

CONNECTIONS

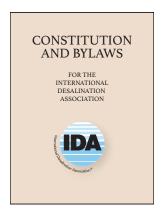
September / October 2016

Connecting People and Ideas to Water Solutions

Inside

Message from the President2
Notice of Proposed Consititutional Amendments3
IDA World Congress Spotlight7
IDA News9
Young Leaders Program Spotlight12
Analyst Corner15
Calendar of Events16

Proposed Constitutional Amendments, Countdown to the 2017 IDA World Congress, Young Leaders and More



This issue of IDA Connections contains an important addition to our regular features with the publication of a special section devoted to several pro-

posed Constitutional amendments. These amendments will soon be avaliable for voting by Class I and Class II members. While we have sent a notice to all members, the inclusion of this text in the newsletter fulfills the requirement of the IDA Constitution that the proposed amendment be published in the next scheduled publication of the Association – namely, our newsletter, in this case the September/October issue, which is being published a bit off-schedule so that we could include the proposed changes without having to wait for the November/December (year-end) issue.

As you will read, "The proposals have been submitted in compliance with requirements of Article VIII Amendments, of the IDA Constitution. In accordance with Article VIII, notice is hereby given to all Members that the following amendment proposals will be submitted to members for voting."

Voting comes later in the process. The mandated Constitutional process consists of several steps:

- Publication of the proposed amendments in this scheduled (September/October) issue of IDA Connections, IDA's official newsletter, for purposes of information.
- A final publication in the November/
 December issue of the newsletter, for
 purposes of voting. This issue of the
 newsletter must be published at least
 40 days but not more than 70 days from
 the publication date of the September/
 October issue of IDA Connections. We
 anticipate publication of the November/December issue iduring the week
 of January 9, thus complying with the
 40-70 day window.
- Voting will be done via electronic ballot in January and will commence five days after the second publication. IDA will send an e-alert to all eligible voters with a link to the online voting.

More details are included in the introduction that prefaces the current Constitution wording and the wording of the proposed amendments.

continues on page 13



messac



Emilio Gabbrielli

Positioning IDA for the Future

This issue of IDA Connections contains information on several proposed amendments to our Constitution, the "laws" that guide how our Association operates. Its authors—some of whom are still active in IDA today—did an exceptionally thoughtful and thorough job in creating this document that has served us well over the years with no Constitutional changes.

Of course, much in our world has changed since the IDA Constitution was adopted—the industry, technology, the environment, the global village itself—and a review and update of our Constitution is an important aspect of ensuring its relevance not only for today but as we move into the future. The proposed Constitutional amendments reflect this dynamic. Many of them emanated from the strategic planning process and development of IDA's 2014-2019 Strategic Plan.

An example of this is the first proposed amendment, which places increased emphasis on water reuse. This is precisely what is going on in the global water treatment industry, and of course, water reuse programs include the deployment of desalination technologies that tie directly back to our original core market.

This process also recognizes that some aspects of the governance of the Association need updating out of experience and progress. For example, the proposed amendments include term limits for Directors to serve on the Board and limiting to two the number of Directors from the same company who may serve on the Board during the same term.

I want to thank the Informal Advisory Group and members of the Constitution and Bylaws Committee, headed by Carlos Cosin, for their diligent and tireless work in helping IDA move forward with this important task.

Since IDA sent a notice about the proposed amendments, we have received many considered responses. Your participation in this process is extraordinarily important as we move forward. IDA is here to serve its members; your opinion and support are essential if we are to grow.

It is not yet time to cast your ballot; that will follow a second publication of the proposed amendments that is planned for the November/December issue of IDA Connections. But I want to take this moment to thank you for your support and to encourage you to continue to engage with IDA—to offer suggestions, share your views, let us know how we can improve in our services and operations, and of course, to vote once balloting has opened. Your voice matters in every aspect of our Association.

APPROVED BY THE IDA BOARD OF **DIRECTORS on 21 APRIL 2016**

This is to provide official notice to the IDA Membership that amendments to the IDA Constitution have been proposed and approved by the IDA Board of Directors. Following a general review of the IDA Constitution, as part of its responsibility to ensure the Association's fiduciary stability and organizational wellbeing, the Board approved the proposed specific revisions and changes to the IDA Constitution on 21 April, 2016.

The proposals have been submitted in compliance with requirements of Article VIII Amendments, of the IDA Constitution. In accordance with Article VIII, notice is hereby given, in this September/October 2016 issue of IDA Connections (IDA's member newsletter), to all members that the following amendment proposals will be submitted to members for voting.

In accordance with Article VIII, Section 4, Voting, the voting will open within 5 (five) days after final publication of the proposed Amendments, scheduled in the November/December 2016 Newsletter. The voting will be limited to Class I, and Class II members. An online ballot will be provided for voting.

In accordance with Article VIII, Section 5, Adoption, an affirmative vote by at least two-thirds of the Class I and Class II members who vote shall be required to adopt the Amendments. At least one-third of the Class I and Class II members must vote before the votes may be counted. If sufficient votes are not received within 60 days of the final publication, the Secretary will declare the proposed Amendments as not being adopted.

Amendments, certified by the Membership and Election Committee as having been adopted, shall take effect 30 days following the certification of the vote unless otherwise specified in the Amendment.

Please note:

• Current wording in the Constitution is indicated by regular font.

- The language to be **added** is *italicized*.
- Language to be **stricken** is indicated by a strikethrough.

To view or download the current Constitution. visit www.idadesal.org

ARTICLE II. GOALS, OBJECTIVES, STRATEGIES AND PRINCIPLES. SECTION 1 and 2

SECTION 1. Goals

CURRENT WORDING:

The goals of the Association will be the development and promotion of the appropriate use of desalination and desalination technology world-wide in water supply, water reuse, water pollution control, water purification, water treatment, and other water sciences and technology.

ADDITION:

1. As part of the implementation of the IDA Strategic Plan, Sections 1 and 2 of Article II of the Constitution should be revised to reflect water reuse having equal status with desalination in the IDA mission.

ARTICLE VI. BOARD OF DIRECTORS

SECTION 1. Power and Duties

d. Audit and Financial Management

CURRENT WORDING:

To borrow money and incur indebtedness for the purposes of the corporation, and to cause to be executed and delivered in the corporate name promissory notes, bonds, debentures, deeds of trust, mortgages, pledges, or other evidence of debt and securities. However, any commitment for indebtedness above and beyond the assets of the Association must be approved by the membership.

ADDITION:

There will be an audit once each term of IDA financial data, financial position, and financial management performed by a reputable, qualified public accounting firm selected by the Board.

ADDITION:

The draft independent audit report will be submitted to the Board for review and approval. After BOD approval, the final report of IDA financial position will be provided electronically to the general membership.

SECTION 3. General Member Representation Item C. Nomination of General Directors

CURRENT WORDING:

The nomination of candidates for Director to be placed on a ballot will be undertaken by the Membership and Election Committee in an open and fair manner which will reasonably permit any Class I or Class II member or their Designated Representative to stand for election within the context of the member's cultural tradition.

Except for 1985, all persons who have been continuous active members or Designated Representatives in the Association for at least one (1) year at the time that the nomination period begins are eligible to stand for election as a Director.

DELETED TEXT TO BE REPLACED WITH NEW WORDING: One (1) full term of membership will be required for candidates for election to the Board.

ADDITION:

No more than two directors from any one organization, including subsidiaries and affiliates, may serve in any one term of the Board of Directors.

ADDITION:

No member of the IDA may serve more than four consecutive terms as a member of the Board. A member serving four consecutive elected terms as a member of the Board must have a two-term absence from the Board before again being a candidate for the BOD. This requirement will be effective for the election of the Board for the term commencing in 2019.

* Note: The Board approved (motion 7-8) on September 28, 2016, that an appropriate staggering mechanism will be defined to ensure an orderly and fair transition of IDA Board Members.

SECTION 6. Resignation

ADDITION: If a Board member resigns from the Board, the vacancy will be filled by a special election unless the effective date of the resignation is less than six months from the end of the term of the Board. In this situation, the vacancy will continue until filled in the regular election.

SECTION 10. Vacancies

CURRENT WORDING:

A vacancy of General Director due to resignation, death, or removal shall be filled by appointment for the remaining term of office by a General Member or its Designated Representative whose name is agreed uponjointly by the President and the two Vice Presidents. The appointment must be confirmed by a majority of all of the Directors in order to take effect.

NFW WORDING:

The current procedure for vacating an IDA Office will be revised to clearly state that is to be used only for removal for cause: i.e., unethical activities or unsatisfactory performance of duties.

ARTICLE VII. OFFICERS

SECTION 1. Officers

CURRENT WORDING:

The Elective Officers of the Association will be the President, First Vice-president, and Second Vice President. The Appointive Officers of the Association will be the Treasurer, Secretary, Editor, Secretary-General, and Comptroller.

These Elective Officers shall be elected by the Directors as the first order of business at the first meeting of the newly elected Directors.

Until an Elective Officer is chosen the meeting will be chaired by the previous President, First Vice President, or Second Vice President in that order.

The Appointive Officers of the Association will be filled by an appointment, which is agreed upon jointly by the President and two Vice Presidents. The appointment must be confirmed by the Board in order to take effect. The term of office for the Elective and Appointive Officers will be from the time of election or confirmation until the new board begins their term of office.

The voting to elect or confirm officers of the Association will be conducted on the following basis:

The President and two Vice Presidents will be elected on the basis of a two-thirds majority in an open vote of the Board.

DELETED TEXT TO BE REPLACED WITH NEW WORDING: The Elective Officers of the IDA (President, 1st Vice President, and 2nd Vice President) will be elected by absolute majority of all Directors. Voting will be by secret ballot.

ADDITION:

Terms of Appointive Officers will be for two years with no limitation on renewals other than those applicable to Board membership for positions held by BOD members.

ADDITION:

The positions of Parliamentarian and Dean of the IDA Academy will be included in listing of Appointive Officers. The Parliamentarian must be a member of the Board. The duties of these Offices will be included in the Constitution.

ADDITION:

The start and end of the term of Appointive Officers who are not required to be Board members will be one year later than the start and end of the terms of the Board and the Elective Officers. This will facilitate continuity of activities and give the incoming Board an opportunity to evaluate performance before being renewed. Incumbents will be given 6 months notice of renewal or non renewal. The notice will require confirmation by a simple majority of the entire Board. The Appointive Officers of the IDA will be elected by absolute majority of all Directors. Voting will be by secret ballot.

ADDITION:

All Appointive Officers of the IDA who are receiving salaries or other payments for their services will have employment contracts with the IDA. The contracts should specify duties, salaries, any other payments for services, terms and conditions of employment, and employee benefits. The contracts should be with the Board with the President signing on behalf of the Board after Board approval.

SECTION 2. President

CURRENT WORDING:

The President must be a Director and must be able to commit to the time necessary to fulfill the duties of the office. The President must be succeeded after one term by a Director from another region.

ADDITION:

Candidates for the Office of President must have served at least one term as a member of the Board and have been a VP or the chairperson of a Standing Committee.

SECTION 3. First Vice President

ADDITION:

Candidates for Vice President must have served one term on the Board.

SECTION 4. Second Vice President

ADDITION:

Candidates for Vice President must have served one term on the Board.

SECTION 5. Treasurer

CURRENT WORDING:

The Treasurer shall keep an account of all monies received and expended for the use of the Association. The Treasurer shall make disbursements authorized by the Board. All sums received shall be deposited in the bank or banks, or trust company, approved by the Board, and the Treasurer shall make a report annually in an Association publication, at the Association's Technical Conference and when called upon by the President. Funds may be drawn only upon the signature of the Treasurer or his/her appointed representative(s) as approved by the Board. The Treasurer may appoint with approval of the Board one or more assistants or the Secretary-General to perform such duties as the Treasurer may delegate.

The funds, books, and vouchers in the Treasurer's hands shall, at all times be subject to verification and inspection by the Board and the Comptroller. The Treasurer shall be a Director.

ADDITION: The Treasurer will provide the proposed budget for each IDA financial year to the Board of Directors for review, comment, and approval. The Treasurer will monitor actual cost performance against budget and provide quarterly reports to the Board.

ARTICLE IX. COMMITTEES

SECTION 2. Standing Committees

CURRENT WORDING:

The Association shall have nine Standing Committees. Those shall be Operations, Finance, Constitution and Bylaws, Publications, Membership and Election, Conference, Education and Scholarship, Audit and Technical Programs. Except for the Audit Committee each standing committee shall be chaired by a Director. A Director

may serve on a maximum of two Standing Committees. Each committee must be composed of a minimum of two Directors and except for the Operations Committee may be composed of additional active members. The Operations Committee shall be composed of eight Directors, which will include the President, First Vice President, and Second Vice President. The Publications Committee will include the Editor. The Finance Committee will include the Treasurer. The Audit Committee will include the Comptroller who will be the Chairman. The remaining members of the Audit Committee may not be Directors nor may they not have or have had business dealings during the past year with the Association. The Membership and Election Committee must have at least one General Member for each region.

ADDITION:

The Constitution will include a brief description of the duties of each of the Standing Committee. It is suggested that each committee submit a draft description to the Chairman of the Constitution and Bylaws Committee and the Chairman of the Operations Committee.

ARTICLE XI. BALLOTING

SECTION 1. General

CURRENT WORDING:

Recognizing the worldwide distribution of the Association's Membership, all balloting of the General Members will be conducted using a mail ballot. Any balloting procedure will be directed by the Nominations and Election Committee. Ballots will be distributed and forwarded to members in a manner which will assure that all eligible Class I and Class II members have a reasonable opportunity to participate in the voting.

DELETED TEXT TO BE REPLACED WITH NEW WORDING: Voting for Amendments to the Constitution and voting for the Board of Directors will be by electronic means that provide for anonymity, verification of membership, and protection against multiple votes by one person.

SECTION 2. Distribution of Ballots

CURRENT WORDING:

Unless otherwise specified ballots will be distributed and forwarded to all eligible voters using a time schedule determined and published by the Nomination and election Committee which reasonably permits each Class I or Class II Member, or its Designated Representative, to have the ballot at the member's mailing address for at least fifty (50) days and be returned to a designated point, or points, by airmail in time to be included in the final count and tabulation.

ADDITION:

Dissemination of information regarding candidates for the Board of Directors and the ballots for voting in the election of the Directors will be distributed by electronic means.

SECTION 3. Anonymity of Voter

CURRENT WORDING:

Balloting is to be conducted in a manner to preserve the anonymity of the voter but permit the verification of the eligibility of the General Member or the Designated Representative to vote.

NEW WORDING:

Voting for candidates for the Board of Directors will be by electronic means that provide for anonymity, verification of membership, and protection against multiple votes by one person.

SECTION 4. Tabulation

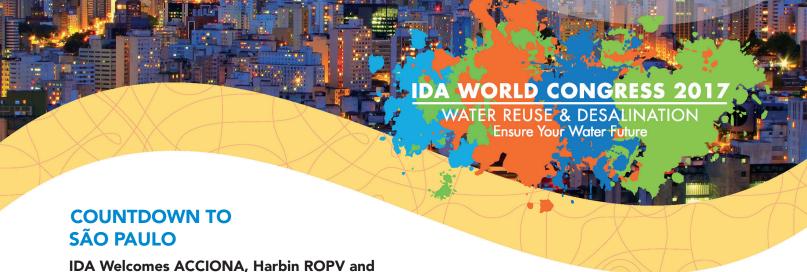
CURRENT WORDING:

The ballots must be opened and counted in the presence of at least three General Members or their Designated Representatives at each place selected to receive and tabulate the ballots. These members will be appointed by the Chairman of the Nomination and Election Committee. Ballots may not be opened or counted until after the end of the voting period. The results of the balloting will be certified and made public by the Chairman of the Nomination and Election Committee within thirty (30) days of the close of the voting period. The results will be published in the next Association publication.

NEW WORDING:

Votes in the election of Board members and in the voting on Amendments to the Constitution will be counted by an independent teller contracted or appointed to the task.

IDA World Congress Spotlight



IDA Welcomes ACCIONA, Harbin ROPV and RWL Water as World Congress Sponsors

IDA is pleased to announce three new sponsors for the 2017 World Congress. ACCIONA will sponsor the World Congress mobile app, while Harbin ROPV and RWL Water will support the World Congress as Bronze Sponsors.

A leader in the development and management of infrastructure, water, services and renewable energy, ACCIONA is one of the foremost Spanish business corporations. Listed on the selective Ibex-35 stock exchange index (ANA.MC), it is a benchmark for the market. ACCIONA has more than 33,550 employees in more than 30 countries on five continents.

The largest pressure vessel manufacturer in the Asia-Pacific region, Harbin ROPV manufactures value and performance engineered pressure vessels. The company offers a wide range of sizes for all major industry systems and application requirements, multiple side port configurations up to 4" and maximum operating pressure up to 1200 PSI, and has an installed base in excess of 150,000 units used in award-winning plants worldwide.

Established with a vision to become the leading global water, wastewater and reuse solutions provider in the middle market, RWL Water offers global solutions for desalination, water, wastewater, waste-to-energy, recovery & reuse, and food & beverage processing. The company has designed and built more than 7,000 plants for clients on all seven continents.







Brazilian Government and World Bank Express Intention to Support IDA World Congress

Two important institutions intend to support the 2017 IDA World Congress. The Brazilian federal government has let IDA know that it plans to support the Congress as a way for decision-makers to learn more about advanced water technologies. They will co-organize with IDA a session in the theatre as a Brazilian-focused event.

Additionally, the World Bank has agreed to organize and participate in a session with IDA. Details will be announced as soon as they become available.

IDA Formalizing Strategic Partnerships for World Congress

As announced in our last newsletter, EMBRATUR, the Brazilian Tourism Institute, is fully supporting the 2017 World Congress. In addition, several additional, prominent Brazilian institutions will be signing on as Strategic Partners for the 2017 IDA World Congress. More details will be announced in the November/December issue of IDA Connections.

Promotion of World Congress Continues in Latin America

IDA participated in two important events in Mexico and Chile, taking the opportunity to continue promotion of the World Congress in the region.

IDA held two sessions at the 30th ANEAS Annual Convention in Mexico, one of the most important events in Latin America where national and international experts,

IDA World Congress Spotlight

entrepreneurs, academics, policymakers, and other stakeholders related to the water and sanitation sector come together. Part of the special technical session entitled "Water Reuse and Desalination: Securing Water for the Future," the sessions focused on "Experience in Desalination and Reuse Projects" and "Desalination, Reuse and Financing."

In addition, IDA is pleased to announce that Juan Miguel Pinto is the newly elected President of ALADYR, IDA's local supporting affiliate of the São Paulo World Congress. He, along with fellow IDA Director Miguel Angel Sanz and IDA President Emilio Gabbrielli, attended DESAL2016: 5th Latin American Congress on Desalination and Water Reuse in Santiago, Chile, promoting the World Congress.

World Congress Exhibition -**Book Your Own Space!**

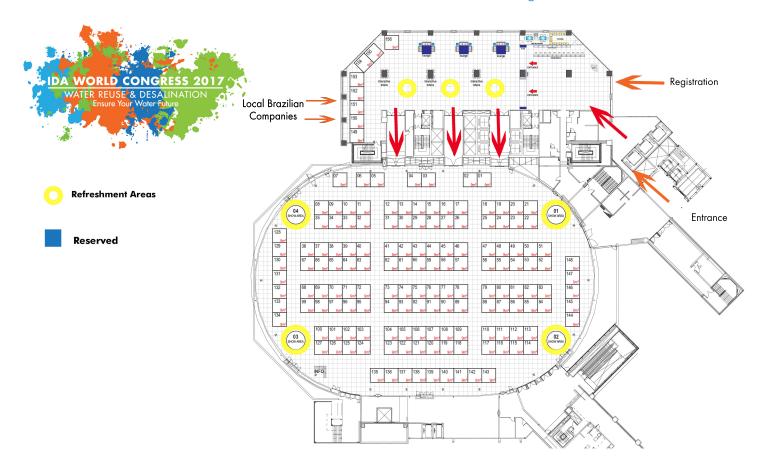
The floor plan for the 2017 World Congress is online at http://ida.enoah.com/Events/World-Congress-2017/ Exhibitor-Directory. IDA invites you to browse the floor plan, choose your space and then use our online interactive booking process to purchase your booth.

For assistance, please contact IDA at exhibits@idadesal.org.

Heads up – Early Registration Opens January 15!

Early registration for the World Congress begins on January 15. Mark your calendar now to take advantage of discounted registration fees.

Please visit wc.idadesal.org for further details.



Inaugural Conference on Water Reuse and Recycling Conference a Formidable Success

IDA Director and Conference Co-chair Nikolay Voutchkov offers his perspective on the groundbreaking event.

From September 25 and 28, 2016 the charming city of Nice, France hosted the first conference in the history of IDA to focus exclusively on water reuse and conservation. Chaired by two veterans in the water reuse and desalination field, Mr. Leon Awerbuch and myself, this event charted a new dimension in the rich and successful 40+year history of the association as a world leader in desalination and water reuse.

The conference attracted delegates from over 30 countries who shared their experience and expert knowledge on the state of the art in water reuse science, technology and practice. Several dozen distinguished speakers provided panoramic overview of the latest achievements and recent milestone water reuse projects in Europe, the Americas, Australia, Asia and MENA. The two plenary and 10 technical sessions, two lively panel discussions, and the multiple venues for networking during the two main days of the conference created a unique "melting pot" environment for amalgamating new ideas and shaping the delegates vision for turning water reuse into a key cornerstone for sustainable long-term water supply worldwide.

Two distinctive features of this conference, which set it apart from many other conferences in the water reuse space, were its distinctive international flavor and its focus on advanced science and technology, which have been tried and proven to be successful in practice.

This conference was also unique because for the first time in the history of similar events, it introduced a session on Joint Desalination and Water Reuse, which is

reflective of the new paradigm of "One Water" gaining momentum in the water industry.

In the new "One Water" vision introduced by IDA at the conference, fresh water production by desalination and generation of reclaimed water are combined into one multifaceted "water factory" in which desalination and water reuse treatment processes are intertwined into one system designed to take advantage of the energy and cost benefits of their integration and synergies.

Besides the conference sessions, the program on September 25 included a Global Clean Water Desalination Alliance Workshop and an IDA Academy course on "Optimization of Energy Footprint and Performance of Reverse Osmosis for Water Reuse and Desalination".

Another new feature of this conference are the IDA awards recognizing recent cornerstone achievements in the field of water reuse and conservation. Awards were presented in three categories, with the winners as follows:

Outstanding Professional in Water Reuse and Conservation, in recognition of individuals who have demonstrated exceptional contributions to the development and implementation of landmark water reuse projects, and advancement of technology and applied science in the field of water reuse and conservation.

Winner: Dr. Masaru Kurihara, Toray Industries, Inc.

Distinction Award (tie): Professor Neal Chung, National University of Singapore

Distinction Award (tie): Dr. Roberto Mazzini, Veolia Water Technologies Italia

Exceptional Utility Leader in Water Reuse and Conservation, to recognize the outstanding performance of public or private utilities that have implemented successful leading-edge water reuse and conservation programs and projects.







IDA News

Winner: Orange County Water District, USA

Distinction Award: Suez, France

Merit Award: Water Corporation, Australia

• Industry Technology and Innovation Leader in Water Reuse and Conservation, to recognize the outstanding performance of private consulting firms and technology and equipment providers that have achieved disruptive advances in water reuse and conservation technology or solutions that have enabled significant reduction in energy use, carbon footprint and costs of alternative water supplies.

Winner: Veolia Water Technologies, France

Distinction Award: Desalitech, USA

Merit Award: Dow Water & Process Solutions, USA

The award recipients will be part of the committee for the 2018 IDA Water Reuse and Conservation Awards, which will be conferred at IDA's next international conference on water reuse and recycling.





Format Changed for Forum on Energy and the Environment



IDA has changed the format of its upcoming event on energy and the environment, to be held in Miami, Florida on December 7-8. The IDA Energy & Environment Forum will be a high-level, invitation-only forum

instead of a conference and has been reconfigured to provide a more intimate setting that will facilitate dialogue among leaders in the industry about critical water issues facing the world today.

The Forum reinforces the commitment of the IDA Energy and Environment Committee (EEC) to encourage energy efficiency and environmental stewardship in desalination and water reuse projects by exchanging knowledge of the best available and most appropriate technologies and practices. Following the event, IDA will publish a "Blue Paper" based on the discussions held at the Forum.

Announced at the White House Water Summit in March 2016, this event also supports the goal of the Global Clean Water Desalination Alliance (GCWDA) – H2O minus CO2 to seek solutions to use renewable energy in desalination and water reuse that will substantially reduce the projected increase in CO2 emissions from desalination processes, as global demand for drinking water continues to grow. The GCWDA was launched in Paris during COP21 in December 2015 and was initiated by Masdar in collaboration with France and the IDA.

The IDA Energy & Environment Forum follows the American Water Summit (AWS), which takes place on December 6-7 at the same location. Attendance at the AWS is free to all IDA Forum speakers to encourage further exploration of timely issues that may be discussed during the Forum.

Top: Dr. Masaru Kurihara, Toray Industries, Inc. Bottom left: Veolia Water Technologies, France. Bottom right: Orange County Water District, USA.

IDA Receives Record Number of Site Selection Bid Proposals for 2019 World Congress

Eight candidate proposals—the most ever received by IDA—are under consideration as the site for the 2019 IDA World Congress. The locations are Barcelona, Spain; Malta; Busan, South Korea; Durban, South Africa; Oman; Dubai, UAE; Hyderabad, India; and Calgary, Canada.

Site Selection Committee Co-chairs Rick Stover and Maurice Neo are now working with committee members Ahmed Al-Mudaiheem, Carlos Cosin, Neil Palmer, Patricia Burke, Rachid Ghamraoui and Michel Canet (Financial Advisor) to do an initial tally of the bid proposals using specific criteria developed for the selection process. This phase will conclude on January 15, 2017, after which the data will be compiled and the shortlisted locations announced.

Site visits follow as members of the Site Selection Committee travel to each of the shortlisted locations from mid-January to the end of March. The IDA Board of Directors then votes on the committee's final recommendation in mid-April. The winning bid will be announced shortly thereafter.

"The popularity of the IDA World Congress speaks to two important points," said Patricia A. Burke, IDA's Secretary General. "First, there is widespread recognition that desalination and water reuse are essential aspects of today's water resources management strategies. Second, the IDA World Congress has proven to be the world's foremost, must-attend event for the global desalination and water reuse community."

Normandy Plaque Unveiled

Thanks to support from the IDA, the achievements of Dr. Alphonse Normandy (1809-1864), noted chemist and a pioneer in the development, commercialization and manufacture of multi-effect desalination equipment, have been memorialized with the installation of the "Normandy Plague" on his former residence at 61 Judd Street in London. The project was overseen by the Marchmont Association, a community group which, among other things, administers the placement of a commemorative blue plague on buildings that once housed luminaries such as famous authors, artists and statesmen.



Attendees at the installation ceremony included IDA President Emilio Gabbrielli and Past President and IDA's unofficial resident historian, Dr. Jim Birkett,



Young Leaders Program Spotlight

YLP in Latin America and the Caribbean

By Monica Boodhan, **YLP Regional Representative**

The International Desalination Association Young Leaders' Program (IDA YLP) established its presence at two events in the Latin America and Caribbean regions in October 2016:

Event 1: The 5th Latin American Congress on Desalination and Water Reuse, Desal 2016, was held at the Hotel Sheraton, Santiago, Chile, from October 5 - 7, 2016. With 268 attendees from 21 countries and 61 presentations addressing the most recent developments pertinent to desalination and water reuse, the event proved to be quite a success for the IDA and its Young Leaders Program.

As a conference partner and exhibitor, the IDA showcased videos and provided a wealth of literature to the diversified attendees at the event. The visitors were educated about both the IDA and its YLP and the numerous benefits associated with membership, such as the opportunities in the industry, support for career advancement, forum for communication and the exchange of ideas among students, young professionals and the industry at large. YLP brochures were available in both English and Spanish and there were several opportunities for networking.

Event 2: After a very successful team event at CaribDA's biennial conference held in Trinidad in May/June 2016, the IDA YLP once more partnered with CaribDA and held a joint display at the Caribbean Water and Wastewater Association (CWWA)'s 25th Silver Anniversary Annual Conference and Exhibition held at the Hyatt



Young professionals at the IDA booth at the 5th Latin American Congress on Desalination and Water Reuse



Young professionals at the Caribbean Water and Wastewater Association (CWWA)'s 25th Silver Anniversary Annual Conference and Exhibition.

For further information about these events and upcoming events in the Latin America and Caribbean region, please contact the YLP Regional Representative, Ms. Monica Boodhan at monicaboodhan@gmail.com.

Young Leaders Program Spotlight

IDA YLP Mentorship Program Update

by Dr. Victor Sim, Regional Coordinator - Asia Pacific and Co-chair IDA Mentor Program

The IDA YLP has successfully completed its second mentorship program session. Initiated in March 2016, the mentorship program connected nine mentors with 10 mentees over a six month timeframe. The YLP Committee is presently gathering feedback from participants and commencing planning for the next mentorship program session in Spring 2017.

For more information regarding the IDA YLP mentorship program, please contact Victor Sim (victor.sim@ch2m.com) or Yang Xing (alwaysbe_yx@hotmail.com).

IDA YLP at IMSTEC

The IDA YLP will sponsor a Student Social Mixer at the International Membrane Science and Technology Conference (IMSTEC). IMSTEC will be held from December 5 – 8, 2016 in Adelaide, Australia.

IMSTEC provides an opportunity for national and international networking through an exciting forum of both formal presentations as well as enhancement of research in order to contribute towards the development of frontier membrane science. Themes for the 9th IMSTEC will cover all areas of inorganic membranes, polymeric membranes, membrane science, membrane fabrication and modification, and membrane applications in a broad variety of areas such as filtration, distillation, desalination and biological separations.

For more information regarding the mixer, please contact Dr. Yang Xing, Special/Technical Program Coordinator, at alwaysbe_yx@hotmail.com For information about IMSTEC, please visit http://www.imstec.com.au/



Proposed Constitutional Amendments, Countdown to the 2017 IDA World Congress, Young Leaders and More (Cont.)

This issue of IDA Connections also highlights several exciting developments surrounding our 2017 World Congress in São Paulo. With the event just 11 months away, our countdown in now well underway!

In this issue, we also explore the State of Desalination to coincide with publication of the 2016-2017 IDA Yearbook. The news is very encouraging—2016 marks the third year of continued growth for the international desalination market. Desalination totals were up 14% in mid-2015 over the same time period in 2014, showing an increase in activity after a 13-year low in the desalination market. Water reuse, while more difficult to track, is definitely on the rise as well.

We also call attention to IDA's Young Leaders Program in this issue. The program is very active, with events around the world and also a growing mentorship program designed to provide invaluable support to the next generation of water leaders.

Analyst Corner

Desalination Industry, Water Reuse Growing: Data Shows Third Year of Continued Growth in Desalination and Increased Adoption of Water Reuse



By Francisco Virgili, Global Water Intelligence

According to new statistics released recently by the IDA, 2016 marks the third year of continued growth for the international desalination market, following a slowdown in the mid-2000s.

The 29th Worldwide Desalting Inventory, published by GWI

DesalData in association with the IDA, indicates that desalination totals were up 14% in mid-2015 over the same time period in 2014, showing an increase in activity after a 13-year low in the desalination market. The period June 2015 to June 2016 saw an increase of 3.7 million cubic meters per day (m³/d) of desalination capacity added globally, compared to 3.2 million m³/d the previous year.

Globally, the cumulative installed capacity of the 18,983 desalination plants considered to be online is 88.6 million m³/d. This number includes plants under construction that are expected to be completed by end of 2016.

The cumulative global contracted capacity as of June 30, 2016 reached 95.6 million m³/d.

Much of this added capacity came from a slew of awards for large-scale seawater projects, particularly in the Gulf region, as 2016 marked the third yearly increase in seawater capacity added, from 1 million m³/d additional capacity in 2014 to 1.6 million m³/d so far in 2016, surpassing 2015's total by 200,000 m³/d. The increase in large-scale projects over the past three years also swung utility users back into the majority again, with nearly 60% of capacity awarded to utility users in 2015.

Meanwhile, the brackish desalination market held steady in 2015 while other feed water streams are near 2014 levels in 2016 after a strong showing in 2015.

Interestingly, a resurgence of interest in reuse projects is occurring not only in North America but also in India and China, according to the 2016 – 2017 IDA Desalination Yearbook, as the latter two markets experience continued industrialization and environmental control. The reuse market is set to grow significantly as both industry and municipalities are beginning to fully grasp the benefits of water reuse projects, either for cost savings and/or environmental benefits and commitments.

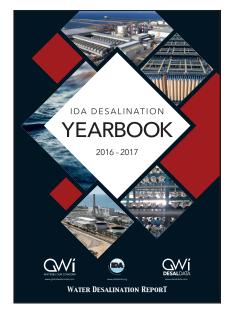
The 2016 – 2017 IDA Desalination Yearbook also shows that the largest gains in desalination capacity this year were in the Middle East and North Africa, driven by several new large projects and increased activity in Egypt and Oman. However, traditionally desalination-heavy Saudi Arabia saw mostly small projects this year as it deals with the maze of its national water policy and future desalination strategy as well as the effect of stubbornly low commodities prices.

It may still take until 2021 and beyond before we see activity reach peak levels again, as forecast by GWI Desal-Data, in part due to the persistence in low commodities prices. The dependence of certain regional economies on these prices is cancelling out some of the increasing demand from such factors as population growth, in-

creased industrialization, drought and climate factors, and competition for water resources.

Commodity prices have also affected growth in Latin America, particularly in mining-heavy countries such as Chile and Peru, but competition for resources and a predicted recovery in prices should spur activity in the region in the medium-term. New forays into desalination by the Philippines and Nigeria also demonstrate new opportunities in an expanding global market.

The IDA Yearbook also explores a number of other interesting trends in 2016. For example, the adoption of mem-



Analyst Corner

brane technologies over thermal technologies continues globally, including in the traditionally thermal Middle East, aided in part by the reduced capital costs and versatility of reverse osmosis.

Private sector funding has also improved, surpassing 30% of total awarded capacity in 2015 for the first time in six years, and can also be attributed to the slew of new large-scale projects in the past year.

DESALINATION BY THE NUMBERS

The cumulative installed capacity of the world's 18,983 desalination plants considered to be online is 88.6 million cubic meters per day (m³/d). This includes plants under construction that are expected to be completed by the end of 2016.

18,983

DESALINATION PLANTS

MILLION CUBIC METERS PER DAY



MILLION CUBIC METERS PER DAY

The cumulative global contracted capacity as of June 30, 2016.

MILLION CUBIC METERS PER DAY

Approximately 15 million m³/d of additional capacity is projected to be awarded / contracted through and including 2020.

Technology use, cumulative global installed / online plants: technology use:



Contracted technology use for 2015-June 2016:



Top 10 desalination countries (cumulative contracted capacity), in descending order:

Seawater Only **All Feed Water Sources** Saudi Arabia Saudi Arabia United Arab **USA Emirates** United Arab Spain **Emirates** Kuwait China Qatar Spain Algeria Kuwait China Australia Israel Algeria Australia Qatar Oman India

Source: 29th Worldwide Desalting Inventory, published by GWI DesalData in association with the International Desalination Association (IDA).

Calendar of Events

November 27-28, 2016

SWCC Water Investment Forum 2016 Kingdom of Saudi Arabia www.wif.sa/en/

November 28-30, 2016

International 9th Desalination Workshop Yas Island, Abu Dhabi, UAE www.desalworkshop.org/main/

December 6-7, 2016

American Water Summit 2016 Miami, Florida USA www.americanwatersummit.com/

December 7-8, 2016

IDA Energy & Environment Forum (by invitation)
Hilton Miami Downtown
Miami, Florida USA
www.idadesal.org/events

February 13-17, 2017

AMTA/AWWA 2017 Membrane Technology Conference & Expo Long Beach, CA, USA www.bit.ly/2fxW5Hp

October 15-20, 2017

IDA 2017 World Congress Sao Paulo, Brazil www.idadesal.org/2017-ida-world-congress/

October 31-November 3, 2017

Aquatech Amsterdam 2017 Amsterdam, The Netherlands http://www.aquatechtrade.com/amsterdam/

May 6-10, 2018

Desalination for the Environment, Clean Water and Energy Nantes, France www.edsoc.com/ IDA Connections (previously IDA News) is published six times a year by the International Desalination Association in February, April, June, August, October and December. It is available free of charge to all current IDA members. Each issue is available in digital format on the IDA website,

The views expressed in articles contributed to IDA Connections are not necessarily the views of the International Desalination Association. IDA assumes no responsibility for unsolicited manuscripts and/or artwork.

Editorial Director

www.idadesal.org.

Patricia A. Burke

Editor

Ann Seamonds

Editorial Offices

International Desalination Association P.O. Box 387

94 Central Street, Suite 200 Topsfield, MA 01983 USA Tel: +1-978-887-0410

Fax: +1-978-887-0411

Editorial Inquiries

+1-978-764-5528

seamonds@seamonds.com



International Desalination Association

PO Box 387, Topsfield, MA 01983 USA

Website: www.idadesal.org Email: publications@idadesal.org