Prince Sultan Bin Abdulaziz
International Prize for Water

Recognizing Innovation

9th Award Winners (2020)

HRH Prince Sultan Bin Abdulaziz
(1930 - 2011)

The Prize is an undertaking that reflects brightly on Saudi Arabia's continued efforts and constructive work on behalf of humanity. There can be no doubt that the Prize, by honoring creative scientists, gives recognition to the contributions they are making to protect one of our most precious resources. Whether it is for their work in water conservation, quality-control, minimizing pollution, or some other worthy endeavor, honoring these researchers is an inspiration for scientists to give their utmost in developing ever-better research methods and capabilities. – Prince Sultan Bin Abdulaziz (1930-2011)

The Prize in Brief

On 21 October 2002, His Royal Highness Prince Sultan Bin Abdulaziz – Saudi Arabia's former Crown Prince, Deputy Prime Minister, Minister of Defence and Aviation and Inspector General – announced in Riyadh that nominations were being accepted for a new prize to be awarded every two years: the Prince Sultan Bin Abdulaziz International Prize for Water (PSIPW).

The Prize Council, headed by Dr. Badran Al-Omar, rector of King Saud University, under the direction of PSIPW President HRH Prince Khalid Bin Sultan Bin Abdulaziz, includes leading scholars from around the world. The General Secretariat of the Prize is headquartered at the Prince Sultan Institute for Environmental, Water and Desert Research at King Saud University in Riyadh, Saudi Arabia.

PSIPW is a global scientific award focusing on cutting-edge innovation in water research. It gives recognition to scientists, researchers and inventors around the world for pioneering work that addresses the problem of water scarcity in creative and effective ways.

To this end, PSIPW offers a suite of five prizes every two years, covering the entire water research landscape. In this way, PSIPW encourages research to find solutions to the various water-related challenges facing the world today. One million Saudi riyals (USD 266,000) is allocated for the Creativity Prize, which is awarded to interdisciplinary work that represents a major scientific breakthrough in any water-related field. Five hundred thousand Saudi riyals ($133,000) is allocated for each of four Specialised Prizes in surface water, groundwater, alternative water resources, and water management & protection.

Nominations are evaluated by an international panel of distinguished scientists who serve on various specialised committees. Each of the five prizes has its own preliminary evaluation committee, followed by a referee committee, and ending with the final selection committee that presents its recommendation to the Prize Council.

Activities of the Prize

PSIPW is a non-profit, non-governmental organisation that promotes a wide range of innovative water-relate work around the world. Among its most important activities are the following:

1. The Prize is a member of a number of leading international organizations, including the World Water Council. PSIPW also has special consultative status with the United Nations Economic and Social Council (ECOSOC) It was granted this status at ECOSOC's Substantive Session of July 2013.

2. The Prize is an observing member of the United Nations' Committee on the Peaceful Uses of Outer Space and participates in its meetings in Vienna.

3. The Prize serves on the Arab Water Council's Board of Governors. It also provides support for some of the Council's activities.

4. The Prize, in conjunction with the United Nations and various space agencies, organizes the International Conference on the Use of Space Technology for Water Management, held every three years. To date, it has taken place in Riyadh, Buenos Aires, Rabat, and Islamabad.

5. In conjunction with King Saud University and the Saudi Ministry of Water and Electricity, the Prize organizes ICWRAE - the International Conference on Water Resources and Arid Environments - every two years in Riyadh.

6. The Prize provides financing and support for the PSIPW Research Chair located at King Saud University. The Chair, in turn, supports a number of graduate students of various nationalities engaged in a program of research into rain and floodwater harvesting.

7. The Prize sponsors and participates in a number of international conferences and exhibitions around the world. It presents seminars at some of these conferences, as well as independently, to facilitate meetings between participating scholars in order to foster the exchange of ideas.

8. PSIPW and the United Nations Office on Outer Space Affairs (UNOOSA), in partnership, maintain the Space4Water Portal, an interactive online platform that enables all stakeholders involved in the space and water communities to access data and knowledge, to be creative and to realize their full potential in contributing to a world in which the availability and sustainable management of water and sanitation for all has become a reality.

For More Information

Prince Sultan Bin Abdulaziz International Prize for Water
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Prince Sultan Institute for Environmental, Water & Desert Research
King Saud University

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Fax: +966-11-4675574
e-mail: info@psipw.org

Website: www.psipw.org

PSIPW is currently open for nominations for its 10th Award (2022). Nominations can be made online at the PSIPW website until the 31 December 2021 deadline.

General Conditions for Nominations

1. All nominations are made online through an electronic application form that is available on the PSIPW website. All required documentation and submitted works are uploaded by way of the same form. Mail-in applications are not accepted.

2. In the event that a team of individuals are being nominated, all team members (up to five) must be named at the time of application and one member must be specified as their representative. Groups of people working on the same project may not be nominated separately. They must be nominated as a team with a single nomination form.

3. The nominee must be an individual (specialized prizes) or team of individuals (all prizes). Organizations are not eligible to be nominees.

4. Nominations for the **Specialized Prizes** are by direct self-nomination. Nominations for the interdisciplinary **Creativity Prize** must be made by a university, institution, or government agency on behalf of the interdisciplinary research team. Individuals may not nominate themselves or others for the Creativity Prize.

5. The nominated body of work must have been completed no more than five (5) years prior to the nomination deadline for the current award.

6. Published research papers, published books, published software, and registered patents may be submitted for consideration. Unpublished works and unregistered patents are ineligible for the prize.

7. No more than five (5) distinct works may be submitted. Multiple works should not be collected together and submitted as a single work.

8. Works will be reviewed and judged in English. A work published in another language must be submitted in the original language accompanied by a full translation or a translation of the parts of the work that are to be considered for the prize. If a partial English translation is provided, then only that portion of the work will be considered for assessment.

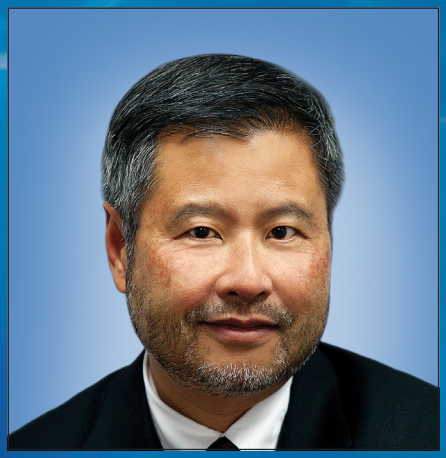
9. A nominee may only be nominated for one prize during an award period.

10. The work being nominated must not have previously been a recipient of any other international prize. (However, it may have been the recipient of local, national or regional prizes.)

11. Members of the PSIPW committees and their immediate relatives may not be nominated for the prize.

Prizewinners for the 9th Award (2020)

9th Award Prize winners (2020)

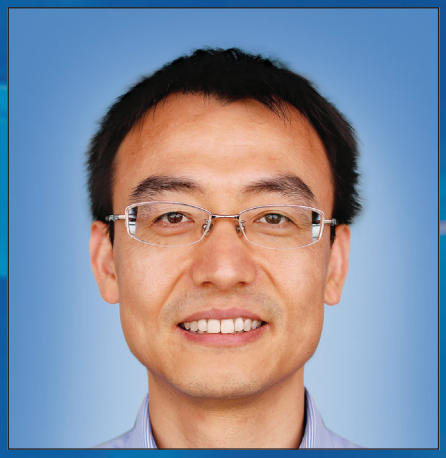


Dr. Benjamin S. Hsiao

Dr. Sherif El-Safty

Dr. Zbigniew Kundzewicz

Dr. J. Jaime Gómez-Hernández



Dr. Peng Wang

Dr. Jay R. Lund

Creativity Prize

The team of Dr. Benjamin S. Hsiao (Stony Brook University, New York, USA) which includes Dr. Priyanka Sharma

The work of Dr. Benjamin S. Hsiao and his team involves the development and use of next-generation high-flux nanostructured materials, particularly nanocellulose, for energy and water purification applications. They have developed environmentally friendly biomass extraction processes to produce low-cost cellulose nanofibers which can be employed as effective adsorbents, coagulants and membrane materials for energy-efficient industrial water treatments, desalination and heavy metal removal, capable of reaching a performance/price ratio of over 10-100 times better than existing commercial systems. This sustainable technology promises to provide clean water to offgrid communities of the developing world.

Dr. Benjamin S. Hsiao

Dr. Hsiao is Distinguished Professor; co-founding Director of the Innovative Global Energy Solutions Center; and Director for the Center for Integrated Electric Energy Systems at Stony Brook University.

Education:

- 1987 – PhD; University of Connecticut (Materials Science)
- 1984 – MS; University of Connecticut (Materials Science)
- 1980 – BSc; National Taiwan University (Chemical Engineering)

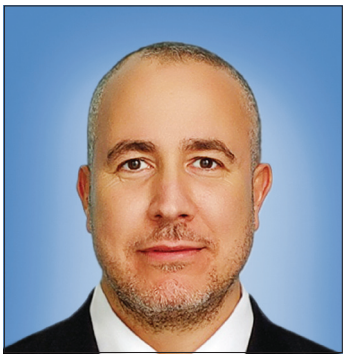
Selected Awards:

- 2016 – Invention Ambassador, AAAS-Lemelson Foundation
- 2015 – Cooperative Research Award (with Andy Tsou), American Chemical Society, Division of Polymeric Materials
- 2014 – Distinguished Professional Achievement Award, Chinese American Academic and Professional Society (CAAPS)
- 2013 – Patent of the Year Award, Long Island Technology Hall of Fame
- 2007-2009 – Special Creativity Award, Division of Materials Research, National Science Foundation
- 2005 – Licensed Innovation Award, Research Foundation of State University of New York
- 1998-2001 – DuPont Young Professor Award

Creativity Prize

The team of Dr. Sherif El-Safty – National Institute for Materials Science, Japan

The work of Dr. Sherif El-Safty and his team pertains to the development of a unique nano-porous filter medium, which is prepared by wet-dry processing with various hierarchal configurations (pellets, tubes, rods, strips, combs and sponge membranes) so that a chemical scavenger is immobilized to achieve a dual detection/chemical sorption process for decontamination during water filtration. This can be applied to virtually any water pollution problems, including the elimination of chemicals, pesticides, pathogens, and radioactive substances. This nano-captor membrane can be applied as a detector/sensor to provide a visual warning of hazards and radioactive species in permeate. His monolithic medium enhances selective monitoring and removal, and provides energy-efficient high volume filtration without applying any pressure, so that hazards can be removed from the water while healthy minerals are retained.



Dr. Sherif El-Safty

Dr. El-Safty is Managing Researcher of the National Institute for Materials Science, Japan, and Visiting Professor of Nanomaterials at the Faculty of Engineering and Advanced Manufacturing, University of Sunderland, UK.

Education:

- 2000 – Ph.D; Tanta University, Egypt (Inorganic and Physical Chemistry)

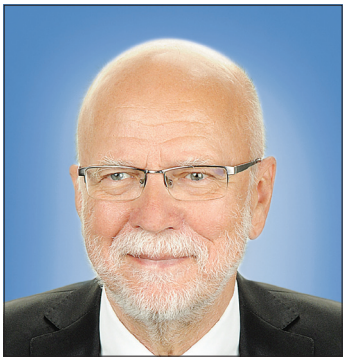
Selected Awards:

- 2017– Fellow of the Royal Society of Chemistry (FRSC)
- 2013 – Creativity Award, Arab Thought Foundation (Synthetic Nanomaterials)
- 2007– JSPS Invitational Fellow Award, Japan Society for the Promotion of Science
- 2001– JSPS Fellow Award, Japan Society for the Promotion of Science
- 1997– Doctoral Fellow, Ministry of Higher Education, Egypt

Surface Water Prize

Zbigniew Kundzewicz – Polish Academy of Sciences, Poznan

Dr. Kundzewicz engages with flood hazard and risk and their relationship with climatic change, globally, in Europe, and at the national level (in Poland, Germany, and China). Flood generation is a complex process, integrating the influences of many climatic and non-climatic factors, in which it is very difficult to disentangle the climatic effects on river flow from the effects of human interventions. The knowledge generated by his work impacts on our understanding and interpretation of flood hazard and risk in the past, present, and future. Dr. Kundzewicz applies this knowledge to develop a diversified portfolio of flood-risk management approaches (flood-risk mitigation, preparation, and recovery) that work together for maximum net effect, providing practical solutions for flood risk reduction and flood preparedness.



Dr. Zbigniew Kundzewicz

Dr. Kundzewicz is Professor of Earth Sciences in the Institute of Agricultural and Forest Environment of the Polish Academy of Sciences in Poznan, Poland.

Education:

- 1985 – Habilitation; Institute of Geophysics, Polish Academy of Sciences, Warsaw, Poland (Hydrology)
- 1979 – PhD; Institute of Geophysics, Polish Academy of Sciences, Warsaw, Poland (Hydrology)
- 1974 – MS; Warsaw University of Technology (Automatics)

Selected Awards:

- 2018 – Honorary Professorship at Nanjing University of Information Science and Technology and Honorary Doctorate at Warsaw University of Life Sciences
- 2017 – Dooge Medal of the IAHS/UNESCO/WMO International Hydrology Prize and Membership of Academia Europaea
- 2010 – Corresponding Member of the Polish Academy of Sciences
- 2007 – Nobel Peace prize as part of the Intergovernmental Panel on Climate Change (IPCC)
- 2004 – Knight's Cross of Polonia Restituta Order
- 1991 – Golden Cross of Merit of the Republic of Poland
- 1987 – first-ever recipient of the Tison Award of the International Association of Hydrological Sciences (IAHS)
- 1986 – Award of the Secretary General of the Polish Academy of Sciences

Groundwater Prize

J. Jaime Gómez-Hernández – Universitat Politècnica de València, Spain

Dr. Gómez-Hernández' work involves solving the inverse problem in hydrogeology. An inverse problem in science is the process of calculating the causal factors that produced a set of observations. A reliable depiction of groundwater flow and mass transport in the subsurface requires characterising the spatial variability of the parameters that control the state of the system. These parameters need to be known over the entire domain of interest, but in practice, can only be determined for a few locations, and unfortunately, they display a large spatial variability that makes them impossible to predict at unsampled locations without considerable uncertainty. Dr. Gómez-Hernández' greatest achievements in solving this problem include (1) proposing that natural heterogeneity is not well represented by multiGaussian fields, and (2) developing the 'self-calibrating method' using pilot points for the stochastic inversion of natural heterogeneity, which yields an estimate of the parameters, but also an estimate about their uncertainty. Both contributions, due to their novelty, were met with strong opposition at first, but have become common practice today.

Dr. J. Jaime Gómez-Hernández

Dr. Gómez-Hernández is Professor of Hydraulic and Environmental Engineering at the Universitat Politècnica de València, Spain.

Education:

- 1992 – PhD; Stanford University (Geostatistics for Natural Resource Evaluation)
- 1991 – MS; Stanford University (Applied Hydrogeology)
- 1988 – Ingeniero de Caminos y Puertos; Universitat Politècnica de València (Civil Engineering)

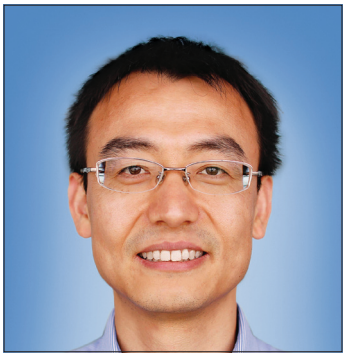
Selected Awards:

- 2021 – Distinguished Lecturer for the International Association of Mathematical Geosciences
- 2020 – William Christian Krumbein Medal
- 1999 – Prize for Research and Technology of Wastes
- 1990 – Centennial Teaching Assistant, Stanford University

Alternative Water Resources Prize

Dr. Peng Wang – King Abdullah University of Science and Technology, Thuwal, Saudi Arabia

Dr. Wang's work is at the forefront of the solar-water nexus, involving solar distillation, zero liquid discharge desalination, and atmospheric water harvesting and its application to PV cooling. The specific works, all of which have considerable scientific and implementation value, are: (1) a prototype and fully solar-driven, all-in-one "self-healing" solar distillation device; (2) a 3-D cylindrical-cup-shaped photothermal structure with a record-breaking water evaporation rate, (3) a 3-D solar crystallizer to achieve zero-liquid-discharge desalination with high energy efficiency, (4) a photovoltaics-membrane distillation device that generates both electricity and water – that shifts electricity production from the "water consumer" side to the "water producer" side, and (5) a new nano vapor sorbent composed of a nano carbon hollow capsule containing deliquescent salt that successfully enables continuous atmospheric water generation.



Dr. Peng Wang

Dr. Wang is Professor of Environmental Science and Engineering at King Abdullah University of Science and Technology, Thuwal, Saudi Arabia.

Education:

- 2008 – PhD; University of California, Santa Barbara (Environmental Science and Management)
- 2004 – MA; University of California, Santa Barbara (Environmental Science and Management)
- 2000 – MS; Sun Yat-Sen University, China (Environmental Science)
- 1997 – BSc; Nanjing University, China (Environmental Science, China)

Selected Awards:

- 2018 – Innovation Award in Nano-Micro Science, Nano-Micro Conference
- 2018 – Emerging Investigator (Environmental Science: Nano)

Water Management and Protection Prize

Dr. Jay R. Lund – University of California Davis, USA

Dr. Jay R. Lund developed the CALVIN water supply optimization model for successful application in the US state of California. The CALVIN model provides a tool for the integrated analysis of regional water supply systems that couples traditional water supply criteria with economic considerations. CALVIN was successful in reshaping and optimizing water planning and management in California, with substantial improvements to the public welfare. This encouraged many countries around the world, including Mexico and Spain, to develop large-scale economic-engineering optimization models with CALVIN as their backbone. Dr. Lund has been directly involved in optimization modeling of other major water systems, including the Columbia River system, the Missouri River system, South Florida, the US Southeast, and the Panama Canal. His work shows how the natural and social sciences can inform public policy in a challenging political environment and contribute to regional water conflict resolution. It also demonstrates how game theory, through the creative use of non-cooperative games, can be harnessed to develop more effective water management policies by identifying the externalities and evolutionary pathways of dynamic water resource problems.

Dr. Jay R. Lund

Dr. Lund is Distinguished Professor of Civil and Environmental Engineering in the Department of Civil and Environmental Engineering, and Director of the Center for Watershed Sciences, at the University of California, Davis.

Education:

- 1986 – PhD: University of Washington (Civil Engineering)
- 1983 – MA; University of Washington (Geography)
- 1983 – BSCE; University of Washington (Civil Engineering)
- 1979 – BA with honors; University of Delaware (Regional Planning and International Relations)

Selected Awards:

- 2016 – Distinguished Member, American Society of Civil Engineers (ASCE)
- 2016 – Tsuan Hua Feng Distinguished Lecture, University of Massachusetts - Amherst
- 2014 – Warren A. Hall Medal, Universities Council on Water Resources
- 2013 – David Todd Lecturer, Groundwater Resources Association of California
- 2013 – Distinguished Scholarly Public Service Award, University of California, Davis
- 2011 – Julian Hinds Award, American Society of Civil Engineers (ASCE)
- 2008 – Hugo B. Fischer Award, California Water and Environmental Modeling Forum
- 2002 – International Water Academy, Member, #143
- 1996 – Walter L. Huber Civil Engineering Research Prize, American Society of Civil Engineers (ASCE)


Dr. Andre Geim
Dr. Rita Colwell
Dr. Kristine M. Larson
Dr. Ashok Gadgil
Dr. Marek Zreda
Dr. Chih Ted Yang
Dr. Abdulkader Larabi
Dr. Rahul Nair
Dr. Shafiqul Islam
Dr. Eric F. Wood & Dr. J. Sheffield
Dr. Kevin Trenberth
Dr. Darin Desilets
Dr. W. Kinzelbach
Dr. Abdul Latif Ahmad
Dr. Günter Blöschl
Dr. Peter J. Webster
Dr. Larry W. Mays
Dr. Charles Franklin Hervey
Dr. I. Rodriguez-Iturbe
Dr. A. W. Mohammad
Dr. Howard S. Wheater
Murugesu Sivapalan
Dr. Gary Parker
Dr. J. Carrera Ramirez
Dr. M. Khayet Souhaimi
Dr. Andrea Rinaldo
Dr. Z. Abd Manan
Dr. Jery R. Stedinger
r. Wilfried Brutsaert
Dr. Tissa H. Illangasekare
Dr. Polycarpos Falaras
Dr. Damià Barceló
Dr. Bart Van der Bruggen
Dr. Patricia Gober
Dr. Herman Bouwer
Dr. Hisham Ettouney
Dr. Hisham El-Dossouky

Former Prizewinners (1st-8th Awards)

Winners for the 8th Award (2018)

Creativity Prize

1) Dr. Andre Geim and Dr. Rahul Nair (National Graphene Institute, University of Manchester, UK)
for developing novel graphene oxide membranes that promise to enable energy-efficient and high-volume water filtration and desalination.


Dr. Andre Geim


Dr. Rahul Nair

2) Dr. Günter Blöschl (TU Wien, Austria) and Dr. Murugesu Sivapalan (University of Illinois at Urbana-Champaign, USA)
for developing the new field of Sociohydrology, a ground-breaking paradigm for water management and a new validated approach for studying the dynamic interactions and bi-directional feedbacks between water systems and people.


Dr. Günter Blöschl


Dr. Murugesu Sivapalan

Surface Water Prize

Dr. Wilfried Brutsaert (Cornell University, USA)
for developing, demonstrating, and validating a new theory that can generate unprecedented estimates of evaporation from the natural landscape.


Dr. Wilfried Brutsaert

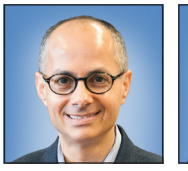
Groundwater Prize

Dr. Martinus Th. van Genuchten (Federal University of Rio de Janeiro, Brazil)
for the development and application of key theoretical and software tools that describe water flow and contaminant transport in the subsurface.


Dr. Martinus van Genuchten

Alternative Water Resources Prize

Dr. Omar Yaghi (University of California, Berkeley, USA) and Dr. Evelyn Wang (Massachusetts Institute of Technology, USA)
for creating a solar-powered device that uses an innovative porous metal-organic framework (MOF) to capture water from the atmosphere.


Dr. Omar Yaghi


Dr. Evelyn Wang

Water Management and Protection Prize

Dr. Jim W. Hall and Dr. Edoardo Borgomeo (Environmental Change Institute, Oxford University, UK)
for developing and applying a new risk-based framework to assess water security and plan water supply infrastructure in times of climate change.


Dr. Jim W. Hall


Dr. Edoardo Borgomeo

Winners for the 7th Award (2016)

Creativity Prize

1) Dr. Rita Colwell (University of Maryland at College Park) and Dr. Shafiqul Islam (Tufts University, USA)


Dr. Rita Colwell


Dr. Shafiqul Islam

for using chlorophyll information from satellite data to predict cholera outbreaks at least three to six months in advance.

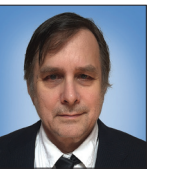
2) Dr. Peter J. Webster (Georgia Institute of Technology, USA)


Dr. Peter J. Webster

for applying knowledge of the effects of ocean-atmosphere interactions on monsoon strength to provide one to two-week lead time forecasts of monsoonal floods for highly populated coastal regions.

Surface Water Prize

Dr. Gary Parker (University of Illinois Urbana-Champaign, USA)


Dr. Gary Parker

for contributing to our understanding of meandering rivers, the shapes they take, and how they change themselves and their floodplains as they migrate.

Groundwater Prize

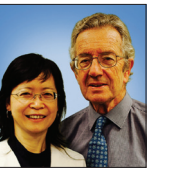
Dr. Tissa H. Illangasekare (Colorado School of Mines, USA)


Dr. Tissa H. Illangasekare

for improving the fundamental understanding of fluid flow and chemical transport in porous media, leading to the reliable prediction of the long-term fate of pollutants in groundwater systems.

Alternative Water Resources Prize

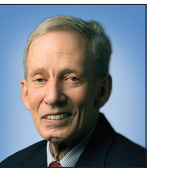
Dr. Rong Wang & Dr. Anthony G. Fane (Nanyang Technological University, Singapore)


Dr. R. Wang Dr. A. G. Fane

for developing hollow fibre membranes that combine forward osmosis with a reverse osmosis (RO)-like inner selective layer and a previously undiscovered positively charged nanofiltration (NF)-like outer selective layer, which effectively reduces the effects of scaling and flux losses.

Water Management and Protection Prize

Dr. Daniel P. Loucks (Cornell University, USA)


Dr. Daniel P. Loucks

for the development and implementation of systems tools that provide an effective, dynamic, and successful framework for addressing practical water resources management problems worldwide.

Winners for the 6th Award (2014)

Creativity Prize

1) Dr. Kristine M. Larson (University of Colorado, Boulder) and her team

for the development of GPS Interferometric Reflectometry (GPSIR). Team members include: Dr. Eric E. Small, Dr. Valery U. Zavorotny and Dr. John J. Braun.


Dr. Kristine M. Larson

2) Dr. Eric F. Wood and Dr. Justin Sheffield (Princeton University, USA)

for the development of as state-of-the-art system for accurately monitoring, modeling and forecasting drought on regional, continental and global scales.


Dr. Eric F. Wood & Dr. J. Sheffield

Surface Water Prize

Dr. Larry W. Mays (Arizona State University, USA)

for his comprehensive work in surface water hydrology and water resources engineering, culminating in three leading and innovative textbooks in the field.


Dr. Larry W. Mays

Groundwater Prize

Dr. Jesús Carrera Ramirez (Institute for Environmental Assessment and Water Research (IDAEA), CSIC, Barcelona, Spain)

for contributing decisively to the development of mathematical hydrogeology and transport modelling in groundwater systems.


Dr. J. Carrera Ramirez

Alternative Water Resources Prize

Dr. Polycarpos Falaras (National Center for Scientific Research "Demokritos", Athens, & Coordinator of the EU's CLEANWATER Project)

for a novel technology that destroys toxins with solar light during the water filtration process.


Dr. Polycarpos Falaras

Water Management and Protection Prize

Dr. William W-G. Yeh (University of California, Los Angeles, USA)

for pioneering the development of optimization models to plan, manage and operate large-scale water resources systems throughout the world.


Dr. William W-G. Yeh

Winners for the 5th Award (2012)

Creativity Prize

Dr. Ashok Gadgil (University of California, Berkeley) and his team

for developing an innovative and effective method to treat the arsenic contamination of groundwater using electrocoagulation. Team members include: Dr. Susan Addy, Dr. Robert Kostecki, Dr. Joyashree Roy, and Case van Genuchten.


Dr. Ashok Gadgil

Surface Water Prize

Dr. Kevin Trenberth and Dr. Aiguo Dai (National Center for Atmospheric Research, USA)

for groundbreaking work that provides a powerful estimate of the effects of climate change on the global hydrological cycle, with a clear explanation of the global water budget.


Dr. Kevin Trenberth

Groundwater Prize

Dr. Charles Franklin Harvey (Massachusetts Institute of Technology) and Dr. Abu Borhan Mohammad Badruzzaman (Bangladesh University of Engineering & Technology)

for developing a complete diagnostic and conceptual model for understanding and preventing the arsenic contamination of groundwater.


Dr. Charles Franklin Hervey

Alternative Water Resources Prize

Dr. Mohamed Khayet Souhaimi (University Complutense of Madrid, Spain)

for his work in pioneering and promoting membrane distillation for water recovery using alternative renewable energy sources.


Dr. M. Khayet Souhaimi

Water Management & Protection Prize

Dr. Damià Barceló (Catalan Institute for Water Research, Spain)

for work at the leading edge of water science in understanding the effect of pharmaceuticals in the water environment and developing new methods for future risk assessment and management of emerging contaminants.


Dr. Damià Barceló

Winners for the 4th Award (2010)

Creativity Prize

1) Dr. Marek Zreda (University of Arizona) & Dr. Darin Desilets (Sandia National Laboratory, USA)

for the development of the cosmic ray probe which, for the first time, measures soil moisture content and snow pack thickness over an area of tens of hectares.


Dr. Marek Zreda


Dr. Darin Desilets

2) Dr. Ignacio Rodriguez-Iturbe (Princeton University) & Dr. Andrea Rinaldo (École Polytechnique Fédérale de Lausan, Switzerland)

for developing the field of Ecohydrology.


Dr. I. Rodriguez-Iturbe


Dr. Andrea Rinaldo

Alternative Water Resources Prize

Dr. Bart Van der Bruggen (Katholieke Universiteit, Leuven)

for the use of nano-filtration membranes to approach zero wastewater discharge in industrial water recycling.


Dr. Bart Van der Bruggen

Water Management & Protection Prize

Dr. Soroosh Sorooshian (University of California, Irvine)

for the development and refinement of the PERSIANN model using artificial neural networks to estimate precipitation from remotely sensed data.


Dr. Soroosh Sorooshian

Winners for the 3rd Award (2008)

Surface Water Prize

Dr. Chih Ted Yang of Colorado State University (USA)

for significant contributions to the understanding of sediment transport and river hydraulics, particularly through the development of the Unit Stream Power Equation.


Dr. Chih Ted Yang

Groundwater Prize

Dr. Wolfgang Kinzelbach (Swiss Federal Institute of Technology)

for developing a new and effective approach to using remote sensing for groundwater modeling by linking spatially widespread remotely-sensed data, including geophysical data, with point surface observations and measurements.


Dr. W. Kinzelbach

Alternative Water Resources Prize

1) Dr. Abdul Wahab Mohammad (Universiti Kebangsaan, Malaysia)

for the development of advanced models for the fundamental characterization of nanofiltration pre-treatment to enhance its use in water desalination.


Dr. A. W. Mohammad

Water Management & Protection Prize

1) Dr. Zainuddin Abd Manan (Universiti Teknologi, Malaysia)

for work which extends the chemical engineering technique of pinch analysis to water demand management.


Dr. Z. Abd Manan

2) Dr. Patricia Gober & the Decision Center for a Desert City, (Arizona State University, USA)

for work at the forefront of integrating physical and social science into a decision support system for enhanced water planning.


Dr. Patricia Gober

Winners for the 2nd Award (2006)

Groundwater Prize

1) Dr. Abdulkader Larabi (University Mohammed V-Agdal, Morocco)

for the novel application of GIS in the characterization of seawater intrusion and the development of optimal models for sustainable water management in coastal aquifers.


Dr. Abdulkader Larabi

Alternative Water Resources Prize

Dr. Abdul Latif Ahmad (Universiti Sains, Malaysia)

for using membrane separation technology coupled with chemical and physical pretreatment to achieve a cost-effective method for treating palm oil mill effluent (POME) with zero discharge.


Dr. Abdul Latif Ahmad

Water Management Prize

Dr. Howard S. Wheater (Imperial College, London)

for developing suitable modeling tools for effective water resources management in arid and semi arid areas.

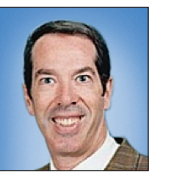

Dr. Howard S. Wheater

Winners for the 1st Award (2004)

Surface Water Prize

Dr. Jery R. Stedinger (Cornell University)

for developing a statistical framework for understanding and interpreting hydrologic and flood data, including historical and regional information.


Dr. Jery R. Stedinger

Groundwater Prize

Dr. Herman Bouwer (USDA-ARS)

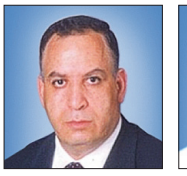
for developing effective design and management criteria for artificial groundwater recharge, including the Bouwer and Rice slug test for measuring hydraulic conductivities of aquifers, and improved cylinder infiltrometer procedures.


Dr. Herman Bouwer

Alternative Water Resources Prize

Dr. Hisham El-Dossouky (NWFP-EUT) & Dr. Hisham Ettouney (Kuwait University)

for developing economical technologies for seawater desalination.


Dr. Hisham El–Dossouky


Dr. Hisham Ettouney

Prince Sultan Bin Abdulaziz
International Prize for Water

General Secretariat

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