Press release - International Water Association (IWA)

For immediate use

13 August 2024

Celebrating the global best in water project innovation

Results of the 2024 International Water Association Project Innovation Awards

Outstanding global examples of the latest in project excellence, from research concept through to application at scale, were celebrated today at the International Water Association's Project Innovation Awards Gala event in Toronto, Canada.

The overall Global Grand Innovation Award and 18 winners across six categories were revealed at a celebratory event, in the fine surroundings of Arcadian Court, downtown Toronto. The overall Global Grand Innovation Award winner went to the Committee of China Concept Wastewater Treatment Plant and CSD Water Service Co., Ltd. The award was given in recognition of the success of application of the China Concept Wastewater Resource Facility.

Awarded biennially at the International Water Association's World Water Congress & Exhibition, the Project Innovation Awards recognise and promote global excellence and innovation in water management, research and technology. This edition of the Project Innovation Awards (PIA) programme features six categories with three finalists each. Each category recognises a distinct aspect of water innovation, from technology breakthroughs through to governance and performance improvement.

The Project Innovation Awards were launched by the International Water Association in 2006 to recognise that shared and pressing challenges can be overcome through the development and implementation of creative water solutions.

Grand Innovation Award

The Grand Innovation Award represents a truly outstanding project of global significance. This overall award is selected by the PIA's expert judges from this year's six 'Gold' category winners.

This year's Grand Innovation Award stems from the move, in 2013, of Professor Jiuhui Qu to found the Expert Committee for China's Concept Wastewater Treatment Plants. The aim was to tackle climate change, resource scarcity, and sustainable living challenges. Following on from this, the Yixing Concept Water Resource Reclamation Facility (WRRF), a USD 42 million project, began operations in October 2021. It handles 20,000 m^3 of wastewater and processes 100 tons of organic matter daily. The facility boosts local water resilience, supports agriculture with nutrient-rich soil, and serves as a model for sustainable wastewater management globally, inspiring further initiatives and international collaboration.

Project excellence across 6 categories

The PIA awards recognise excellence across six industry-critical dimensions of project innovation. For each of these categories, three awards were presented: Gold, Silver, and Bronze.

IWA is proud to announce that the results of the 2024 are:

Category: Market-changing Water Technology and Infrastructure

GOLD: Inspiring Technological and Market Transformation: Practice of the China Concept Wastewater Resource Facility, by Committee of China Concept Wastewater Treatment Plant, CSD Water Service Co., Ltd., China

SILVER: The Linear Path to Circularity!, by Águas do Tejo Atlantico, Portugal

BRONZE: South African Sanitation Technology Enterprise Programme (SASTEP), by Water Research Commission, South Africa

Category: Breakthroughs in Research and Development

GOLD: Redefining Wastewater Treatment Technology - Design, Construction, and Operation of the World's First Mainstream Partial Nitritation-Anammox Wastewater Treatment Facility, by Beijing Drainage Group Co., Ltd.; Beijing University of Technology, China

SILVER: Integration of TADOX® Technology to achieve Net Zero in Textile Wastewater Treatment, by The Energy and Resources Institute (TERI), India

BRONZE: IntensiCarb, All in One Process, by Brown and Caldwell, Trojan Technologies, US Peroxide Technologies, USA

Category: Governance, Institutions and Social Enterprise

GOLD: Wollert Community Farm, by Yarra Valley Water, Australia

SILVER: Tetra Safe Drinking Water Project: Leveraging Solar Energy to Support Lower Income Communities in Bangladesh's Coastal Region, by Tetra Private Limited, Bangladesh

BRONZE: Jaldoot Programme, by Public Health Engineering Department & Jal Jeevan Mission, Assam, India

Category: Performance Improvement and Operational Solutions

GOLD: Government-led City-wide COVID-19 Sewage Surveillance in Hong Kong with Engineering and Smart Technology Applications, by Environmental Protection Department, Hong Kong SAR Government, China

SILVER: Whole Life Cycle Management System of Municipal Pipe Networks in Developing Areas by Three Gorges Smart Water Technology Company Limited and Shanghai Investigation, Design & Research Institute, China

BRONZE: All-factor Collaborative Digital Governance Demonstration for Pollution and Waterlogging of the Shenzhen River Basin, by Shenzhen Water and Environment Group Co., Ltd., China

Category: Exceptional Project Execution and Delivery

GOLD: Ontario Wastewater Surveillance Initiative (Ontario WSI), by Ministry of the Environment, Conservation and Parks (MECP), Canada

SILVER: Huangxiao River and Airport River Water Environment Comprehensive Treatment PPP Project, Green Industry Investment Ltd. from the 3rd Bureau of China State Construction Engineering Co.Ltd.(CSCEC); Wuhan Municipal Water Authority; The 3rd Bureau of CSCEC, China

BRONZE: 120 MLD SWTP 9 Stage 6 Phase 1, Jubail in the Kingdom of Saudi Arabia, by VA Tech Wabag Ltd, India

Category: Smart Systems and the Digital Water Economy

GOLD: Digital Twin Platform for Water Distribution System in Fuzhou, by Fuzhou Water Group Co., Ltd., China

SILVER: Digital Dosing for Sustainable Sewer Protection, by The University of Queensland, Australia

BRONZE: The AI-Acoustic Underground Leak Detection System: A Case Study of Taiwan Water Corporation, by Taiwan Water Corporation (TWC), Industrial Technology Research Institute (ITRI), Chinese Taipei

More information

https://iwa-network.org/iwa-project-innovation-awards/

About the PIA categories

The six categories of the Project Innovation Awards are:

1. Market-changing Water Technology and Infrastructure

This award celebrates innovations in water and wastewater technologies and infrastructure, which embrace forward-thinking applications and solutions to advance clean and safe water goals

2. Performance Improvement and Operational Solutions

Original thinking is essential for overcoming long-term challenges and delivering solutions for the future. This award celebrates new and innovative approaches that improve performance, efficiency, resilience and sustainability in water operations and maintenance. These solutions can range from specific technologies to innovative approaches.

3. Breakthroughs in Research and Development

Research is the powerhouse of disruptive and breakthrough innovation. This award celebrates research that is challenging existing markets and addressing future needs to create new opportunities. It is open to research of all types, as well as early-stage business projects that are not yet market ready.

4. Exceptional Project Execution and Delivery

Innovation in the execution of water projects is critical for the sector. This award celebrates projects that developed and implemented: creative practices during their execution; excellent client relationships beyond expectations; outstanding responses to unexpected difficulties.

5. Governance, Institutions and Social Enterprise

This award celebrates social innovation, social enterprise and social entrepreneurship and their contribution to sustainable water management. In addition, it recognizes innovations in governance and institutional transitions and the role this plays in supporting the circular and digital water economies.

6. Smart Systems and the Digital Water Economy

This award celebrates digital solutions with the potential to reshape the water sector. Harnessing and aligning this technology between the physical and digital worlds, creates a smarter way of managing and protecting water resources and building a water-wise society.

The global panel of judges

Paul Brown, President, Paul Redvers Brown Inc.

Mark Fletcher, Arup Fellow & Global Water Business Leader, Arup | Chair British Water

Tao Li, Director of Strategy & Development, IWA

Xingcan Zheng, Chief Engineer, National Engineering Research Center for Water and Wastewater

Valerie Naidoo, Executive Manager, Water Research Commission

Oliver Nachevski, Water and Sanitation Advisor, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

How Yong Ng, Professor, Beijing Normal University, Zhuhai | Adjunct Professor, National University of Singapore

Robert Nerenberg, Professor, University of Notre Dame

Liu Ye, Professor, The University of Queensland

Jörg E. Drewes, Chair Professor of Urban Water Systems Engineering, Technical University of Munich

Helena Alegre, Principal Researcher and Head of the Water and Environment Department, LNEC (National Laboratory for Civil Engineering, Portugal)

Lansana Gagny Sakho, Chair of the Board of Directors, Senegal Investment Promotion Agency

Miriam Feilberg, Head of Climate Change Adaptation and Planning, DANVA (Danish Water and Wastewater Association)

Victor-Lucian Croitoru, Communications Director, Somes Water Company

Mary Ann Dickinson, CEO, Dickinson Associates

Blanca Antizar, Director of Consultancy for Europe, Africa and Latin America, Isle Global

Elvira Estruch Juan, Researcher and Assistant Professor, Department of Hydraulics and Environmental Sciences, Universitat Politècnica de València

Klara Ramm, Assistant Professor, Warsaw University of Technology

Bernard Koh, Assistant Chief Executive, PUB (Singapore's National Water Agency)

Val Frenkel, VP Process Engineering, Fellow IWA, Fellow EWRI/ ASCE, Fellow WEF

Xiaohua Chen, Municipal Process and Application Director, Veolia Water Technologies Asia Pacific and Municipal Engineering Director South East Asia and Australia

Aaron Burton, Head of Water Resources, Efficiency and Development, Department for Environment, Food and Rural Affairs; Chair IWA Efficient Urban Water Management Specialist Group

Randolf Waters, Strategy, Mergers and Acquisitions, Marketing and Product Management, Water & Climate Tech Leaders

Shuming Liu, Professor, School of Environment, Tsinghua University

Cecilia Wennberg, Executive Vice President Water, Cities Global Business Unit, DHI

Oliver Grievson Associate Director, AtkinsRéalis | Royal Academy of Engineering | Visiting Professor of Digital Water, Exeter University

Norhayati Abdullah, Secretary, ASEAN Learning Network, Universiti Teknologi Malaysia Kuala Lumpur

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About the International Water Association (IWA) Global Water Award

For more information on the International Water Association (IWA), including previous awardees, see:

https://iwa-network.org/global-water-award/

About the IWA World Water Congress & Exhibition

The IWA World Water Congress & Exhibition gathers water experts, thought-leaders, decision makers, leading researchers, and business representatives from within and outside the water sector. Keynote speakers are top specialists in their field. They frame the critical debates facing the water sector, while workshops, technical sessions, business forums, and solutions presented in the global exhibition showcase the latest science and best practices. For more information on the IWA World Water Congress & Exhibition, please visit worldwatercongress.org

About the International Water Association (IWA)

The International Water Association (IWA) is a global network of water professionals, researchers, and practitioners committed to achieving sustainable water solutions. IWA connects people and organisations to drive innovation, knowledge, and best practices in water management. Through its diverse membership and collaborative platforms, IWA strives to tackle pressing water challenges and shape a sustainable future. International Water Association - International Water Association (iwa-network.org)