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IDA World Congress 2022 will consist of panel discussions, an excellent technical program, keynote presentations, an industry-driven exhibition, unparalleled networking opportunities, and specialized workshops. Global attendance from public and private sector leaders, researchers, and academics in desalination, water reuse, energy, environment, and project finance will provide knowledge-sharing and discussion opportunities for participants on many technical and business topics to ensure a secure water future.

First held in 1987, the IDA World Congress has been a global meeting point for promoting the appropriate use of desalination and water reuse technologies as a critical part of addressing the world’s freshwater shortages. The theme of the 2022 World Congress is Charting Resilient Water Solutions and how to secure a sustainable future that efficiently meets the growing water demand, threats to water security, and the increasing frequency and severity of droughts resulting from climate change.

We are looking forward to seeing you in Sydney!

Mrs. Shannon McCarthy, IDA Secretary General

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**Our World Congress History:**

- **2024** To be announced at Sydney WC22
- **2022** Sydney, Australia
- **2019** Dubai, United Arab Emirates
- **2017** Sao Paulo, Brazil
- **2015** San Diego, CA, USA
- **2013** Tianjin, China
- **2011** Perth, Western Australia
- **2009** Dubai, UAE
- **2007** Maspalomas, Gran Canaria, Spain
- **2005** Singapore
- **2003** Bahamas
- **2001** Manama, Bahrain
- **1999** San Diego, CA, USA
- **1997** Madrid, Spain
- **1995** Abu Dhabi, UAE
- **1993** Yokohama, Japan
- **1991** Washington DC, USA
- **1989** Kuwait City, Kuwait
- **1987** Cannes, France

Visit [wc.idadesal.org](http://wc.idadesal.org) for more information.
Congress Sponsors as of June 2022

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SYDNEY DESALINATION PLANT
Registration

Registration is now open with special rates until 30 June!

Delegate Registration is open. The IDA World Congress is a five-day event, a week for learning, sharing ideas, developing business, and expanding your network to advance the solutions that will secure water for all. We encourage early registration to take advantage of the special rates offered.

Registration includes:

- **Access to technical sessions and exhibition** (Sun Oct 9 to Thu Oct 13)
- **Lunch and refreshment breaks daily**
- **Networking events:** opening ceremony, welcome reception, gala dinner and awards, closing luncheon
- **Congress proceedings**
- **Plant Tour** (Friday, October 14) limited Sydney Desalination Plant

To register please visit: [https://wc.idadesal.org/registration/](https://wc.idadesal.org/registration/)
Visa Information

Request your Visa as soon as possible!

The Department of Home Affairs manages visas for Australia and the site is continually updated with the Australian law to ensure site visitors are getting the most current information. Applications can be made electronically and most individuals attending the IDA World Congress 2022 would be applying for a (subclass 600) as this is specific to attending a conference.

Those countries who participate in the Australian biometrics program should visit this link as it is in addition to the standard visa online process. This program is set in conjunction with your country travel requirements, and it requires an additional scanning process. Individuals who travel regularly would have this status on their International profile in any case and are very accustomed to the process.

World Congress Exhibitors and Speakers need to apply for a Subclass 651.

Requests for Visa Invitation Letters should be submitted to registration@idadesal.org.

Several reference links are below including up-to-date information about Covid-19 regulations.

Overseas Travellers (Exemptions)

Some travellers are automatically exempt from Australia’s border restrictions and do not need to apply for an individual exemption. Among other groups, this includes:

- Australian citizens, Australian permanent residents and New Zealand citizens usually resident in Australia;
- Fully vaccinated eligible visa holders; and
- Individuals travelling to Australia under a safe travel zone arrangement.

A full list of travellers who are automatically exempt from border restrictions is available here.

Interstate Travellers

Domestic visitors are no longer required to quarantine or hold a permit to enter Victoria from another Australian state or territory to visit, work, transit, or if you are a cross-border resident.
Visa Options

Participants, attendees and speakers that will not be working, performing or otherwise be paid to contribute at the event may be eligible to apply for the following visa options:

- Visitor (subclass 600)(Business stream) visa. For more information click here.
- Electronic Travel Authority – ETA (subclass 601). For eligible passport holders and more information click here.
- Visitor (subclass 651)(Business Stream) visa. For eligible passport holders and more information click here.

A speaker, presenter, exhibitor, or other contributor invited to participate in an event by an Australian organisation may be eligible to apply for a:

- Temporary Activity (subclass 408)(Invited Participant) visa. For more information click here.

Important

Please note that a the letter of support from an Australian organisation is a legislative requirement for the Temporary Activity (subclass 408) (Invited Participant) visa.

Visa Processing Time

Please apply for you visa well in advance of your intended date of travel to Australia, as you could experience long processing times.

Before you arrive, download the Service Victoria Check-in app to stay safe and up to date when visiting Melbourne.

Here are a few useful links to keep you in the loop:

- passports.gov.au – Guidance foreign vaccination certificates
- covid19.homeaffairs.gov.au – Travelling to Australia
- General information for visa applicants
- Travel Exemption Portal
- Choosing the correct Visa
- Visa processing times
- Entering Australia Border Checklist
Accommodations

Take your pick from Sydney’s huge choice of hotels to suit every taste, need and budget. The IDA has special rates at the following hotels. We recommend you to make your booking as soon as possible to ensure availability at special IDA room rates.

- **Sofitel Sydney Darling Harbour**
- **Novotel Darling Harbour**
- **Ibis Sydney Darling Harbour**
- **Parkroyal Darling Harbour**
- **Mantra Sydney Central**

More information at [https://wc.idadesal.org/accommodation/](https://wc.idadesal.org/accommodation/)
Preliminary General Schedule

Pre Congress - Day 1 Saturday, 8 October 2022

07:00 - 00:00  Construction of Exhibition Hall
13:00 - 16:00  Registration Desk Open for Exhibitors Only

Pre Congress - Day 2 Sunday, 9 October 2022

07:00 - 17:00  Construction of Exhibition Hall
14:00 - 18:00  Delegate Registration Open
15:30 - 16:30  Term 19 Outgoing Board Meeting
16:30 - 17:30  Term 20 Incoming Board Meeting
18:30 - 20:00  Welcome Reception
Preliminary General Schedule

Congress - Day 1 Monday, 10 October 2022

07:30 - 08:15  Technical Program Speakers Breakfast
07:30 - 08:15  VIP Breakfast Meeting
07:30 - 17:30  Delegate Registration/Information Desk Open
09:00 - 12:30  Opening Ceremony, Keynotes, and Panel Sessions
12:30 - 18:00  Exhibit Hall Open
12:30 - 14:00  Lunch Break
14:00 - 17:30  - IDA Innovation Forum
                - Technical Program Parallel Sessions
                - Outback Theater Discussions
15:30 - 16:00  Refreshment Break
19:30          Gala Dinner and Awards Ceremony
Preliminary General Schedule

Congress - Day 2 Tuesday, 11 October 2022

07:30 - 17:30  Delegate Registration / Information Desk Open
07:30 - 08:15  Technical Program Speakers Breakfast
07:30 - 08:15  Leaders Summit Speakers Breakfast
08:30 - 14:30  Outback Theater Discussions
08:30 - 17:30  - Exhibit Hall Open
               - Leaders Summit
               - Technical Program Parallel Sessions
10:30 - 11:00  Refreshment Break
13:00 - 14:30  Lunch Break
16:00 - 17:30  YLP Forum
15:30 - 16:00  Refreshment Break
17:30 - 19:00  YLP Reception (by invitation)
19:30  Leaders Summit Reception (invitation only)
Congress - Day 3 Wednesday, 12 October 2022

07:30 - 08:15  Technical Program Speakers Breakfast

08:30 - 17:30  Information Desk Open

08:30 - 17:30  - Exhibit Hall Open
               - Outback Theater Discussions
               - Technical Program Parallel Sessions

10:30 - 11:00  Refreshment Break

13:00 - 14:30  Lunch Break

15:30 - 16:00  Refreshment Break

17:00 - 18:00  Membership Meeting

18:00 - 19:00  Term 20 Board Meeting
**Preliminary General Schedule**

**Congress - Day 4 Thursday, 13 October 2022**

07:30 - 08:15  Technical Program Speakers Breakfast Meeting

08:30 - 12:30  
- Technical Program Parallel Sessions
- Outback Theater Discussions

08:30 - 15:00  Exhibit Hall Open

09:00 - 12:30  Information Desk open

10:30 - 11:00  Refreshment Break

13:00 - 15:00  Closing Luncheon and Technical Program Awards/Innovation Forum Awards

**Congress - Day 5 Friday, 14 October 2022**

08:30 - 12:30  Sydney Desalination Plant Tour

An essential component of Sydney’s water supply resilience supplying up to 250 megalitres per day of drinking water (15% of Sydney’s water needs), the Sydney Desalination Plant was built between 2008 and 2010 in response to the millennium drought and operated successfully for two years. With water storage dams recovering to high levels, a decision was made to place the plant in a state of long-term preservation ready to respond to the next drought. After seven years of preservation, the plant was successfully restarted and continues to be available to assist the supply of water to Sydney’s customers. A tour of the Sydney Desalination Plant provides a unique insight to a large-scale reverse osmosis plant that has faced many challenges that include full operations to deep preservation and the recovery from extensive tornado damage which occurred in 2015.

Please visit wc.idadesal.org on how to register or contact us at registration@idadesal.org.
IDA is delighted to announce that, at this year’s World Congress Gala event in Sydney, held on Wednesday, Monday October 10, 2022, we will honor the efforts of selected companies, organizations, and even cities with outstanding industry and sustainability awards. The nomination period for these awards is now open. Those who challenge themselves to innovate and meet the increasing demands for municipal and industrial water needs, will be acknowledged for their exceptional contributions. These awards reflect the diversity of contributions present in the water community. From municipalities to corporations, these award categories recognize the varied ways in which the global community is tackling water scarcity in order to ensure a future in which clean water and sanitation are universal.

The Awards are open to IDA members and nonmembers.

To nominate, an IDA member must submit an email to awards@idadesal.org on or before the deadline of 15 August 2022 with the following information:

1. The name of the nominee
2. The specific Award
3. How the nominee exemplifies the spirit of the award (500 words minimum with references).
# Industry Awards

<table>
<thead>
<tr>
<th>Award</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 Best Public-Private Partnership</td>
<td>The company exemplifies collaboration with a public utility.</td>
</tr>
<tr>
<td>02 Most Innovative Utility</td>
<td>A national or local utility that brings innovation to secure clean and fresh water for their consumers.</td>
</tr>
<tr>
<td>03 Best Private Company (Global)</td>
<td>The company makes an overall contribution to water sustainability using non-conventional water resources, to be Water Positive, in its region.</td>
</tr>
<tr>
<td>04 Most Innovative Company</td>
<td>The company that executed the project we all wish we had thought of and employed a breakthrough technology enhancing the desalination process.</td>
</tr>
<tr>
<td>05 The Most Progressive Disruptive Policy in Water Reuse</td>
<td>The project is moving the needle in the public sector to support and grow water reuse implementation.</td>
</tr>
<tr>
<td>06 Best Performing Company in Water Reuse</td>
<td>The company has exemplified efficiency, best-in-class technology, and operations to earn the highest quality plant performance.</td>
</tr>
</tbody>
</table>
# Sustainability Awards

## 07
**The Most Resilient City**
The city has created infrastructures and best practices for a community that can thrive and adapts to climate change and water scarcity.

## 08
**Most Innovative Water-Energy Nexus Project**
The project that bridges the gap and capitalizes on the synergies between its community’s water and energy needs.

## 09
**Best Implementor of UN Sustainability Development Goal 6 Water for All (SDG6)**
The company that ensured availability and sustainable management of water and sanitation for all.

## 10
**Best Corporate Social Responsibility Project**
The company that utilized desalination or water reuse technology to improve the lives of a community by creating a regenerative water economy to be Water Positive.
Technical Paper Awards

At each World Congress, IDA gives awards for the best oral and written papers presented as part of the Technical Program in five categories. Winners are selected by members of the World Congress Awards Committee, using a weighted percentage score. These awards are presented at the Closing Luncheon.

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>State-of-the Art</td>
<td>Best paper that presents the application of an established desalination or water reuse technology in a way that reflects the best engineering practices in all aspects of the project or topic presented that is significant for the global industry.</td>
</tr>
<tr>
<td>Innovation</td>
<td>Best paper that presents an innovative desalination or water reuse technology that has reached the commercial stage, is not yet considered to be widely adopted but is likely to become a game-changer for the industry.</td>
</tr>
<tr>
<td>Research and Development</td>
<td>Best paper that presents fundamental or applied research of a technology or concept related to desalination or water reuse that is at a pre-commercialization stage but shows interesting signs of development which could lead to impactful discoveries or technologies once at maturity.</td>
</tr>
<tr>
<td>Environment and Sustainability</td>
<td>Best paper presenting a desalination or water reuse topic, case study, a technology or any project in such a way that demonstrates how desalination can be applied while respecting the environment and applying the best sustainability principles.</td>
</tr>
<tr>
<td>Young Leader</td>
<td>Best paper presented by a member of the IDA Young Leaders Program demonstrating scientific originality relevant and important to the fields of desalination and/or water reuse.</td>
</tr>
</tbody>
</table>
Special Awards

**Presidential**

The Presidential Awards are conferred upon individuals and organizations whose work on behalf of IDA and the desalination industry demonstrate outstanding achievement, leadership and vision. The awards will be bestowed by the IDA President, Mr. Carlos Cosin.

**Lifetime Achievement**

IDA's Lifetime Achievement Award recognizes outstanding achievements and contributions to our industry. All IDA Lifetime Awardees receive a commemorative plaque and lifetime access to attend all IDA events at no registration fee.

**Emerging Leader Achievement Award**

Introduced in 2011, this award is given to one member of the IDA Young Leader’s Program whose contribution to the desalination and water reuse industry has shown a track record of positive leadership and originality.

**Delegate-Voted Awards**

Delegates at the World Congress cast their votes for winners in the following four categories via the mobile app:

- Best Moderator
- Best Session Chairman
- Best Presenter
- Best Poster
The World Congress will feature a four day technical, four track technical program. As well as a high-level plenary sessions, business roundtable discussions, Leaders Summit, Innovation Forum, and plant tours.

The Congress Technical Program Committee is led by five distinguished members of the IDA Board of Directors, serving as the Technical Program Committee Co-Chairs. They have formed a dynamic technical committee of 30 members from around the globe.

Technical Committee Members:

Mrs. Olga Sallangos, Caramondani Desalination Plants
Mr. Tim Lam Shing, WSD
Ms. Naomi Jones, McCarthy Building Companies, Inc.
Mr. Kevin Price, AWTT, LLC
Dr. Antonella DeLuca, OMYA
Dr. Giancarlo Barassi, Aquatech International
Mr. Guillaume Clairet, H2O Innovation
Mr. Alistair Munro, Gaia Wind
Dr. Victor Monsalvo, FCC Aqualia
Mr. Patrick Buchta, Dupont-Inge
Dr. Domingo Zarzo, SACYR
Mr. Rodrigo Segovia, Almar Water Solutions
Dr. Jaichander Swaminathan, IIT Gandhinagar
Dr. Emily Tow, Olin College
Prof. Shadi Hassan, Khalifa University
Dr. Mohammad Wakil Shazad, Northumbria University
Dr. HK Shon, University of Technology Sydney
Mr. Miguel Angel Sanz, SUEZ
Mr. Antonio Casanas, Dupont
Mr. Rama Jagwani, PROJECX
Mr. Ravid Levy, RLV Consulting
Mr. Tariq Nada, ACWA Power
Prof. Duc Long Ngheim, University of Technology Sydney
Dr. Tony Fane, University of New South Wales
Mr. Neil Palmer, Osmoflo

**Topic Chairs:**

Dr. Jantje Johnson  
*OrangeBoat*

Dr. Veronica Garcia Molina  
*Dupont*

Mrs. Blanca Salgado  
*Dupont*

Dr. Veronique Bonneye  
*Suez*

Mr. Jonathan Pressdee  
*AECOM*

Dr. Rick Stover  
*Gradiant*

Mr. Neil Palmer  
*Osmoflo*

Prof. David Warsingher  
*Purdue University*

Prof. Stephen Gray  
*Institute for Sustainable Industries and Liveable Cities*

Mr. Miguel Angel Sanz  
*SUEZ*
Session Chairs:

- Prof. Long Ngheim, University of Technology Sydney
- Prof. Seungkwan Hong, Korea University
- Mr. Scott Murphy, Veolia
- Mr. Alejandro Sturniolo, H2O Innovation
- Dr. Roberto Mangano, ILF Consulting Engineers
- Mr. Devesh Sharma, Aquatech International
- Mr. Victor Verbeek, Toray Membrane
- Mr. Ties Venema, Piedmont
- Mr. Juan Miguel Pinto, Energy Recovery, Inc
- Eng. Nikolay Voutchkov, SWCC
- Mr. Greg Wetterau, CDM Smith, Inc.
- Dr. Ahmad Al Amoudi, SWCC
- Mr. Hoon Hyung, LG NanoH2O
- Dr. Giancarlo Barassi, Aquatech International
- Mr. Guillaume Clairet, H2O Innovation
- Dr. Antonella DeLuca, OMYA International AG
- Mr. Fady Juez, Metito
- Dr. Jorge Malfeito, ACCIONA
- Dr. Antonio Casanäs, Dupont
- Ms. Naomi Jones, McCarthy Building Companies, Inc.
- Dr. Víctor Monsalvo, Aqualia
- Mr. Alistair Munro, Gaia Wind
- Mr. Hiep Le, Gradient
- Dr. Mohammad Wakil Shazad, Northumbria University
- Dr. Heike Glade, University of Bremen
- Dr. Jaichander Swaminathan, IIT Gandhinagar
- Mr. Rama Jagwani, PROJECSX
- Dr. Mike Dixon, Synauta
- Dr. Abraham Negaresh, Thames Water
- Mr. Danielle Strongone, American Water Chemicals, Inc
The Call for Papers resulted in over 300 abstracts from countries across the globe. These technical papers will be presented in 38 sessions in the following categories and topics:

| 01 | Seawater and Brackish Water Desalination |
| 02 | Water Reuse, Potable and Non-Potable including Public Outreach |
| 03 | Industrial Water and Wastewater Treatment |
| 04 | Coupling Desalination and Renewable Energy |
| 05 | Emerging Technologies, Emerging Issues and Emerging Contaminants |
| 06 | Membrane Science |
| 07 | Environment and Sustainability |
| 08 | Governance, Finance, and Project Delivery |
| 09 | Thermal Desalination |
| 10 | Pre-Treatment and Post Treatment |
| 11 | Plant Operations and Digitization |
| 12 | Brine Management and Resource Recovery |
Oral Presentations

IDA thanks all authors who submitted abstracts for the World Congress 2022.

Submitted abstracts were peer-evaluated and accepted on the basis of technical merit and assigned to a related session. Currently, authors are refining their manuscripts in collaboration with Topic and Session Chair.

Listing of Manuscripts

01 Seawater and Brackish Water Desalination

Topic Chairs:
- Mr. Miguel Angel Sanz, Director of Strategic Development, SUEZ International
- Prof. Stephen Gray, Executive Director, Institute for Sustainable Industries and Liveable Cities
- Dr. Veronique Bonnelye, Position Title Technical Support Manager, SUEZ International
- Prof. John Lienhard V, Professor, Massachusetts Institute of Technology (MIT)
- Dr. Veronica Garcia Molina, Global Marketing Manager Municipal, Dupont
- Dr. Emilio Gabbrielli, Independent International Advisor

1.1. Seawater Plant Cases Studies and Process Improvements

A Pilot Study of Low-Energy Seawater Desalination with Innovative Membranes and Pretreatment Systems

20 Years of Data from 500 Seawater Membrane Autopsies

Application of New Technologies for Energy Savings in Desalination

Ashkelon Desalination Plant - 1.7 Billion m3 of Successful Operation

Comparison and Evaluation of Centralized & Decentralized Systems for Nuweibaa SWRO Desalination Plant - Case Study
Control of SWRO Membrane Biofouling Through Removal of Planktonic Colloidal Biofilms Coming from RO Pretreatment and Rotary Energy Recovery Device

Desalination of Seawater and High Salt Waters to Potable Water by Salt Repellent Technique

Dry Sea Water Reverse Osmosis Elements

Energy Optimization and Management Of Mega Sea Water Reverse Osmosis (SWRO) Desalination Plants


From Mothball to 100% Production and Back Again - Lessons from Gold Coast and Sydney Desalination Plants

High Recovery Reverse Osmosis Water Challenging

Improving the Performance of A Severely Biofouled Seawater Reverse Osmosis Facility Using the Latest in Chemical Technology - A Case Study

Novel Perforated-Pillar Spacer for Fouling Mitigation and Enhanced Hydrodynamics in Spiral Wound Modules

O&M Start Up: Maintenance Challenges

Performance Study of Sulfuric Acid Shocks in Reverse Osmosis Membranes

Resilience Through Disasters - The Reinstatement and Subsequent Restart of the Sydney Desalination Plant

Seawater Piston-Batch Reverse Osmosis: Energy Efficiency at Small Scales

Special Design Features of Commercial SWRO Plants

Technology and Innovation Hand to Hand With Sustainability. Best Practices in Atacama

The Effectiveness of Ceramic Ultrafiltration as a Pre-Treatment for SWRO at Tuas Spring Singapore

Tuas Desalination Plant

Water for Fodder Initiative: Use of Desalination to Provide Drought Relief in Australia
1.2. Brackish Plant Cases Studies and Process Improvements

Fouling of Reverse Osmosis Membrane: Autopsy Results from a Wastewater Treatment Facility at Central Park, Sydney

Nitrate Removal from Drinking Water Using Novel Biomimetic LPRO Membranes and Sustainable Brine Management

Solar Powered Reverse Osmosis with Bore-Well Intake as a Sustainable Option for Remote Areas in the Middle East

Successful Field Demonstration of a New High Recovery Semi-Batch Reverse Osmosis Technology

Sustainability and Cost of Water Savings Through New High Rejection Filmteck BW30xhr Pro-440 Membrane For Seawater Desalination

The Myalup-Wellington Story - Is Help on the Horizon for Western Australian Horticulture, Dairy, and Beef Farmers?

1.3. Novel Approaches to Design and Operation

The Design & Process Development of Electro-Thermal Membranes for Membrane Distillation Applications

A Leap Forward in RO Membrane Pressure Vessel Service Life, Performance, Safety & Reliability - A New Best Practice Guide

A Novel Closed-Loop PRMD System for Simultaneous Water Production and Power Generation

A Novel PV-T Powered Multi-Effect Distillation Technology: A Conceptual Analysis Through Modelling

A Proposed Safe Design of the Reverse Osmosis System

Advanced Rejuvenation Protocol with Chemical Agent for the Deteriorated RO Membrane

ArcelorMittal Seawater Desalination Plant: Breakthrough Approach For Water Security

Boosting Permeate Production without Compromising on Sec: 60% Recovery and Beyond in SWRO
Centrifugal Reverse Osmosis - A Novel Membrane Module Design for Desalination Near the Thermodynamic Restriction

Design Strategies for Reducing Energy and Total Costs for Large Scale Seawater Reverse Osmosis Plants


Membrane Autopsy and Targeted Cleaning with Specialty Cleaners

Temporally Multi-Staged Batch Counterflow Reverse Osmosis for High Recovery Desalination

The Barrel: The Next Generation of Desalination Plants

Use of Nanofiltration for Toc Removal while Optimizing Recovery on a Brackish Water Source

Validation of a Method For Modeling Brine and Permeate PH in RO and NF Systems Reverse Osmosis Plants Performance Index

1.4. Intakes and Outfalls

Proper Design of Intakes and Outfalls to Avoid Main Risks During Operation

Relationship Between the Desalination Plant Intake Tunnel Condition, Intake Flow, and Shock Dosing

1.5. Planning for Major City, State and Country Desalination Upgrades

Desalination Responses for Greater Sydney Planned During the 2017-2020 Drought

First Stage Tseung Kwan O Seawater Desalination Plant -- The New Strategic Water Source for Hong Kong

Greater Sydney Water Strategy - Toward Greater Drought Resilience

Here, There or Everywhere: A Comparison of Centralised and Decentralised Desalination Schemes

RO: History, Benefits & Limitations

State of Desalination In Pakistan - Recent Trends and Future Prospects
02 Water Reuse, Potable and Non-Potable including Public Outreach

Topic Chairs:

- Mr. Jim Lozier, VP, Global Tech Leader for Desalination, Jacobs
- Dr. Domingo Zarzo, Innovation and Strategic Projects Manager, Sacyr Water

2.1. Potable Water Reuse Studies and Projects

Beenyup Advanced Water Recycling Plant Stage 2: Construction, Commissioning and Integration with Stage 1

Continuous Online Monitoring for Potable Water Network

Direct Potable Reuse Combining Tertiary Effluent with Seawater Reverse Osmosis: An Opportunity for a Synergy

Enhanced Biofouling Resistance, Energy Savings and Higher Flux Operation Through New FilmTect Nf270-440 Membrane

Hyperion 2035: On Its Way To Become the Largest Water Reuse Plant in the World

Implementing Direct Potable Reuse for the City of Los Angeles"

Innovative Potable Reuse AWTF Puts WrD of Southern California Closer to Water Independence

Innovative Process to Produce Drinking Water from Wastewater for Small & Isolated Communities

Jourdain: Paving the Way Towards Planned Indirect Potable Reuse in France

Satisfying PRW Stakeholder Expectations -- Lessons for Engineers and Project Leaders

Small-Scale and Household Methods to Remove Salinity & Hardness from Drinking Water - A Case Study of Abyek Qazvin

State of the Art Advanced Water Treatment Facility Puts WrD of So. California Closer to Water Independence

The Beenyup Advanced Water Recycling Plant -- Australia's First Large Indirect Potable Reuse Plant
2.2. Non-potable Water Reuse Studies and projects

Anderson Road Quarry Development Grey Water Treatment Plant -- A Triumph on Recycled Grey Water in Hong Kong Sar

Application of LG New Generation Thin-Film Nanocomposite Membrane to Wastewater Treatment in a Steel Plant

Biofilm Cleaner Improves Effluent WWRO Membrane Plant Operation

Effect of RO Pretreatment Process to Minimize Brine Water when Reuse of Effluent from Public Wastewater Treatment Plant

Nutrient Recovery from Brackish Groundwater with Monovalent Selective Electrodialysis and Nanofiltration

Smart-Ferti-Reuse - A Smart Decision Tool For Fertigation of Agricultural Crops: Assessment of Treated Water Quality

Study of Alternatives to Implement and Expansion Unit of Water Reuse System in a Lithium Facility

2.5. New Treatment Techniques for Water Reuse

Clarification of RO Biofouling Mechanism and Development Of New PVDF UF Membranes for RO Pretreatment

Evaluating And Visualizing the Effect of Membrane and Feed Spacer in Biofouling Development Through Fortilifet Directory Tool

High Recovery Water Treatment for Non-Potable Reuse Using an Integration of Ion Exchange and Reverse Osmosis

Implementing DesalitecTM Soar CCRO to Increase Efficiency and Reliability in Wastewater Reuse

Investigating the Potential For Closed Circuit Reverse Osmosis (CCRO) to Reduce Concentrate Flows on a Future Inland Water Reuse Application

Water Softening Using Ion-Exchange Treatment: A Novel Search for Converting Waste Polystyrene into Cation Exchange Resins

2.6. Virus and Bacteria Removal Including Log Credit Techniques

RO and NF Membranes Performance Monitoring in Water Reuse Applications by Continuous Measuring of Adenosine Triphosphate
03 Industrial Water and Wastewater Treatment

Topic Chairs:
- Mr. Borja Blanco, CEO, Aqua Advise
- Dr. Rick Stover, Vice President of Technology, Gradiant Membrane Systems

3.1. Environmental Issues in the Mining Industry

A Novel Ion Exchange and Encapsulated Bacteria System for Complete Nitrate Removal

Solution Alternatives Study for Fouling MBR Membranes in an Industrial Wastewater Treatment Plant Ice Cream Factory

3.4. Semiconductor

Advanced New RO Membrane Having High Rejection for Small Neutral substance

On-Site Evaluation of Biocide Combination for Biofouling Mitigation

Optimization of Anion Exchange Resin Beds with Membrane Degasification

3.5. Oil & Gas

Membrane Distillation as an Environmentally Friendly Desalination System for Petroleum Refinery’s Wastewater Reuse - A Technical And Environmental Case Study

Using Direct Contact Condenser in a Wastewater Treatment System for Removal of Organic Contaminants

Water for Hydrogen Production: Challenges and Opportunities Supported by Real-World Case Studies

3.7. Zero Liquid Discharge

Advanced Wastewater Treatment System Using Multiple Membrane Processes and Chemicals

Concentrated Solar Multi-Effect Water Distillation & Dewatering (CSMED) Technology - A Viable Solution to Water Scarcity
Continuous Batch Reverse Osmosis at Industrial Scale

Effects of Antiscalants and Cleaning Agents in Membrane Distillation for Brine Concentration

High-Pressure Membrane Processes with Energy Recovery: New Perspectives for Efficient Brine Concentration

Industrial Wastewater Treatment by Membrane Distillation: Process Performance and Detailed Fouling Analysis

Innovative Brine Concentration Membranes to Lower the Cost of MLD/ZLD Treatment

Novel Antiscalant to Inhibit Ultra-High Calcium Sulfate Scale Formation in High Stress Conditions

Pre-Treatment Requirements for Produced Water Treatment Using FO-MD Hybrid System

Pretreatment of Seawater Desalination Brines with Nanofiltration for Brine Concentration and Mining

Shifting the Economics of ZLD By Using Energy Recovery Devices

The UF-FO-MD Hybrid System for Resources Recycle from Wastewater Using SWRO Brine as FO Draw Solution

**04 Coupling Desalination and Renewable Energy**

**Topic Chairs:**
- Mr. Neil Palmer, Chief Technology Officer, Osmoflo
- Mr. Kevin Price, Principal, AWTT, LLC

**4.1. Zero Liquid Discharge and Brine Concentration Techniques**

Analytical Study of a Low-Grade Solar Heat Based Thermal Compressor Actuating a Novel Off-Grid Water Desalination

Can Recent Developments in Membrane Distillation Surpass Current Limitations in Brine Management with Solar Energy?

Innovative Solar Driven Tri-Hybrid Cycle for Future Sustainability
4.2. Improvements for Hybrid Renewable Projects

Application of Artificial Neural Network to Model Hydrogen Production from Wastewater by Dark Fermentation Process

Energy and Water without Carbon: Integrated Nuclear Power and Large-Scale Desalination at Diablo Canyon

Noble Approach for Net Zero Carbon Emission Desalination Configuration Facilitated in Hydrogen Production

Predictive Time-Variant Photovoltaic-Electrodialisys: A Novel Design Using Machine Learning and Control Theory

4.3. Mega Projects Using Renewable Energy

Analysis of Solar Thermal Driven Membrane Distillation System Developed for Desalination in Different Conditions

Dakhla Desalination Plant Intended for Irrigation and Drinking Water Supply Using Renewable Energy

4.4. Cutting Edge Research in Desalination and Renewable Energy

A Multifunctional Osmotic Battery for Desalination and Grid Energy Storage

Analysis of Pressure Retarded Osmosis Flat-Sheet Membrane Models

Life Hyreward Project: Hybrid System for Renewable Energy Production from Desalination Brine

Robust Control and Experimental Validation of a Direct Drive Photovoltaic Electrodialysis Desalination System

Wave-Powered Desalination: A Sustainable Way to Increase Resilience to Water Scarcity
05 **Emerging Technologies, Emerging Issues and Emerging Contaminants**

**Topic Chairs:**
- Prof. David Warsinger, Assistant Professor, Purdue University
- Mr. Rodrigo Segovia, Director of Water Processes & Systems, Almar Water Solutions

**5.1. Emerging Technologies in Desalination and Water Reuse**

A Comparison of Membrane-Based Brine Concentration Systems: An Analysis of OARO and LSRRO

Batch Reverse Osmosis Pilot Demonstration and Commercial Applications

Development of Forward Osmosis Membrane with Cellulose Triacetate Hollow Fibers for Enhancement of Desalination Performance

Dynamic Modelling of Membrane Distillation for the Reduction of Cost of Water by Using Optimal Control Methods

Electromagnetic Field as a Tool in Enhancing Water Desalination Processes

Enhancement of Seawater Battery Desalination Applying Nickel Hexacyanoferrate Doped Cathode

High Recovery Membrane Brine Concentration

Manipulation of Ion and Water Permeabilities Across Salt Rejecting Membranes Using Magnetic Fields

Multi-BARRIER Process Purification for Contaminants of Emerging Concern Removal

New PX, Pressure Exchanger, Energy Recovery Device: Improving and Optimizing Performance Over the PX-Q300 for Greater Energy Saving

Past, Current and Future Directions of Batch and Semi-Batch Reverse Osmosis

Rewaise - A Smart Water Ecosystem for a Sustainable and Efficient Water Cycle in Europe

Stand-Alone, Portable Desalination System Based on Ion Concentration Polarization

Toward the Validation of the World’S Largest MDC Technology for Low Energy Drinking Water Production

Validation of Recycled UF Membranes for RO Pretreatment Process
5.2. Emerging Issues for Desalination Plants and Professionals

Experience with the New Flex Rotary Energy Recovery Device
Low Temperature Process Studies for Spent Desalination Membranes

5.3. Emerging Contaminants in Desalination and Water Reuse

A Critical Control Point Approach to Management of Water Quality Chemical Risks
Abundance of Microplastics from Human Activities to Water Environment
Design and Integration of Ozonation in Treatment Train for Micropollutant Removal and Urban Wastewater Reuse
Hybrid RO, Softening & Chromium Cr(Vi) Remediation
Multiple Point Ozonation for Micropollutants Removal from Wastewater: A Full-Scale Demonstration from Denmark
PFAS Removal with Thin Film Nanocomposite Reverse Osmosis Membranes
Remove Oil Contamination of Seawater by Aerogels
Using RO for Removal of Pfas and Other Cecs from a Wastewater Impacted Surface Water

6.1. Advances in Membrane Chemistry and Efficiency

3D Printed Spacers Containing Carbon Nanotubes for Performance Improvement Assessment in Membrane Distillation
3D-Printing of Desalination Device with Anti-Fouling Nanocellulose Membrane
A New Generation of Multi-Capillary Pes Membrane
Aminated Silica Grafted Carbon Nanotube-Based Membranes for Oily Wastewater Treatment

Autopsies and Hydraulic Tests to Detect Main Problems of Reverse Osmosis Elements

Desalination And Anti-Biofouling Performance Of Graphene And Iron Nanoparticle Coated Membranes

Development of Anti-Fouling High Pressure RO and Application to ZLD Process

Development of Carbon Based Nanofillers Embedded Performance Enhanced Fouling Resistant Polyvinyl Chloride Nanocomposite Ultrafiltration Membranes for Oil-Water Separation

Development of Hollow Fiber Asymmetric Membrane for Osmotically Assisted Reverse Osmosis (OARO) Applicable to Brine Concentration and Its Long-Term Experimental Study

Elucidation and Mitigation of Fouling and Wetting in Membrane Distillation (MD) by Electrical Repulsion Using a Multi-Layered Single-Wall Carbon Nanotube/Polyvinylidene Fluoride Membrane

Evolution of First Pass Membrane Configuration at a Large Scale Desalination Plant Membrane Design of a Subsea Desalination System

Nanoporous Multilayer Graphene Membrane for Precise and Stable Forward Osmosis Desalination

Next-Generation Membranes: Printing Polyamide Thin-Film Composite Membranes Using Electrospray Technique

07 Environment and Sustainability

Topic Chair:
• Dr. Jantje Johnson, Founding Partner, Orange Boat

7.2. Environmental Impact Assessments

Climate-Smart Engineering Package for Seawater Desalination Facilities -- CSSDF: Ultimate Climatic Security on Earth

Desalination Brine Discharges on the Model Mediterranean Seagrass Posidonia Oceanica: Implications for Stress Biology Research and Biomonitoring
Multi-Criteria Analysis for Sustainable Development of Desalination Plants in Chile
Positive Futures as Decision-Support Tools for Urban Water Planning

7.4. Energy and Chemical Efficiency in Desalination Processes
A Multifunctional Osmotic Battery for Desalination and Grid Energy Storage
A Thermodynamic Platform for Evaluating Energy Efficiency of Multifarious Desalination Processes
Four Simple Innovations to Reduce Co2 Emissions on Large SWRO Plants

08 Governance, Finance, and Project Delivery

Topic Chair:
- Dr. Veronique Bonnelye, Technical Support Manager, SUEZ International

8.1. Project Delivery Models for Big-Desal
Membrane Loader for the Reverse Osmosis Membrane Replacement at Gold Coast Desalination Plant
The Importance of Shared Management to Promote Access to Water in the Brazilian Semi-Arid Region: Programa Água Doce
09 Thermal Desalination

Topic Chair:
- Mr. Thomas Altman, EVP - Innovation & New Technology, ACWA Power

9.1. Long Term Case Studies
Developing a New and Novel Antiscalant as a Targeted Approach to Maintaining Thermal Plant Performance

9.2. Thermodynamics of Thermal Systems
Energy Recovery in Thermals Desalination Systems: A Way Forward to Improved Comprehensive Performance
Pilot Testing of Advanced MED Technology for Seawater Desalination

9.3. Solar Thermal Projects
An Innovative Self-Cleaning Floating Solar Still for Low-Cost Water Desalination in Remote Areas
Heat-Driven Direct Reverse Osmosis for Emergency Seawater Desalination Powered by Solar Thermal Energy
Solar Thermal High Efficiency-High Recovery Multi Effect Hybridized with Nanofiltration-Membrane Distillation Emets
10 Pre-Treatment and Post Treatment

Topic Chair:

- Mr. Jonathan Pressdee, Executive Vice President, Global Business Development, Nanostone Water

10.1. Pretreatment Processes Including Media Filtration, Ultrafiltration and other Methods

AOM Characterization and Removal Efficiency Using Various SWRO Pretreatment Techniques

Best Value Solutions for Desalination Pretreatments: Towards Enhanced Flotation

Breakthrough Solution Against Biofouling at Maspalomas I Desalination Plant Demonstrates the Efficiency of Dupont B-Freet Pre-Treatment

Case Study: The Use of a Novel Antiscalant to Prevent Iron Fouling in a Brackish Water RO System

Commissioning in Times of Corona: Remote Assistance over Four Time Zones and 11,000 Km Distance

Innovative Concept for Ultrafiltration Systems: Integration of Ultrafiltration Cartridges and Strainer in a Single Vessel. Case Study: Barge 150,000 m3/d

Multibore® In-Out Ultrafiltration Replacement for Horizontal Membrane Systems Relation Between Pulse Bubble Aeration and Cake Layer Fouling Removal in Submerged Membrane Systems

Robustness and Efficiency of an Integrated Flotation-Filtration Pretreatment for Seawater Desalination

Submerged UF Membranes Pre-Treatment at the Adelaide Desalination Plant Vs SWRO Projects at Tuas In Singapore

The Initiatives of Operation Excellence of Pretreatment System in Ras Al Khair SWRO Plant

Umm Al Houl SWRO Plant Ultra-Daf® Optimization for Turbidity Removal

Validation of AFM Filtration Media for Pretreatment of the RO Process in Alicante Desalination Plant

Washable Microfiber Disc Filter for Pretreatment
10.2. Risks to Pretreatment Efficiency such as Harmful Algae Blooms

The Perils of Using Chloramines for Pretreatment of Water Reuse RO
Biofouling Risks Control by Reducing the Environmental Footprint and Optimising RO Plant Performance

10.4. Remineralization and Post Treatment Techniques and Improvements

Innovative Ultrafiltration Based Remineralization System Capable Of Providing Consistently Low Turbidity Effluent

11. Plant Operations and Digitization

Topic Chair:

- Mrs. Blanca Salgado, EMEA Technical Service and R&D Manager, Dupont Water Solutions

11.1. Big Data and Data Monitoring in Desalination

Designing Digital for Desalination Delivery
From Chaos to Harmony with Double Diamond Establishing a Modern Performance Function for Old Plants
Importance of Artificial Intelligence in Site Selection and Environmental Monitoring In SWCC Desalination Plant
Plant Performance Optimization Using Smartopstm
Transforming the Digital Space of Desalination Through the Dupont Waterapp, the FT-Norm Pro and the Enhanced Digital Tools
11.2. Artificial Intelligence in Desalination

3 Australian Deployments of Machine Learning to Save Opex in Reverse Osmosis Plants

A Machine Learning Deployment to a Large Middle East Sea Water Reverse Osmosis Plant to Save Energy

A Theoretical Deep Neural Network Framework for Mapping Biofouling with Hydrodynamic Parameters

Artificial Intelligent in Designing Water Desalinization Plant

Data-Driven Digital Tool for Smart Ro Membrane Management in a Large Scale Seawater Desalination Plant

Digitization of a Novel HDH System: An AI Framework to Optimize and Guide the Technology Development

11.3. Digital Twins in Desalination

Pre-Commissioning Digital Twin for Optimising Operation and Knowledge Transfer of Tseung Kwan O Desalination Plant

Process Simulation for Design and De-Risking of a Complex Mine and Power Station Water Re-Use and Brine Project

Development of a Digital Monitoring System Solution - The Importance of the Dual Strategy Approach

12 Brine Management and Resource Recovery

Topic Chair:

- Mr. Felix Wang, VP of Marketing, Gradiant Membrane Systems

12.1. Recovery of Minerals from Seawater

Brine Purification Process: A Step Towards Zero Liquid Discharge Desalination
Circular Processing of Seawater Brines from Saltworks for Recovery of Valuable Raw Materials (Searcularmine): Project Update

Investigating the Salt Crystallization Phenomena of Red Sea and Arabian Gulf SWRO Brines by Solar Evaporation

Pilot Scale Demonstration of Desalination of Acid Mine Drainage Water from an Australian Coal Mine

Redefining a Desalination Business Model to Achieve Zero Potential for Environmental Impact

Salt-Mine: Mineral Extraction from Seawater Desalination Brine and Seawater Greenhouse Farming

12.2. Recovery of Minerals from Industrial Brines

Lithium Recovery from Hypersaline Salt-Lake Brine with Selective Nanofiltration and Electrodialysis

Membrane Based Brine Concentration Solutions and Concentrated Brine Reuse Experiences

12.3. Novel Treatment Processes for Resource Recovery

A Long-Term Simulation Model under Super/Hyper/Ultra Salinity and High Hydraulic Pressure Condition for CTA Hollow Fiber Membrane Module for Brine Concentration Application

Brine Management from Desalination Plants for Salt Production Utilizing High Current Density Electrodialysis-Evaporator Hybrid System: A Case Study in Kuwait

Lithium Recovery from Hypersaline Brines: Enhancing Selectivity and Optimizing Energy Consumption

Modeling and Simulation for the Use of Pervaporation in Treating the Brine from Seawater Reverse Osmosis Desalination Process

Modeling, Optimization and Control of Convection-Enhanced Evaporation System (CEE) for Brine Volume Reduction

Novel Nanofiltration Remix Process and Water Recovery Leading to Minimum Liquid Discharge (MLD)
Novel Polymer Composite Evaporator Tubes for Brine Concentration: Heat Transfer, Wetting and Scale Formation

RO Brine Treatment and Desalination by Modified EDR and LPRO

Sea4value: Novel Technologies in Seawater Desalination to Extract Minerals and Metals from Seawater Brines

Sustainable Minimum Liquid Discharge for Inland Desalination
The effects of climate change, combined with the ever-growing demand for clean water across the globe, underscore the urgency of sustainable water solutions. We must chart resilient water solutions and enlist the global community in this mission.

The Leaders Summit takes us one step closer to addressing such solutions. Bringing into dialogue executives from various sectors including finance, legal, project development, public and private utilities, industrial water users, and technical solution providers, the Summit will provide a common space for meaningful conversations to happen. Addressed topics include how to be Water Positive, ESG Criteria and Ensuring Water Sector PPPs fit the 2030 UN Agenda, how water will drive hydrogen, capturing the value of water, how to innovate the water sector, net zero and water positive goals for industry, the looming water crisis and the effect on food security, and the water-energy-food nexus.
Preliminary Schedule

09:00 - 09:15  Welcome Remarks
- Ms. Shannon McCarthy, IDA Secretary General
- Mr. Carlos Cosin, IDA President and CEO of Almar Water Solutions

09:15 - 09:30  IDA Talk

09:30 - 10:30  Panel 1: ESG Criteria and Ensuring Water Sector PPPs Fit the 2030 UN Agenda
Moderator: H.E. Eng. Khaled Al Quershi, CEO of Saudi Water Partnership Company
Co-Moderator: Mr. Tariq Nada, VP Technology, ACWA Power

10:30 - 11:00  Refreshment Break

11:00 - 12:00  Panel 2: The Future of Clean Energy through Green Hydrogen is Non-conventional Water Resources
- Moderator: Mr. Carlos Cosin, IDA President and CEO of Almar Water Solutions
- Co-Moderator: Mr. Jose Diaz Caneja, CEO, Acciona Agua

12:00 - 13:00  Panel 3: Capturing the Value of Water
Moderator: Mr. Gavin Von Tonder, CEO, NEOM Water

13:00 - 14:00  Lunch

14:00 - 14:20  IDA Talk: The Red Book of Water
Mr. Eduardo Orteau

14:20 - 14:40  IDA Talk: Innovating the Water Sector
H.E. Eng. Abdullah Ibrahim Al-Abdulkarim, Governor of the Saline Water Conversion Corporation
14:40 - 15:40  Panel 4: Net Zero and Water Positive Goals for Industry
Moderator: Mr. Fady Juez, Managing Director, Metito

15:40 - 16:00  Refreshment Break

16:00 - 17:00  Panel 5: Water for food. Food for thought: Addressing disruptions to the global food system through water security
Moderator: Dr. Gonzalo Delacamara, Director, Centre for Water Security & Climate Change Adaptation, IE University

17:00 - 17:30  Closing Remarks
Moderators and Outgoing and Incoming IDA Presidents

18:30 - 20:30  Cocktail Reception - Invite Only
The IDA World Congress is the most extensive desalination and water reuse exhibition globally. It’s where world-leading private and public companies share the latest innovations in technologies, equipment, projects, and knowledge about desalination, water reuse, and advanced water treatment. And it’s the best place for networking opportunities with stakeholders and professionals from the water sector.

Be part of the global innovation discussions for the future of water at the IDA 2022 World Congress and connect with the international water community! Registration is now open.
Maximize your visibility among the more than 1,200 delegates from around the globe
Expand your knowledge of current and future desalination, water reuse, and renewable energy technologies
Collect qualified leads
Reinforce relationships with your existing customers
Meet and educate prospective customers
Network with colleagues from around the world

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Day 1 Monday, 10 October 2022

14:00 - 15:30  Sponsor Forums
16:00 - 17:30  Innovation Forum

Day 2 Tuesday, 11 October 2022

08:30 - 09:30  (Outback Theater Sponsor)
09:30 - 10:30  (Gold)
10:30 - 11:00  Coffee Break
11:00- 11:30  (Silver)
11:30 - 12:30  (Gold)
12:30 - 13:00  Sponsor Forum
13:00 - 14:30  Lunch Break
14:30 - 15:00  Sponsor Forum

15:00 - 15:30  (Silver)

15:30 - 16:00  Refreshment Break

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**Day 3 Wednesday, 12 October 2022**

08:30 - 09:30  (Gold)

09:30 - 10:00  (Premium Bronze)

10:00 - 10:30  (Silver)

10:30 - 11:00  Coffee Break

11:00 - 13:00  (Titanium)

13:00 - 14:30  Lunch Break

14:30 - 15:30  (Premium Gold)

15:30 - 16:00  Refreshment Break

16:00 - 17:00  (Platinum)
Day 4 Thursday, 13 October 2022

08:30 - 09:00  Sponsor Forum

09:00 - 10:00  Sponsor Forum

10:00 - 10:30  Sponsor Forum

10:30 - 11:00  Coffee break

11:00 - 11:30  Sponsor Forum

11:30 - 12:30  Sponsor Forum

12:30 - 13:00  Sponsor Forum

13:00 - 14:30  Lunch break

14:30 - 15:00  Sponsor Forum

15:00 - 15:30  Sponsor Forum

15:30 - 16:00  Refreshment break

16:00 - 16:30  Sponsor Forum

16:30 - 17:00  Sponsor Forum

17:00 - 17:30  Sponsor Forum
The IDA Innovation Forum, new to the World Congress, is specifically designed to introduce new and innovative solutions from universities, research centers, technology developers, and start-up companies to major organizations in the water and energy sectors, venture capitalists, developers, and investor’s. This new event at the World Congress will be held on Monday, October 10, 2022.

Who can submit?

The submissions are open to individuals, all companies, and organizations. The proposal should emphasize innovative energy reduction and environmental considerations, building a sustainable future with financial resilience and innovation.

Selection process

Submit your innovations for consideration to be selected as a finalist for the Innovation Forum by July 30, 2022. The winners will be selected by an international, cross-sector panel of judges. The proposal should emphasize innovative energy reduction and environmental considerations, building a sustainable future with financial resilience and innovation.

To learn more and submit your proposal, please visit https://wc.idadesal.org/ida-2022-innovation-forum/
The International Desalination Association, established in 1973, is the point of connection for the global desalination and water reuse community. A non-profit association, IDA serves members in more than 60 countries and reaches an additional 15 affiliate member organizations, both regional and national. Its membership comprises scientists, developers, off-takers, regulators, end-users, engineers, consultants, media, and researchers from governments, corporations, and academia. IDA is associated with the United Nations as part of a growing international network of non-governmental organizations (NGOs).

We invite you to learn more by visiting www.idadesal.org
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The International Desalination Association (IDA) has a network of regional and association affiliate members from around the world. We are pleased to be associated with the following organizations and their representatives who are on our Board of Directors.

Regional Affiliate Members

Association Affiliate Members

[Logos of various regional and association affiliate members]
IDA Sustainable Water Resources Foundation (SWRF)

IDA’s Sustainable Water Resources Foundation (SWRF), a 501(c)(3) organization, promotes creative solutions to the world’s most pressing water challenges. With a continuously growing population, innovative water strategies must rise to meet the increasing demand for clean water. SWRF promotes this innovation by advocating clean energy solutions, fostering collaboration among professionals, and supporting educational programs and projects concerning the nexus of water, energy, food, and the environment.

In the face of increasing demands for water, exponential population growth, and a changing climate, our water needs have never been greater. The United Nations, alongside the IDA SWRF, prioritizes clean water and sanitation as one of the essential Sustainable Development Goals. Water touches every aspect of human life. It is the nexus where agriculture needs meet human rights and gender equality meets urban planning. Recognizing the mounting challenges of water needs, the SWRF seeks to build a future in which development and responsibility come hand in hand and water is a ubiquitous human right.

For more information, visit: http://www.idaswrf.org/.
IDA Membership and Benefits

IDA is dedicated to the development and promotion of desalination and water reuse worldwide. It is the only global association focused exclusively on advanced water treatment technologies and energy for these solutions.

- IDA provides educational resources to industry professionals and students through publications, online and multi-media communications, workshops, conferences, scholarships, and a fellowship program.
- An NGO of the United Nations, IDA is committed to outreach that informs the international community about advanced water treatment solutions and their critical role in providing new and sustainable sources of fresh water around the world.
- IDA advocates the development of advanced water treatment solutions and practices that lower costs, reduce energy requirements, and enhance environmental responsibility. We represent the global desalination community at water, energy and environmental conferences and events.
- IDA’s biennial World Congress is the premier global event for the desalination and water reuse community.
- IDA serves more than 60 countries from end users to financial institutions and from government organizations to academia.

IDA offers five categories of membership:

- Class I-A membership for corporations or utilities, is $1260 per year. Three employees are included in Class I-A membership.
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- Class III-A, III-B, Class III-C membership is for students, non-profit libraries, and individuals from LDCs (respectively). Benefits include reduced fees at all Association activities, complimentary online membership directory access, and more. The fee is $30 / student or library.
- Individuals who are employees of Class I-A or I-B corporate members are $90 additional per person.

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