. 145, No. 4, 2019. 10.1061/ (ASCE)EE.1943-7870.0001487

Journal of Hazardous, Toxic and Radioactive Waste

Best Theoretical Oriented Paper

Mark C. Gemperline, Ph.D., P.E., M.ASCE

"Responding to the Smallest Consequential Quantity of Soil Contamination", J. Hazard. Toxic Radioactive. Waste 23(2), 04019002 (2019).

Best Practice Oriented Paper

D.G. Grubb, M.ASCE

T. B. Weik

D.R.B. Berggren "Air-Cooled Blast Furnace Slag, II: Phosph

"Air-Cooled Blast Furnace Slag. II: Phosphate Removal from Simulated Rainfall Events", J. Hazard. Toxic Radioactive. Waste 22(4), 04018031 (2018).

Best Associate Editor Award

Tian C. Zhang, Ph.D., F.ASCE

Journal of Sustainable Water in the Built Environment

Best Case Study

Thomas H. Epps, Ph.D. John M. Hathaway, Ph.D.

"Establishing a Framework for the Spatial Identification of Effective Impervious Areas in Gauged Basins: Review and Case Study." Journal of Sustainable Water in the Built Environment, 4(2), 05018001.

Best Paper

Lauren McPhillips, Ph.D. Christine Goodale, Ph.D.

M. Todd Walter, Ph.D.

"Nutrient Leaching and Greenhouse Gas Emissions in Grassed Detention and Bioretention Stormwater Basins." Journal of Sustainable Water in the Built Environment 4, no. 1 (February 2018): 04017014.

Urban Water Resources Research Council Service Award – *Presented at the 2020 Low Impact Development Conference*

Michael Clar, PE, D.WRE

Ven Te Chow Award- & Keynote Speaker

The Ven Te Chow Award recognizes lifetime achievement in the field of hydrologic engineering.



Richard M. Vogel, M.ASCE

In September 2017, Richard Vogel converted from professor to professor emeritus and research professor in the department of civil and environmental engineering after 33 years on the faculty at Tufts University. In 2017 he was elected Fellow of the American Geophysical Union. Professor Vogel received several other ASCE awards including: the Walter L. Huber Civil Engineering

Research Prize in 1995 and the Julian Hinds Award in 2009.

Vogel received his BS in systems engineering in 1977 and his MS in environmental science in 1979, both from the University of Virginia. He received his Ph.D. in Water Resource Systems Engineering from Cornell University in 1984. Between his MS and PhD degrees he was a consulting hydrologist for two years with Dufresne-Henry Inc. in Vermont.

Vogel is the author of over 145 peer reviewed scientific journal articles and 15 book chapters. He has a Google Scholar h-index of 61 with over 14,500 Google Scholar citations. He has given over a dozen keynote lectures.

Vogel's research experience has covered a broad range of topics relating to: hydrology, water resource engineering, natural hazards and environmental statistics. Most of his research involves the application of statistical and systems approaches to the solution of applied problems in the fields of hydrology, water resources engineering and natural hazards. He has also made numerous other contributions to the areas of water supply, watershed modeling, watershed management and environmental statistics and has transferred basic innovations in the field of statistical hydrology to advance the state of practice relating to other natural hazards including: earthquakes, landslides, winds, and bird and plant extinctions.

Arid Lands Hydraulic Engineering Award

This award recognizes original contributions in hydraulics, hydrology, planning, irrigation and drainage, hydroelectric power development, navigation applicable to arid or semi-arid climates, or contributions to the understanding and development of new technology in river basins.



Larry W. Mays, Ph.D., P.E., P.H., F.ASCE, D.WRE Larry W. Mays is a Professor Emeritus of the School of Sustainable Engineering and the Built Environment at Arizona State University. He earned his B.S. (1970) and M.S. (1971) degrees in civil engineering from the University of Missouri at Rolla (now the Missouri School of Science and Technology), after which he served in the U.S. Army, (1970-1973) stationed at the Lawrence

Livermore National Laboratory. He received a Ph.D. in civil engineering from the University of Illinois at Urbana-Champaign (UIUC) in 1976 and was later bestowed a Distinguished Alumnus Award from UIUC.

His teaching and research career spanned over 43 years, first 13 years at the University of Texas (UT) at Austin from 1976 to 1989 and then continuing for the last 30 years at Arizona State University. At UT, he served as the Director of the Center for Research in Water Resources, and at Arizona State University, he served as Chair of the Civil and Environmental Engineering Department from 1989 to 1996. He has supervised 38 Ph.D. students to completion and has traveled to over 60 countries for the purposes of consulting, photography of ancient water systems, and presentations at international meetings.

His previous awards have included the ASCE Julian Hinds Award, the ASCE Ven Te Chow Award, the Warren A. Hall Medal from the Universities Council on Water Resources, and the 6th Prince Sultan bin Abdulaziz International Prize for Surface Water.

Mays has published his research extensively and has been the author, coauthor, or editor of 24 books including textbooks, handbooks, and even books on ancient water systems. In fact, his book, "Integrated Urban Water Management: Arid and Semi-arid Regions" was developed for the UNESCO-IHP.

One of his major efforts has been the photography and study of ancient water systems. He and his wife, Susi, live in Pagosa Springs, CO and Mesa, $\rm AZ$

Journal of Hydrologic Engineering

Best Case Study

Gabriel Perez Mesa, Ph.D. Student, S.M.ASCE Ricardo Mantilla, Ph.D. Aff.M.ASCE

Witold F. Krajewski, Ph.D. Aff.M.ASCE

"Estimation of Historical-Annual and Historical-Monthly Scale-Invariant Flow Duration Curves with Implementation for Iowa" by Gabriel Perez, Ricardo Mantilla, and Witold F. Krajewski, 2018, 23(12), DOI: 10.1061/(ASCE) HE.1943-5584.0001707.

Best Discussion

Yue Liu, Ph.D. Shi-jun Chen, Ph.D.

Wei-bin Huang, Ph.D. Guang-wen Ma, Ph.D.

"Influence of Daily Regulation of a Reservoir on Downstream Navigation" in ASCE JHE, 2018, 23(10), https://doi.org/10.1061/(ASCE)HE.1943-5584.

Best Technical Note

Richard H. McCuen, Ph.D., M.ASCE

"Critical Values for Sen's Trend Analysis," 2018, 23(11), DOI: 10.1061/ (ASCE)HE.1943-5584.0001708

Best Associate Editor

Latif Kalin, Ph.D.

Best Technical Paper

Hong Fang, Ph.D.

Jianting Zhu, Ph.D.

"New Approach for Simulating Groundwater Flow in Discrete Fracture Network" by Hong Fang and Jianting Zhu, 2018, 23(7), DOI: 10.1061/ (ASCE)HE.1943-5584.0001665.

Thursday, May 21 – Planning & Management Council Luncheon & Awards 12:15 – 1:45PM

Julian Hinds Award & Keynote Speaker

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.



Avi Ostfeld, D.Sc., F.ASCE, F.EWRI

Avi Ostfeld is a Full Professor in the Faculty of Civil and Environmental Engineering at the Technion – Israel Institute of Technology, in Haifa ISRAEL. He 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. His main research work is in the area of water distribution systems analysis and, in particular, in water distribution systems security. Dr. Ostfeld served as the Editor of the Water Resources Planning and Management Division ASCE Journal from 2010-2016, received the EWRI Service to the Profession Award in 2016, is Fellow, Environmental and Water Research Institute (EWRI) as of 2013, Fellow, American Society of Civil Engineers (ASCE) and Fellow, International Water Association (IWA) as of 2012. Dr. Ostfeld published to date 128 manuscripts in refereed professional journals and 145 papers in conference proceedings.

Service to the Profession

This award recognizes and honors a person 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.



David Watkins, Ph.D., M.ASCE

David Watkins, Ph.D., is distinguished professor of civil and environmental engineering at Michigan Technological University, where he has been on the faculty since 1999. He received BS degrees in Civil Engineering and Engineering & Public Policy from Washington University in St. Louis, and an MS in Environmental Engineering and Ph.D. in Civil

Engineering degrees The University of Texas at Austin. Prior to joining Michigan Tech, he was a research hydraulic engineer at the U.S. Army Corps of Engineers Hydrologic Engineering Center. He is a licensed Professional Engineer in Michigan.

Watkins' teaching interests include hydrologic and hydraulic engineering, water and environmental systems analysis, and international service learning. He serves as a faculty advisor to the Michigan Tech student chapter of Engineers Without Borders-USA, and he directs an international capstone design program in Panama. Watkins' research interests include sustainable development and integrated systems modeling to address environmental and water resources problems in both the developing and industrialized world. His current research includes investigations of the foodenergy-water nexus at the household scale, the potential use of abandoned mines for pumped-storage hydropower, and climate adaptation planning in rural communities in El Salvador. He has directed the research of six Ph.D. and 40 master of science graduates, and he has advised more than 20 undergraduate students in research.

Watkins is active in the EWRI Environmental & Water Resources Systems and River Basin, Planning, Policy & Operations technical committees, and he has served as chair of the EWRI International Council. He currently serves as chief editor of the ASCE Journal of Water Resources Planning and Management.

Journal of Water Resources Planning and Management

Best Research Oriented Paper

Justin D. Delorit, Ph.D., P.E., M.ASCE Delorit, J., & Block, P. (2019). Using Seasonal Forecasts to Inform Water

Market-Scale Option Contracts. Journal of Water Resources Planning and Management, 145(5)

Quentin Martin Best Practice Oriented Paper

Thomas B. Wild, Ph.D. Patrick M. Reed, Ph.D., M.ASCE Martin Mallen-Cooper

Erland D. Jensen Daniel P. Loucks, Ph.D., Dist. M.ASCE

Wild, T., & Reed, P., Loucks, D., Mallen-Cooper, M., Jensen, E. (2019). Balancing Hydropower Development and Ecological Impacts in the Mekong: Tradeoffs for Sambor Mega Dam. Journal of Water Resources Planning and Management, 145(2).

Best Policy Oriented Paper

Euijin Yang, S.M.ASCE Kasey M. Faust, Ph.D., A.M.ASCE

Yang, E., & Faust, K. (2019). Human-Water Infrastructure Interactions: Substituting Services Received for Bottled and Filtered Water in US Shrinking Cities. Journal of Water Resources Planning and Management, 145(12).

Best Seminal Paper Award

John W. Nicklow, Ph.D., F.ASCE Patrick Reed, M.ASCE Dragan Savic Tibebe Dessalegne, M.ASCE Laura Harrell, M.ASCE Barbara Minsker, M.ASCE Avi Ostfeld, M.ASCE Abhishek Singh, M.ASCE Amy Chan-Hilton, Ph.D., P.E., F.EWRI, M.ASCE Mohammad Karamouz, Ph.D., P.E., F.ASCE, D.WRE Emily Zechman, M.ASCE

Nicklow, J., Reed, P., Savic, D., Dessalegne, T., Harrell, L., Chan-Hilton, A., Karamouz, M., Minsker, B., Ostfeld, A., Singh, A. and Zechman, E. (2009). State of the art for genetic algorithms and beyond in water resources planning and management. Journal of Water Resources Planning and Management, 136(4): 412-432.

Best Associate Editor

Jakobus Ernst van Zyl, Ph.D.

Best Reviewer

Amy Piscopo, Ph.D.

Stefano Alvisi, Ph.D.

State-of-the-Art in Civil Engineering Award

Xiaofeng Liu, Ph.D., P.E., M.ASCE Jie Zhang, P.E., M.ASCE

Walter L. Huber Civil Engineering Research Prize

Amir AghaKouchak, Ph.D., P.E., M.ASCE John Fortner, Ph.D., A.M.ASCE Zhiyong Ren, Ph.D., EIT, A.M.ASCE

Task Committee Excellence Award

Tim Ward, Ph.D., P.E., F.ASCE, F.EWRI Richard Hawkins, Ph.D., P.E., F.ASCE, F.EWRI Donald Woodward, P.E., F.ASCE

Outstanding Institute Chapter

Pittsburgh Chapter