# AWARDS

## WORLD ENVIRONMENTAL & WATER RESOURCES CONGRESS 2013



CINCINNATI, OHIO / MAY 19-23, 2013

#### **AWARDS PRESENTATION EVENTS:**

ICE BREAKER RECEPTION – SECTION WELCOME WITH POSTERS SUNDAY, MAY 19 / 5:30 – 7:00 P.M. (GRAND BALLROOM AB)

WELCOME CEREMONY, KEYNOTE LECTURE, BREAKFAST, AND AWARDS MONDAY, MAY 20 / 7:30 – 9:15 A.M. (JUNIOR BALLROOM ABCD)

PLANNING & MANAGEMENT COUNCIL BREAKFAST, AWARDS, AND LECTURE TUESDAY, MAY 21 / 7:30 – 8:45 A.M. (JUNIOR BALLROOM AD)

HYDRAULICS & WATERWAYS COUNCIL BREAKFAST, AWARDS, AND LECTURE TUESDAY, MAY 21 / 7:30 – 8:45 A.M. (JUNIOR BALLROOM BC)

VISITING INTERNATIONAL FELLOWS RECEPTION WITH POSTERS TUESDAY, MAY 21 / 5:30 – 7:30 P.M. (GRAND BALLROOM AB)

WATER, WASTEWATER & STORMWATER <u>AND</u> ENVIRONMENTAL COUNCILS BREAKFAST, AWARDS, AND LECTURE

WEDNESDAY, MAY 22 / 7:30 - 8:45 A.M. (JUNIOR BALLROOM AD)

WATERSHED AND IRRIGATION & DRAINAGE COUNCILS BREAKFAST, AWARDS, AND LECTURE WEDNESDAY, MAY 22 / 7:30 – 8:45 A.M. (JUNIOR BALLROOM BC)

STUDENT AND NEW PROFESSIONALS ACTIVITIES COUNCIL LUNCHEON AND AWARDS WEDNESDAY, MAY 22 / 12:30 – 1:30 P.M. (JUNIOR BALLROOM AD) (Students Only)

> GROUNDWATER COUNCIL BREAKFAST, AWARDS, AND LECTURE THURSDAY, MAY 23 / 7:30 – 8:45 A.M. (JUNIOR BALLROOM AD)

WATER DISTRIBUTION SYSTEMS ANALYSIS SYMPOSIUM BREAKFAST AND LECTURE

THURSDAY, MAY 23 / 7:30 - 8:45 A.M. (JUNIOR BALLROOM BC)

The Environmental & Water Resources Institute (EWRI) of the American Society of Civil Engineers (ASCE) is proud to recognize the 2013 recipients of the Society's Career Achievement Awards and Paper Awards, and EWRI's Career Achievement, Service, and Paper Awards.

SUNDAY, MAY 19 / 5:30 – 7:00 P.M. (GRAND BALLROOM AB) MONDAY, MAY 20 / 7:30 – 9:15 A.M. (JUNIOR BALLROOM ABCD)

## Ice Breaker Reception – Section Welcome with Posters

## EWRI SECTION AND BRANCH ACTIVITIES COUNCIL OUTSTANDING TECHNICAL GROUP OR INSTITUTE CHAPTER AWARD

The purpose of this award is to bonor an outstanding ASCE Section or Branch Environmental and/or Water Resource Technical Group or EWRI Chapter based on its activities, relative to its size and geographic location.

The 2013 recipient is the **Suncoast Chapter of EWRI**, being represented by Chapter Representative Adnan Javed, P.E., M.ASCE.



Included for all Full, Senior, Student, Corporate, and Monday-daily Registrants. Additional tickets: \$50.

## 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 2013 Lifetime Achievement Award is presented to Jerry L. Anderson, Ph.D., P.E., D.WRE, F.ASCE; Donald M. Phelps, P.E., D.WRE, M.ASCE; and Vijay P. Singh, D.Sc., P.E., Hon.D.WRE, F.ASCE.

**Dr. Jerry L. Anderson** received his BSCE from Tennessee Technological University in 1966, MSCE from Vanderbilt University in 1967, and Doctorate of Philosophy in Water and Environmental Engineering from



Vanderbilt University in 1972. He joined the faculty of the Department of Civil Engineering at the University of Memphis in 1972 where he has been the primary professor in charge of the Water Resources curriculum both at the undergraduate and graduate level. In 1998, he became Director of the University's Ground Water Institute. He retired in May 1911.

Dr. Anderson's areas of expertise are in studies of the hydrodynamics of surface water and ground water, drainage,

flood plain mapping, geographic information systems, hydrology, and hydraulics. Dr. Anderson has been involved with research with the US Environmental Protection Agency, US Geological Survey, US Army Corps of Engineers Engineering Research and Development Center (Waterways Experiment Station), the State of Tennessee, and the Ground Water Institute. His involvement with ASCE began with the student chapter in college. In 1967, he became an Associate Member, and followed that with Fellow and Life Membership. Dr. Anderson became active with the previous Water Resources Planning and Management Division in 1982 when he was on various task committees, standing committees, technical editor for technical conferences, and on the Executive Committee (1992-1996) where he was the Division Chairman in 1996. He continued his activity with the Environmental and Water Resources Institute where he served as the first chairman of the Infrastructure Council, later renamed the Water, Wastewater, and Stormwater Council. He was the chair of the EWRI Awards Committee and the WWSC Awards Committee, and on the Paper Review Committee for the Society. Additionally, he is a Diplomate with the American Academy of Water Resources Engineers. Dr. Anderson was also a member of the US Army Reserves and retired as a Colonel in the Corps of Engineers.

Keynote Breakfast is included for all Full, Senior, Student, and Monday-daily Registrants. Additional tickets: \$25.

# Welcome Ceremony, Keynote Lecture, Breakfast, and Awards

## **EWRI LIFETIME ACHIEVEMENT AWARDS**

Don Phelps left New Hampshire at 20 years old in 1968 with everything he owned in two packing trunks in the back of his El Camino and \$180 dollars in his pocket... heading for Alaska. He ran out of money in Washington, DC, went to work for the US Forest Service for the next 10 years, and then headed back home and to Washington State University for a pair of engineering degrees. With those degrees in hand, he moved to Mountain Empire Community College in Virginia to teach engineering



and environmental science for 2 years before moving on to New England College in New Hampshire to teach civil engineering classes. He went into the consulting field in 1989 and moved back to Lake Chelan in Washington State in 1991. In 2005, he and his wife started a winery, with Don growing the grapes for his wife, the winemaker. According to Don: "In the 30 years since I left Washington State, I volunteered as much time as I possibly could to the benefit of ASCE and EWRI, serving on numerous committees starting in 1983; chairing multiple conferences; holding leadership roles in Section activities, the ASCE Board of Direction, and EWRI. It has been a great life and I am looking forward to many more vintages at Hard Row to Hoe Vineyards. (PS: I still have the trunks!)"

Professor V.P. Singh holds the Caroline and William N. Lehrer Distinguished Chair in Water Engineering and is a Professor of Biological and Agricultural Engineering and a Professor of Civil and Environmental Engineering at Texas A&M University. He received his BS, MS, Ph.D. and D.Sc. degrees in engineering and is a registered professional engineer, professional hydrologist, and honorary diplomate of the American Academy of Water Resources Engineers. He has widely published in



the areas of hydrology, ground water, hydraulics, irrigation engineering, environmental engineering, and water resources engineering. He has received numerous national and international awards for his research contributions and professional service, including the Arid Lands Hydraulic Engineering Award, the Torrens Awards, the Norman Medal, and the Vent Te Chow Award from the American Society of Civil Engineers; and the R.K. Linsley Award and Founders Award from the American Institute of Hydrology. He has been awarded two honorary doctorates (Ph.D. and D.Eng.) from the University of Basilicata, Italy, and University of Waterloo, Canada, respectively. He currently serves as Editor-in-Chief of Water Science and Engineering, and Editor-in-Chief of Springer's Water Science and Technology book series, and associate editor/member of 20 journal editorial boards. He served as Editor-in-Chief of the ASCE Journal of Hydrologic Engineering (2004-2012). He has given numerous keynote addresses, directed innumerable international conferences, chaired many sessions and panels, examined hundreds of Ph.D. dissertations from different parts of the world, and served as a consultant on several national and international projects. He is a fellow of American Water Resources Association (AWRA), Indian Water Resources Society (IWRS), India Society of Agricultural Engineers (ISAE), Indian Association of Soil & Water Conservationists (IASWC), and Institution of Engineers (IE), and a member of numerous other professional societies. He is also a fellow/ member of 10 international science/engineering academies. Professor Singh has served as President and Senior Vice President of the American Institute of Hydrology (AIH), and has served on numerous committees of the American Society of Civil Engineers and American Water Resources Association, as well as on government panels.

## 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.

#### C. Dale Jacobson, P.E., Dipl.BCEE, D.WRE, F.ASCE

**C. Dale Jacobson** has over 40 years' experience in water and sanitation, water resources, and groundwater issues. He holds Masters Degrees in civil engineering and business administration. He has served as President of two globallyfocused water organizations (to include EWRI) and on the Boards of several other waterrelated organizations. He organized the role of professional associations' sessions at the 2nd and 5th World Water Fora and co-founded the Water



Associations Worldwide group. For the 6th World Water Forum, he led the planning for the water and food security sessions, participated in water and sanitation sessions, and led the US effort in the Americas Regional Process. Presently, Dale acts as Governor to the World Water Council on behalf of ASCE.

## DISTINGUISHED CHAIR SERVICE AWARD – STANDARDS DEVELOPMENT COUNCIL

**Robert S. Giurato, P.E., M.ASCE** for his distinguished service as chair of the Urban Drainage Standards Committee.

# Planning & Management Council Breakfast, Awards, and Lecture

Lecture Title: "Reflections and Visions on Water Resources Planning and Management"

## 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 **2013 Julian Hinds Award** is presented to **Walter M. Grayman**, **Ph.D.**, **P.E.**, **D.WRE**, **F.ASCE** for pioneering research and years of outstanding and sustained leadership as a consulting engineer in water supply and distribution networks, urban water infrastructure, water pollution and water resources planning and management, and for service leading ASCE and EWRI technical committees.

For the past 26 years, **Dr. Walter M. Grayman** has been owner of the independent consulting engineering firm of W.M. Grayman Consulting Engineer, specializing in the fields of water supply, water pollution, and water resources. He is a member of American Geophysical Union (AGU), American Water Resources Association (AWRA), American Water Works Association (AWWA), International Water Association (IWA), and has chaired national committees for both ASCE and AWWA. He has over 150 publications to his credit and has won awards from both ASCE and AWWA for his publications, research, and service to the profession.



Over his 40-year career,

Dr. Grayman has garnered extensive experience in a variety of fields that relate to risk-based analysis of water resources. These include the assessment of climate change and its potential impact on the water infrastructure; design of riskbased water quality sampling programs; water distribution system modeling, sampling, and management; water security vulnerability assessment with emphasis on issues of water contamination; and

integration of GIS technology and spatial models of hydrologic analysis and infrastructure planning. He has performed studies and lectured on risk-based water resource analysis throughout the country and internationally and is widely recognized as an expert in this area.

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

The Planning and Management Council Service-to-the-Profession Award is given to recognize and bonor 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 **2013 Planning & Management Council Service-to-the-Profession Award** is presented to **Mohammad Karamouz**, **Ph.D.**, **P.E.**, **D.WRE, F.ASCE** for innovative research, textbooks, and dedicated service to ASCE and EWRI as Chairman of three ASCE-EWRI technical committees/councils (Systems Committee, International



Council, Emerging and Innovative Technologies Council); Associate Editor of the ASCE Journal of Water Resources Planning and Management for 6 years; Congress Technical Program Chair (1986); ASCE Water Forums Technical Program Chair (1992) and Proceedings Editor (1986, 1992); Chairman, Vice Chairman, and Secretary of the ASCE Water Resources Planning and Management

Program Committee (1984-1993); and ASCE NY Metropolitan Section Director (1992-1994). He is also recognized for his continued professional service to ASCE and EWRI over 28 years on numerous task committees as well as membership on the ASCE-EWRI Program Committee (2009-present). In addition to a distinguished academic career, which has included administrative service at various international and US academic institutions, Dr. Karamouz has contributed to the field of water resources engineering by publishing more than 300 technical articles and five textbooks. In 2011, Dr. Karamouz was featured on NBC Nightly News with Brian Williams. Dr. Karamouz is a licensed professional engineer as well as a diplomate member of the American Academy of Water Resources Engineers and a fellow of ASCE.

# Planning & Management Council Breakfast, Awards, and Lecture

## JOURNAL OF WATER RESOURCES PLANNING AND MANAGEMENT

#### 2013 BEST RESEARCH-ORIENTED PAPER AWARD

Lisa C. Thompson, Marisa I. Escobar, Stockholm Environment Institute – US Center; Christopher M. Mosser, Wildlife, Fish & Conservation Biology Department, University of California, Davis; David R. Purkey, Ph.D., US Water and Sanitation Group, Stockholm Environment Institute – US Center; David Yates, National Center for Atmospheric Research; Peter B. Moyle, Wildlife, Fish & Conservation Biology Department, University of California, Davis for their paper entitled "Water Management Adaptations to Prevent Loss of Springrun Chinook Salmon in California under Climate Change," 138(5), 465-478 (2012)

#### 2013 QUENTIN MARTIN BEST PRACTICE PAPER AWARD

Francisco J. Suero, A.M.ASCE, Instituto Nacional de Recursos Hidráulicos (INDRHI), Dominican Republic; Peter W. Mayer, P.E., Aquacraft, Inc.; David E. Rosenberg, Ph.D., A.M.ASCE, Utah State University for their paper entitled "Estimating and Verifying United States Households' Potential to Conserve Water," 138(3), 299-306 (2012)

#### **2013 BEST POLICY-ORIENTED PAPER**

Kaveh Madani, A.M.ASCE, Department of Civil, Environmental, and Construction Engineering, University of Central Florida; Jay R. Lund, Ph.D., M.ASCE, Department of Civil and Environmental Engineering, University of California, Davis for their paper entitled "California's Sacramento – San Joaquin Delta Conflict: From Cooperation to Chicken," 138 (2), 90-99 (2012)

#### 2013 BEST ASSOCIATE EDITOR AWARD

**Laurel S. Saito, Ph.D., P.E., M.ASCE,** University of Nevada-Reno, is awarded the Best Associate Editor of the *Journal of Water Resources Planning and Management* for 2013 for her consistent and exemplary service to the journal since 2008.

#### **2013 BEST REVIEWERS**

Maria da Conceição Morais de Oliveira Cunha, Ph.D., Departamento de Engenharia Civil – FCTUC, Pólo II da Universidade de Coimbra, Coimbra, Portugal

#### AND

Shaun Carney, P.E., M.ASCE, Riverside Technology, Fort Collins, CO

## PLANNING & MANAGEMENT COUNCIL OUTSTANDING ACHIEVEMENT AWARD

David W. Watkins, Jr., Ph.D., M.ASCE, Michigan Technological University, for his leadership in water resources planning and management education and spearheading the creation of the unique ASCE educational publication, "Water Resources Systems Analysis through Case Studies: Data and Models for Decision Making."

# Hydraulics & Waterways Council Breakfast, Awards, and Lecture

Lecture Title: "The Grand Challenge of Bridge Scour Prediction"

## 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 bydraulic engineering.

The **2013 Hunter Rouse Award** is presented to **Terry D. Sturm, Ph.D., P.E., M.ASCE** for his fundamental contributions in the area of fluid mechanics and sediment transport, and for his innovative work in sediment transport and practicing engineering.

Dr. Terry W. Sturm received BS and MS degrees in Civil Engineering from the University of Illinois and Ph.D. in Mechanics and Hydraulics from the University of Iowa at the Iowa Institute of Hydraulic Research. He holds the rank of Professor in the School of Civil and Environmental Engineering at the Georgia Institute of Technology where he teaches undergraduate courses in fluid mechanics and a graduate course sequence in open channel hydraulics and



sediment transport. In addition, he has taught continuing education courses on river hydraulics, culvert design, erosion control, and bridge scour. He is the author of a graduate-level textbook entitled Open Channel Hydraulics, which is published by McGraw-Hill and is in its second edition. His most recent experimental research and publications focus on the sediment-water interface in natural watercourses and the hydrodynamic processes that occur there such as flow resistance, cohesive sediment re-suspension, and bridge foundation scour. His research has been supported by agencies such as the National Science Foundation, National Academy of Sciences, US Geological Survey, Georgia Department of Transportation, Federal Highway Administration, Environmental Protection Agency, and US Army Corps of Engineers. In 2008, Dr. Sturm was named the Georgia Engineer of the Year in Education, and he is a past President of the Georgia ASCE Water Resources Technical Group. He is a Life Member of ASCE, and since 2010 has served as the Chief Editor of the ASCE Journal of Hydraulic Engineering.

## 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 bydraulic engineering as applied to bydraulic structures.

The **2013 Hydraulic Structures Medal** is present to **Clifford A. Pugh, P.E., M.ASCE** for his substantial contributions toward advancing hydraulic engineering in the areas of spillway design, fuse plug design criteria, landslide wave generation criteria, hydraulic modeling methods, and instrumentation.

Clifford A. Pugh is an internationally recognized technical expert in hydraulic engineering and has made significant contributions to the field of study especially in areas of hydraulic modeling and design of hydraulic structures.

Mr. Pugh's 40-year engineering career includes physical modeling, field testing, and technical advice. He has authored over 60 technical publications and books on various topics related to hydraulic



engineering. He retired as the head of the Bureau of Reclamation's Hydraulics Laboratory at the Technical Service Center in Denver in 2009 and is currently a consultant in Hydraulic Engineering.

Mr. Pugh has received several awards recognizing his contribution to the engineering community. His awards include the Outstanding Civilian Service Medal from the Department of the Army in February 2007 recognizing his service on ASCE's Expert Review Panel reviewing Hurricane Katrina, and the Superior Service Award from the Bureau of Reclamation. In 1992, he received the Ricky Medal for his part in writing Hydropower Development Guidelines for ASCE.

## 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 **2013 Karl Emil Hilgard Hydraulic Prize** is presented to **Adrian C. H. Lai, Ph.D.** Department of Civil Engineering, University of Hong Kong; **Daeyoung Yu, Ph.D.** *(deceased),* Croucher Laboratory of Environmental Hydraulic, University of Hong Kong; and **Joseph H.W. Lee, Ph.D., F.ASCE**, Vice President for Research and Graduate Studies, Hong Kong University of Science and Technology for the paper entitled "Mixing of a Rosette Jet Group in a Crossflow," Journal of Hydraulic Engineering, ASCE, 137(8), 787-803

## TUESDAY, MAY 21 / 5:30 – 7:30 P.M. (GRAND BALLROOM AB)

## 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 **2013 J.C. Stevens Award** is presented to **Iwao Ohtsu**, **Ph.D.**, **M.ASCE**, **Youichi Yasuda**, **Ph.D.**, **M.ASCE**, and **Masayuki Takahashi**, **Ph.D.**, **A.M.ASCE**, for authorship of the discussion of "Energy Dissipation and Turbulent Production in Weak Hydraulic Jumps," by E. Mignot and R. Cienfuegos in the *Journal of Hydraulic Engineering*, 137(8), 857-860. All authors are with Nihon University, College of Science and Technology, Tokyo.

## JOURNAL OF HYDRAULIC ENGINEERING

#### 2013 BEST TECHNICAL NOTE

Iran E. Lima Neto, Ph.D., Department of Hydraulic and Environmental Engineering, Federal University of Ceara – Technology Center for the note **"Modeling the Liquid Volume** Flux in Bubbly Jets Using a Simple Integral Approach," 138(2), 210-215 (2012)

The author presents a simple model for predicting the liquid volume flux indiced by round bubbly jets in aerated mixing zones based on experimental data of their own, as well as data from other investigators. The presentation of the results in dimensionless form identifies clear transitions between different zones based on the relative influence of buoyancy. The results of the paper can be applied to the engineering use of aeration in tanks and in relatively shallow water bodies for the improvement of water quality.

## Visiting International Fellows Reception with Posters

## EWRI VISITING INTERNATIONAL FELLOWSHIP AWARDS

The International Committee (IC) established the Visiting International Fellowship program to promote cultural and technical exchange between EWRI members and international colleagues from developing countries. This marks the program's twelfth year.

Visiting International Fellows are competitively selected by the IC's Visiting International Fellowship Task Committee. The 2013 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 2013 Visiting International Fellows will be recognized during the Congress at this Reception.

**Dr. B.R. Chahar**, Associate Professor, Indian Institute of Technology - Delhi, New Delhi, India

**B.R. Chahar** is Associate Professor of Civil Engineering at Indian Institute of Technology - Delhi. He earned his Ph.D. with an "Optimal Design of Channel Sections Considering Seepage and Evaporation Losses" from IIT Roorkee, and his MTech degree in Water Resources Engineering from IIT Kharagpur. His current areas of research include seepage, subsurface drainage, urban drainage, groundwater modeling, channel design,



numerical methods, etc. He has been teaching for more than 20 years and has guided many Masters and Doctoral theses. He is the recipient of several scholarships and awards, including AICTE Career Award for Young Teachers. He is the author of more than 70 articles in reputed journals and proceedings, and is Fellow/Life Member of seven professional groups, including service as Vice President, North India Chapter, EWRI of ASCE.

continued on next page

## TUESDAY, MAY 21 / 5:30 – 7:30 P.M. (GRAND BALLROOM AB)

## Visiting International Fellows Reception with Posters

continued from previous page

## EWRI VISITING INTERNATIONAL FELLOWSHIP AWARDS

**Dr. Kristrina Toderich**, Associate Professor, Regional Head of International Center for Biosaline Agriculture (ICBA) for Central Asia and Caucasus, Samarkand State University, Tashkent, Uzbekistan

Kristrina Toderich has more than 29 years of experience working on desert ecology and management of water resources research at the Samarkand Division of the Academy of Sciences of Republic of Uzbekistan. She has worked in all countries of Central Asia in development and research of land and water management with a focus on sustainable assessment, rehabilitation methodologies, and capacity development of degraded dryland in rural environments. She has



collaborated with international organizations, such as the International Center for Agriculture Research in Dryland Areas (ICARDA), Japanese International Research for Central Asian Studies (JIRCAS), Center for International Research of Agriculture Development (CIRAD), and for many United Nations and European Union Programs. She was the PI for several research/development projects with a strong emphasis on collaboration with researchers, extension colleagues, and end-users in low-income/poverty-affected pastoral communities impacted by climate change and desertification, and riverine communities affected by water and river pollution or salinity. Since 2006, PI Toderich has worked part-time as Regional Representative of the International Center for Biosaline Agriculture (ICBA) for Central Asia and Caucasus.

**Dr. Rajesh Gupta**, Professor, Visvesvaraya National Institute of Technology - Nagpur, Nagpur, India

Rajesh Gupta is presently working as Professor in the Department of Civil Engineering at Visvesvaraya National Institute of Technology (VNIT) Nagpur (India) and holding the additional charge of Dean. A Civil Engineering graduate from Jabalpur University (1987), Dr. Gupta did his post-grad work in Environmental Engineering in 1990 and obtained a Ph.D. from Nagpur University (1996) on the subject "Reliability-based Analysis and Design of Water Distribution



Systems." He joined VNIT as lecturer in 1991, became Assistant Professor in 1998, and was promoted to Professor in 2006. Previously, he served as Project Fellow at National Environmental Engineering Research Institute, Nagpur (1990-91). He was Head of the Civil Engineering Department (2009-2010), and has been Dean since 2010. He was also coordinator of new construction activities from 2006-2010. He is presently nodal officer for procurements and finance under the World Bank-funded Technical Education Quality Improvement Program-II (TEQIP-II). WEDNESDAY, MAY 22 / 7:30 – 8:45 A.M. / (JUNIOR BALLROOM AD)

## Water, Wastewater & Stormwater and Environmental Councils Breakfast, Awards, and Lecture

Lecture Title: "The Future of Environmental Microsensing: Measuring the Very Small"

## 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.

Paul L. Bishop, Ph.D., P.E., BCEE, F.ASCE is presented the 2013 Simon W. Freese Environmental Engineering Award for "providing direction and stimulation to numerous undergraduate and graduate students, for inspiring others, and for his unrelenting service to the profession."

**Dr. Paul L. Bishop** is currently serving as Fulbright Distinguished Chair of Environmental Engineering at the University of Parthenope, Naples, Italy. He is the Associate Dean of Engineering for Research on a part-time basis at the University of Rhode Island. He recently finished a 4-year term as the Environmental Engineering Program Director for the Division of Chemical, Bioengineering,



Environmental and Transport Systems (CBET) at the National Science Foundation (NSF). In April 2011, he retired as Associate Vice President for Research at the University of Cincinnati, where he is Professor Emeritus of Environmental Engineering. He also held a secondary appointment as Professor of Environmental Health in the College of Medicine.

Dr. Bishop received his BS in Civil Engineering from Northeastern University and his MS and Ph.D. from Purdue University in environmental engineering. He joined the University of Cincinnati in 1988 after 16 years as Professor and Head of the Department of Civil and Environmental Engineering at the University of New Hampshire. He previously served as department head at the University of Cincinnati, and was the Associate Dean for Graduate Studies and Research for six years before becoming the Associate Vice President for Research. He was also the Director of the NIH-funded University of Cincinnati Superfund Basic Research Program.

Dr. Bishop has directed over \$19 million of environmental research and is the author or co-author of five textbooks and over 500 technical publications. He is a Past President of the Association of Environmental Engineering and Science Professors (AEESP); a Registered Professional Engineer; a Fellow of the American Society of Civil Engineers, the Water Environment Federation, and the International Water Association; and a Board-Certified Environmental Engineer of the American Academy of Environmental Engineers (AAEE). He served two terms on the AAEE Board of Trustees. He was also Chair of the USA National Council of the International Water Association (IWA), member of the International Water Association Strategic Council, and three-term member of the Governing Board of the IWA. He also served on several federal boards, including the National Water Quality Monitoring Council and the National Aeronautics Research and Development Policy Working Group. He is currently a

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# Water, Wastewater & Stormwater <u>and</u> Environmental Councils Breakfast, Awards, and Lecture

Director of the Engineering Accreditation Board of the Accreditation Board for Engineering and Technology (ABET). He was recently elected to the Water Environment Research Foundation Board of Directors. Dr. Bishop's research interests include drinking water security, biological treatment of water and wastewater using biofilms, contaminated soil bioremediation, development of environmental microsensors, solidification/stabilization of hazardous wastes, and pollution prevention technologies. In 2005, he was awarded the Frontiers in Research Award by the Association of Environmental Engineering and Science Professors (AEESP) and in 2006 received the Outstanding Service Award from the International Water Association.

## **RUDOLPH HERING MEDAL**

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

The **2013 Rudolph Hering Medal** is presented to **Subbu-Srikanth Pathapati** and **John J. Sansalone, P.E.,** both of the University of Florida, for their paper "Modeling Particulate Matter Resuspension and Washout from Urban Drainage Hydrodynamic Separators," *Journal of Environmental Engineering*, 138(1), 90-100 (2012).

## WESLEY W. HORNER AWARD

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

The **2013 Wesley W. Horner Award** is presented to **Roopa Kamath**, **Ph.D.**, **P.E.**, **John A. Connor**, **P.E.**, **Tom E. McHugh**, **Ph.D.**, **Audra Nemir**, **M. Phuong Le**, and **A.J. Ryan**, all of GSI Environmental Inc., Houston, for their paper "Use of Long-term Monitoring Data to Evaluate Benzene, MTBE, and TBA Plume Behavior in Groundwater at Retail Gasoline Sites," *Journal of Environmental Engineering*, 138(4), 458-469 (2011).

## JOURNAL OF HAZARDOUS, TOXIC, AND RADIOACTIVE WASTE

#### 2013 BEST THEORETICAL-ORIENTED PAPER

Prof. C.S.P. Ojha, Indian Institute of Technology, Roorkee, India; K.S. Hari Prasad, D.N. Ratha, and Rao Y. Surampalli, Ph.D., P.E., BCEE, D.WRE, Dist.M.ASCE, US EPA, for their paper entitled "Virus Transport through Unsaturated Zone: Analysis and Parameter Identification," 16(2), 96-105 (2012)

#### 2013 BEST PRACTICE-ORIENTED PAPER

Kati Manskinen, Hannu Nurmesniemi, and Risto Pohkio for their paper entitled "Occupational Risk Evaluation of Using Bottom Ash and Fly Ash as a Construction Material," 16(1), 79-87 (2012)

## WATER, WASTEWATER & STORMWATER COUNCIL AWARDS

#### EXPRESSIONS OF APPRECIATION AWARD – WATER, WASTEWATER, AND STORMWATER COUNCIL

Jianpeng "Jim" Zhou, Ph.D., P.E., BCEE, M.ASCE

**Dr. Jianpeng Zhou** provided excellent service to the Residuals Management Technical Committee (RMTC) as Secretary, Vice-Chair, and Chair (2006-2012). Dr. Zhou, through his leadership, energized and brought positive impact to RMTC. He is praised for having "done a terrific job" for the committee.

# Watershed <u>and</u> Irrigation & Drainage Councils Breakfast, Awards, and Lecture

Lecture Title: "Water Resources Systems Engineering – From Ven Te Chow To Ven Te Chow"

## **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 **2013 Ven Te Chow Award** is presented to **Slobodan P. Simonovic, Ph.D., P.Eng., D.WRE, F.ASCE** for his outstanding contributions in the fields of water resources modeling and management, climate change-sensitive hydrologic engineering, systems, analysis and soft computing-based methods in hydrology, and for his extensive service to the profession and education through publications and books.

**Dr. Slobodan P. Simonovic** has over 30 years of research, teaching and consulting experience in water resources engineering. He teaches courses in civil engineering and water resources systems, and has been invited to present special courses for practicing water resources engineers in many countries. He actively works for national and international professional organizations, assists in the publication of water resources journals, and



participates in organizing national and international meetings. He has published over 350 professional publications and three major textbooks, and has received a number of awards for excellence in teaching, research, and outreach.

Dr. Simonovic's primary research interest focuses on the application of the systems approach to, and development of, decision support tools for management of complex water and environmental systems. Most of his work is related to the application of computerized simulation, optimization, and multi-objective analysis tools in deterministic, probabilistic, and fuzzy form. The second focus area of Dr. Simonovic's research includes risk management. He is developing and implementing probabilistic and fuzzy set methods for water resources risk management. He has undertaken applied research projects that integrate mathematical modeling, spatial and temporal data-base management, and intelligent interface development into decision support tools for water resources decision makers. Most of his research is conducted through the Facility for Intelligent Decision Support (FIDS) at the University of Western Ontario.

## 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 **2013 Arid Lands Hydraulic Engineering Award** is presented to **Timothy J. Ward, Ph.D., P.E., F.ASCE** for continuing contributions, initiative, and leadership in education, research, and service enhancing the advancement of hydraulic engineering, hydrology, and watershed planning studies in semi-arid regions around the world.

Dr. Timothy J. Ward is Dean of the School of Engineering and Professor of Civil and Environmental Engineering at Manhattan College in Riverdale, The Bronx, New York, and Emeritus Professor of Civil Engineering at the University of New Mexico. Professor Ward received BS and MS degrees in geological engineering from the Mackay School of Mines at the University of Nevada, Reno, and a Ph.D. in civil engineering from Colorado State University with emphases in hydrology,



hydraulics, and geotechnical engineering. He is a member of the National Society of Professional Engineers and a Founding Member of EWRI. He has conducted work throughout the United States and in Asia, Central and South America, and Europe, and authored or co-authored over 200 papers, reports, and presentations.

## JOURNAL OF HYDROLOGIC ENGINEERING

#### 2013 BEST PAPER

Prof. Ying Ma, Chinese Academy of Sciences; Prof. Shaoyuan Feng, Yangzhou University; Prof. Hongbin Zhan, Texas A & M University;
Xiaidong Liu, Water Authority of Haidian District, Beijing; Dongyuan Su, Guangxi Institute of Water Resources Research; Prof. Shaozhong Kang, China Agricultural University; and Prof. Xianfang Song, Chinese Academy of Sciences, for their paper entitled "Water Infiltration in Layered Soils with Air Entrapment: Modified Green-Ampt Model and Experimental Validation," 16(8): 628-638, 2011

# Watershed <u>and</u> Irrigation & Drainage Councils Breakfast, Awards, and Lecture

#### 2013 BEST CASE STUDY

Prof. J.M. Bravo, Depto. de Obras
Hidraulicas, Universidade Federal
do Rio Grande do Sul, Brazil; Prof.
D. Allasia, Depto. de Hidraulicas e
Saneamento, Universidade Federal de
Santa Maria, Brazil; Prof. A.R. Paz,
Depto. de Engenharia Civil e Ambiental,
Universidade Federal da Paraiba, Brazil;
Prof. W. Collischonn and Prof. C.E.M.
Tucci, both of Depto. de Hidrologia,
Universidade Federal do Rio Grande
do Sul, Brazil, for their study entitled
"Coupled Hydrologic-hydraulic Modeling
of the Upper Paraguag River Basin,"
17(7), 635-646 (2012)

#### 2013 BEST TECHNICAL NOTE

Prof. Ali R. Vatankhah, Department of Irrigation and Reclamation Engineering, University of Tehran for his note "Direct Integration of Manning-based GVF Equation in Trapezoidal Channels," 17(3), 455-462 (2012)

#### **2013 BEST DISCUSSION**

John D. Valiantzas, Department of Natural Resources and Agricultural Engineering, Agricultural University of Athens, for his discussion of "Case Study on the Accuracy and Cost-effectiveness in Simulating Reference Evapotranspiration in West-Central Florida" by Michael Grant Exner-Kittridge and Mark Cable Rains

# 2013 OUTSTANDING ASSOCIATE EDITOR

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

University of Maryland, for outstanding service as Associate Editor of the *Journal* of *Hydrologic Engineering*, helping to elevate the journal's reputation by providing a very highly qualified assessment to manuscripts; thoughtful, detailed reviews along with helpful recommendations of strengths and weaknesses to authors; and going the extra mile to provide additional support in many ways.

## JOURNAL OF IRRIGATION AND DRAINAGE ENGINEERING

#### **2013 BEST PAPERS**

J.L. Hutson, C.T. Simmons, and J. van den Akker, all of Flinders University, Australia, for their papers "Salinity Effects from Evaporation and Transpiration under Flood Irrigation," Vol. 137:754-764 and "Use of Stable Isotopes Deuterium and Oxygen-18 to Derive Evaporation from Flood Irrigation on the Basis of Pan Evaporation Techniques," Vol. 137:765-778

#### AND

J.M.S. Scholberg, Ph.D., Wageningen University, Netherlands; R. Munoz-Carperna, Ph.D., University of Florida; K. Femminella, University of Florida; M.D. Dukes, Ph.D., P.E., M.ASCE, University of Florida; L. Zotanelli, Ph.D., University of Florida, for the paper "Irrigation Scheduling for Green Bell Peppers Using Capacitance Soil Moisture Sensors"

# 2013 HONORABLE MENTION PAPERS

J.E. Hernandez, Ph.D., P.E., A.M.ASCE, USDA-ARS-CRPL, Bushland, TX and G.P. Merkley, Ph.D., P.E., Utah State University, for their papers "Canal Structure Automation Rules Using an Accuracybased Learning Classifier, a Genetic Algorithm, and a Hydraulic Simulation Model. I: Design," Vol. 137:1-11, and "Canal Structure Automation Rules Using an Accuracy-based Learning Classifier, a Genetic Algorithm and A Hydraulic Simulation Model. II: Results," Vol. 137:12-16

#### AND

Suat Irmak, Ph.D., M.ASCE, University of Nebraska, for his paper "Dynamics Of Nocturnal, Daytime, and Sum-of-Hourly Evapotranspiration and Other Surface Energy Fluxes over Nonstressed Maize Canopy," Vol. 137:475-490

#### **2013 BEST REVIEWERS**

The best reviewer award is presented to **Andrew N. French, Ph.D.,** USDA-ARS, for his timely and thorough reviews that contribute to the success of the *Journal of Irrigation and Drainage Engineering.* 

#### AND

The best reviewer award is presented to **Anvar R. Kacimov, Ph.D.,** Sultan Oaboos University, Oman, for his detailed and constructive review of papers published in the Journal of Irrigation and Drainage Engineering.

# Student and New Professionals Activities Council Luncheon and Awards

## **PB STUDENT DESIGN COMPETITION**

#### **2013 COMPETITORS**

Cal Poly Pomona: Mai Bushara, Zachary Gautsch, Matthew Holmes, Chelsea Kelcher, Cindy Khov, Jorden Louie, David Pardez, Todd Ricardson, Raymond Roesadi, Steven Saleh, Shannon Smith "Crystal Lake Site Rehabilitation"

San Jose State University: Patrick LaBruzzo, David Kehn, Shaun Mehl, Andrea Bautista

"TTHM Control with In-tank Aeration"

Seattle University: Andrew McEwan, Caitlyn Echterling, David Farr, Lauren Oumaye

"Real Time Control of Stormwater Detention Facilities to Reduce CSOs"

## **EWRI STUDENT POSTER COMPETITION**

#### 2013 COMPETITORS

#### To Be Viewed and Judged Onsite

482 "Encouraging and Empowering Liberian Female Youth in Engineering"

Sara Rimer, Doctoral student, University of Michigan, Ann Arbor, MI

629 "Effect of Entrapped Air and Gas Pockets on the Hydraulic Performance of Pressurized Sewer Pipes: A Case Study"

Kirstin Byrne (Primary Author, Presenting Author), Antonella Sciortino, Ph.D, California State University, Long Beach, CA; William Cassidy, P.E., Orange County Sanitation District, Fountain Valley, CA

#### 875 "Collection and Identification of Potentially Toxic and Allergenic Cyanobacteria from the Greater Cincinnati Area"

**Stefania Guglielmi, Alexus Rice, Miriam Steinitz Kannan, Ph.D.,** Northern Kentucky University, Highland Heights, KY

# 977 "Selection and Evaluation of Different Spatial Resolutions for Statistical Downscaling of Precipitation"

Aneesh Goly, EIT (Primary Author, Presenting Author), Ramesh Teegavarapu, Ph.D., P.E., Florida Atlantic University, Boca Raton, FL

1250 "San Dimas Experimental Watershed Modeling Project" Shannon Smith (Primary Author, Presenting Author), Patricia Hsia, EIT, Seema Shah-Fairbank, Ph.D., P.E., Cal Poly Pomona, Pomona, CA

# 1298 "Sustainable Water Resources Management Through Potable Water Augmentation $\mathbf{2}''$

Justin Lyon, P.E., LEED AP (Primary Author, Presenting Author), Biohabitats/Johns Hopkins University, Santa Fe, NM

## EWRI STUDENT TECHNICAL PAPER COMPETITION

#### **UNDERGRADUATE DIVISION**

#### **FIRST PLACE**

Julia Traylor, University of Colorado at Boulder, Boulder, CO "Optimal Initial Configuration of Treatment Solution for In Situ Remediation of Contaminated Groundwater Using Engineered Injection and Extraction"

#### **SECOND PLACE**

Rachel Musgrove, Texas A&M University, Austin, TX "An End-use Integrated Agent-based Model to Simulate Consumer Demand for a Water Utility"

#### THIRD PLACE

Justin Cosgrove, Norwich University, Northfield, VT "Hydrological Analysis of Potential Campus Expansions by Two Methods"

#### **GRADUATE DIVISION**

#### **FIRST PLACE**

Abhinav Gupta, Virginia Tech, Blacksburg, VA "Evolution of Organic Matter and Organic Nitrogen in Leachates with Landfilling Age: A Size Distribution and Hydrophobicity Study"

#### **SECOND PLACE**

Kamel Babaeivelni, University of Illinois at Chicago, Chicago, IL "Effect of pH and Ionic Strength on the Removal of Fluoride from Water Using Titanium Dioxide"

#### THIRD PLACE

Ehson Shafiee, North Carolina State University, Raleigh, NC "Integrating an Agent-based Model with a Multi-objective Evolutionary Algorithm to Warn Consumers" THURSDAY, MAY 23 / 7:30 – 8:45 A.M. (JUNIOR BALLROOM AD) THURSDAY, MAY 23 / 7:30 – 8:45 A.M. (JUNIOR BALLROOM BC)

# Groundwater Council Breakfast, Awards, and Lecture

Lecture Title: "Working towards Sustainable Water Resources in a Constantly Changing World"

### PIONEERS IN GROUNDWATER AWARD

David G. Jewett, Ph.D., has been selected to deliver the 2013 Pioneers in Groundwater Award Lecture.

Dr. David G. Jewett is a hydrogeologist with the US EPA's Office of Research and Development (ORD), where he serves as the Chief of the Subsurface Remediation Branch of the National Risk Management Research Laboratory's Ground Water and Ecosystems Restoration Division (GWERD). Dr. Jewett also is the technical lead on the EPA's Study of Potential Impacts of Hydraulic Fracturing on Drinking Water Resources



where he focuses the majority of his attention on case studies to better understand potential impacts of hydraulic fracturing on ground water systems.

In addition to his responsibilities with the EPA's hydraulic fracturing national study, as Chief of the GWERD's Subsurface Remediation Branch, Dr. Jewett leads a team of scientists and engineers conducting research and providing technical support related to subsurface characterization and remedial technology development in order to protect and restore ground water, surface water, and ecosystem resources. His research interests include the water-energy nexus, ground water/surface water interactions, subsurface site characterization, and solute fate and transport.

Dr. Jewett also has served as the acting Director of the GWERD and is the former Director of the EPA's Center for Subsurface Modeling Support. Dr. Jewett holds a BS in geology from Syracuse University, an MS in geology from The Wichita State University, and a Ph.D. in hydrology from the Department of Hydrology and Water Resources at The University of Arizona. He has over 30 years of hydrology, hydrogeology, and project management experience in government, industry, and academia.

# Water Distribution Systems Analysis Symposium Breakfast and Lecture

Lecture Title: "Consequential Research: What Separates Consequential from Inconsequential Research?"

## WDSA KEYNOTE SPEAKER

Thomas M. Walski, Ph.D., D.WRE, F.ASCE, Senior Product Manager for Hydrology and Hydraulics Products, Bentley Systems

**Dr. Thomas Walski** has been responsible for a number of advances in water engineering. He (with Johannes Gessler) developed the first multi-objective water distribution optimization model; he was first to establish the need to consider valving and segments in assessing distribution system reliability; he (with Teresa Lutes) was first to demonstrate the existence of negative pressure due to hydraulic transients from normal operation in water systems; he developed a method for tracking movement of corrosive gas pockets through sewer force mains; he was one of the first to quantify pipe break rates in water systems; he initiated the first battle of the network models; and he was instrumental in advancing the state-of-the-art in calibrating and applying water distribution models. His 1984 book, *Analysis of Water Distribution Systems*, was the first book on applied water distribution modeling. He is the lead author on some of the leading reference books in water distribution and wastewater collection.

During his career, he served as a research civil engineer with the Army Corps of Engineers; Planning Engineer and later Manager of Water Distribution Operation for the City of Austin, Texas; Executive Director of the Wyoming Valley Sanitary Authority; Associate Professor of Environmental Engineering at Wilkes University; Engineering Manager for Pennsylvania American Water Company; Vice President of Engineering for Haestad Methods; and Senior Product Manager for Bentley Systems.

With ASCE, he has served as Editor of the *Journal of Environmental Engineering*, Associate Editor of the *Journal of Water Resources Planning and Management*, Chair of the Water Systems Committee (Water Resources Division) and Chair of the Water Supply and Awards Committees (Environmental Engineering Division) as well as serving on numerous other committees. He has a Ph.D. in Environmental and Water Resources Engineering from Vanderbilt University and is a licensed water system operator.

Your choice of Breakfast is included for all Full, Senior, Student, and Thursday-daily Registrants. Additional tickets: \$25. Your choice of Breakfast is included for all Full, Senior, Student, and Thursday-daily Registrants. Additional tickets: \$25.

# HELP RECOGNIZE OUTSTANDING ENGINEERS

The Honors and Awards Program of the American Society of Civil Engineers (ASCE) and the Environmental & Water Resources Institute (EWRI) has as its basic objective the enhancement of the engineering profession by emphasizing and rewarding exceptional merit and achievement.

Nominations are invited for ASCE Society Awards and EWRI Awards to be presented in 2014.

Do you know someone whose accomplishments deserve recognition or whose published work shows superior merit? Learn more about EWRI awards by visiting http://www.asce.org/ewri/Awards/EWRI-Awards/



#### WITH THANKS TO THE 2012-2013 EWRI AWARDS COMMITTEE

Teresa B. Culver, A.M.ASCE, Chair Jery R. Stedinger, Ph.D., Dist.M.ASCE, Vice Chair Wayne C. Huber, Ph.D., P.E., M.ASCE, Past Chair

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