



CONNECTIONS

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Connecting People and Ideas to Water Solutions

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IDA Announces Plans for Energy and Environment Forum as Part of White House Water Summit

Befitting its role as the point of connection for the global desalination and water reuse industry, IDA participated in the invitation-only White House Water Summit held in Washington, DC, on March 22, World Water Day. The highly anticipated event raised awareness of the national importance of water in the United States, and highlighted new commitments and announcements that the Administration and non-Federal institutions are making to build a sustainable water future.

As part of the event, IDA announced its plan to hold an Energy and Environment

Forum in the United States either the end of this year or in early 2017. The event is expected to convene approximately 250 of the world’s leaders in desalination and water reuse to explore issues and facilitate discussions to shape a path to a sustainable water supply for future generations. IDA will also convene a special meeting of its global Energy and Environment Task Force during the Symposium. The event dates and location will be announced soon.

The upcoming Energy and Environment Forum builds on the success of other IDA conferences that explored each of

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message

from the Secretary General

Patricia Burke



At last, winter is losing its cold grip and the first signs of spring fill us with a sense of anticipation and optimism. It's a good time to contemplate the many positive developments for IDA that are on the horizon.

First is the excellent response to our upcoming Water Reuse and Recycling Conference in Nice, France this September. This event reflects IDA's repositioning that includes promotion of reuse as well as desalination in our mission. To this end, Christopher Gasson has contributed an insightful article to this issue of IDA Connections. In addition to including an increased focus on reuse in our programs, you will soon see dedicated content on the topic of water reuse and recycling on our website. We plan to publish a series of white papers related to the topic, and it will be an important topic in our Technical Program at the IDA 2017 World Congress in São Paulo, Brazil.

Our cover story highlights IDA's recent participation in the White House Water Summit, and our announcement that we will hold an Energy and Environment Symposium in the United States either later this year or in early 2017. This commitment was highlighted in a special report prepared by the White House, and I was fortunate to represent IDA at this high-level, invitation-only event. More details will follow regarding the date and location of the Symposium, but mark your calendars for this internationally important event on two of the most important topics that impact development of water resource management programs around the world.

We are pleased to announce important collaboration agreements with PUB in Singapore and our colleagues at the International Water Association. These alliances

further strengthen IDA's reach and introduce our Association to important new audiences.

Our Mentorship Program for the IDA Young Leaders Program continues to grow. We know from experience how a mentor can change our lives, opening doors to new understanding and guidance that have long-term positive impact on our careers. Young Leaders Program member Manuela Garakis has kindly contributed our Viewpoint Column on this very topic. I hope that it will encourage more people to become mentors and of course, more young professionals to take advantage of this great opportunity.

Speaking of Young Leaders, I want to commend our YLP Committee members for their exceptional enthusiasm and dedication to spreading the word about not only IDA but also desalination and reuse as potential career paths for the many talented students and other young professionals around the world. We've included a brief news item on the recent YLP program at KAUST as an example.

Work on potential updates to our Constitution continues, and we will continue to report on its progress.

While my message concentrates on the future, I would also like to call attention to our Annual Report, which is available to all IDA members on our website. We believe that transparency in our operations is important, so this report provides a comprehensive overview of our activities and the state of the organization. We hope you will take time to read it, and I would welcome your comments.

I look forward to hearing from you and seeing you at our events.

IDA Mentorship Program: A Changing Life Experience



By Manuela Garakis

I am Brazilian and moved to the United States in June 2015 together with my husband. We came here so that he could attend a two-year MBA program. I always loved working and being challenged professionally. However, the decision to come to the U.S. meant that I would have to

put my career on hold, since I do not have a work visa for this country.

In an attempt to address this scenario, I applied for a number of positions and sent my résumé to different companies over the course of several months, but was unsuccessful. Time marched on, and I began to realize that I had no clear direction and that my future was highly uncertain. This was very difficult for me, since I had always been a very active person with many career goals.

I have been a member of the IDA and Young Leaders Program (YLP) since 2014 and have tried to be as active as possible in the group from the beginning. My interest is in more than just the professional experience obtained; it extends to the relationships and interactions I can have with the outstanding professionals who also are members.

It was at the IDA World Congress 2015 that everything changed. I was speaking with a professional who I admire very much about my current professional situation when he told me: "You have to enroll in the YLP Mentor Program." He also encouraged me to choose Lisa Henthorne, Past President of IDA and Senior Vice President / Chief Technology Officer of Water Standard, as my mentor.

I remember thinking: "How can this program possibly help me if my visa status makes it impossible for me to work here? And why Lisa Henthorne?"

While I continued questioning myself, my friend told me about Lisa and suggested that she would be the right person to help me. I confess that I felt a little intimidated by the prospect of reaching out to such a complete and accomplished professional, but I thought it just might be an excellent opportunity for me. Much to my delight, Lisa agreed to be my mentor.

I prepared quite a bit for my first mentoring meeting, since I really wanted to make a good impression. Even though we had yet to meet, I already admired this person very much. I confess that I felt a little nervous, since after all, I really had no idea what to expect.

Shortly after we began, Lisa asked me, "so what do you want to do with your life?" I was speechless! I did not know how to respond. I always knew what I wanted in life, but at that moment, I did not know what to say. I felt like my hands were tied due to the fact that I was unable to work.

But it was at that moment that everything changed. Lisa told me a little about her experiences and that despite my situation, there were still many things I could do to help me achieve my objectives, regardless of what they were.

The days following our first mentoring session proved to be very intense. I opened myself up to internal exploration in a way that I never had before, and out of this exercise emerged a much deeper self-awareness. This process led to the birth of a much more conscientious and mindful person in relation to her dreams and goals.

During our second meeting, we talked a lot about my objectives and how I could stay active and continue to grow both professionally and personally. We created a development plan involving lectures, conferences, congresses, webinars, technical and motivational books, improvement in English and Spanish, and performing volunteer work for the IDA, YLP, nearby university labs and within the community.

Reuse Outpaces Desalination as Water Efficiency Becomes Key



Global Water Intelligence's Christopher Gasson looks at how and why demand for water reuse is growing faster than demand for seawater desalination.

Where is the desalination market heading? The answer used to be simple: more bigger seawater plants. There was a

time when this seemed to be the inexorable trend, with records for the largest plant in the world being shattered every couple of years. Since 2010, when the 1,035,000 m³/d Ras Al Khair project in Saudi Arabia was contracted, nothing has come close to surpassing it.

The opportunity for desalination technology has not gone away. It has just moved elsewhere.

I would identify three key events that are shaping the market today:

1. Drought in California. When Australia experienced its Millennium Drought nearly a decade ago, the response was a large seawater desalination plant in every major city. Shortly after the plants were contracted, the drought ended and all of the politicians responsible for ordering them were thrown out of office by an angry electorate.

Californian politicians have not wanted to go down that route. Instead they have backed water reuse programs across the state. The real impact of the drought, however, has been on the groundwater. Farmers have saved their crops by sinking new wells, and this will inevitably have an impact on the quantity and quality of the groundwater available in the future.

It raises the question of whether it is more economical to desalinate brackish groundwater or to manage the salinity of the groundwater through reclaimed water injection. Given the problems of brine disposal, and the successful record of water reuse for groundwater replenishment in Orange County, my guess is that the longer term impact of the drought will also be to increase demand for water reuse.

2. The fall in the oil price. The desalination market in the GCC region has always been closely tied to the oil price. When the money is there, Gulf water agencies order up new desalination plants like takeaway pizzas, and in the past, when the money was not there, everyone went hungry.

This time around it is different. There is a determination that lower oil prices should not bring economic development to a grinding halt.

The solution is three-fold: higher consumer water tariffs to manage demand, greater use of private finance to pay for new water infrastructure, and a big push for water reuse. Saudi Arabia has been leading the way in this. Selling treated sewage effluent to industrial water customers such as Sabic and Aramco has been a big revenue driver for the National Water Company. The tariff structure in the Kingdom means that investing in wastewater treatment pays a much better return than a similar investment in seawater desalination.

Lower oil prices, and commodity prices in general are, in fact, feeding an interest in reuse for industrial customers worldwide. Heavy water users in the energy, petrochemical and mining sectors are looking to lower their costs and reuse offers a tremendous value proposition.

3. China's Water Ten Rules. Last year, China introduced a new pollution prevention plan known as the Water Ten Rules. At the same time, it stepped up the penalties for breaches of environmental regulations. The result has been strong demand for desalination technologies such as brine concentrators and crystallizers, particularly from the coal-to-liquids industry in Inner Mongolia where water is scarce and the coal plentiful.

China's new approach to environmental regulation represents a significant turning point for industrial wastewater treatment technology. The trend over the past 20 years or so has been for heavy industry to relocate from high cost regions such as Europe and North America towards China. With this trend has come a significant erosion of the market for wastewater treatment systems because of the difference in environmental standards.

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Reuse Outpaces Desalination as Water Efficiency Becomes Key

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Water Ten Rules will take China's environmental compliance standards closer to the developed world, driving the market for zero liquid discharge. Other emerging markets are likely to follow suit. India, for example, has recently issued guidelines requiring polluting industries such as textiles, tanning, pulp & paper, petrochemicals and brewing to move to zero liquid discharge (which translates as 100% on-site water reuse). With the big emerging market economies imposing tougher regulation, the smaller ones can no longer claim that they need to pollute the environment in order to be competitive.

Overall we can expect the market for advanced water reuse to be stronger than the market for seawater desalination over the next three years or so, with the US, China, India and the GCC region leading the way.

The seawater desalination market will continue to recover, but the pattern is slightly different. We are seeing new countries open up to seawater desalination: GWI is currently tracking seawater desal projects in Kenya, Sri Lanka, Taiwan and Kazakhstan, although Iran is probably the single biggest opportunity for seawater desalters today.

Within the traditional desal heartland of the GCC, the pipeline of projects remains relatively buoyant, largely thanks to a switch to the BOT (build operate transfer) model which spreads the cost of new infrastructure.

The Australian experience definitely cast a shadow over the seawater desalination industry. It created the impression that seawater plants were expensive white elephants that were an inappropriate response to drought. The return of drought conditions to Australia has forced the Victorian government to place its first order for water from the Wonthaggi SWRO plant this month. The plant was completed in 2014 but has not been used since. It is a reminder that seawater desalination is the only truly drought-proof renewable water resource.

Water reuse has a role in driving the water efficiency of an economy, but ultimately it can only complement rather than replace seawater desalination as a resource. In that sense this September's IDA Water Reuse and Recycling Conference in Nice will be a pivotal event in the future of our industry.

Christopher Gasson is Publisher of Global Water Intelligence. He can be reached at cg@globalwaterintel.com.

Spotlight On The IDA 2017 World Congress



IDA Unveils the 2017 World Congress Branding

Soon you'll see the branding for our upcoming World Congress on a dedicated website for São Paulo as well as on all our material for this highly anticipated event. The identity reflects São Paulo's vibrancy and culture – a city full of life and excitement!

Call for Papers – Opening Soon!

The Call for Papers for the IDA 2017 World Congress will open in June. Please stay tuned for more details as we finalize tracks and topics of the Technical Program, which will be posted at www.idadesal.org

Fast Facts About São Paulo: IDA World Congress 2017 Destination

Latin America is widely recognized as an important emerging market in desalination and water reuse, and as reported in the last edition of *IDA Connections*, São Paulo, Brazil is the destination for the IDA 2017 World Congress on October 16-20, 2017. A vibrant São Paulo is among the world's most populous cities and is Brazil's financial center, featuring an abundance of cultural institutions and a rich architectural tradition.

Here are some fast facts about our host city:

São Paulo is the name of a state and its capital city.

São Paulo is the richest and most populated state in Brazil and its capital city, bearing the same name, is the largest city in all of South America.

A lot of people call São Paulo home.

São Paulo is the largest city in Brazil and Latin America. Over 11 million citizens live in São Paulo. They are called Paulistanos. By 2025, the United Nations forecasts São Paulo will have a population of about 24 million people – 10 million more people than Rio de Janeiro.

São Paulo is the epicenter of Latin American commerce.

Latin America's largest Stock Exchange is located in the state's capital. The Latin American headquarters of many banks, financial organizations and international corporations are based in the city.

São Paulo is a cosmopolitan city.

São Paulo is known as a "melting pot" of cultures that shape its large and diverse population.

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There is lots to see, do and learn in São Paulo.

São Paulo is rich in history, culture and politics. You can discover world famous shopping, entertainment, parks, and cultural sites in this dynamic city.

São Paulo (the city) is not on the ocean, but the state of São Paulo has miles of Atlantic shoreline.

While landlocked itself, the city of São Paulo is only 70 kilometers (43 miles) from the Atlantic Ocean. The state of São Paulo boasts approximately 400 miles of tropical Atlantic coastline.

São Paulo is known internationally for its vibrant street art.

São Paulo takes great pride in its street art. In fact, the work of many street artists has been presented in museums. The IDA 2017 World Congress branding incorporates abstract art into the design – a visual reference that is reminiscent of São Paulo’s famous street art.

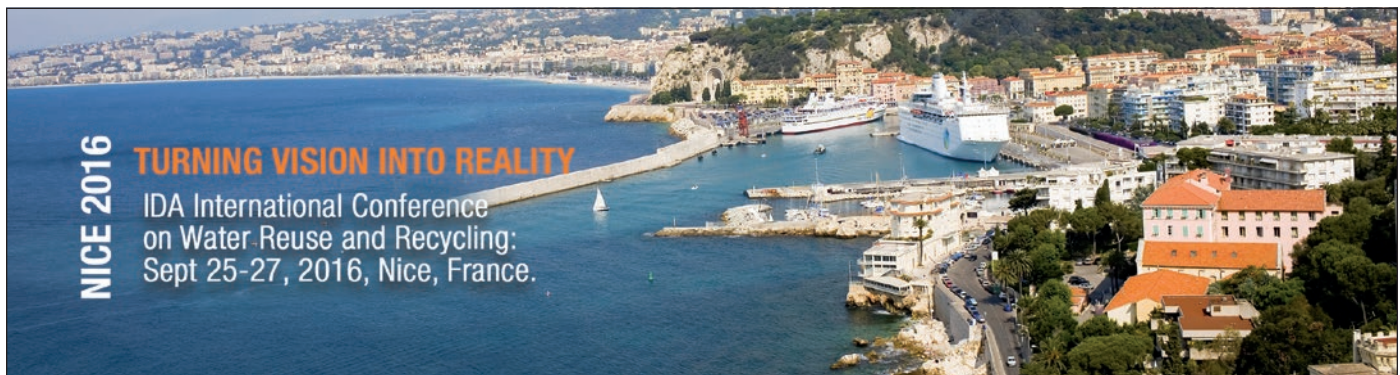
São Paulo has a nickname.

São Paulo is colloquially known as “Sampa”.



Be sure to check the idadesal.org for updates on the IDA World Congress 2017.

Water Reuse and Recycling Conference Updates



IDA Announces Preliminary Speakers and Program Line-up

With the International Water Reuse and Recycling Conference, "Turning Vision into Reality", less than six months away, IDA announces the preliminary speaker roster and program line-up. The conference, to be held on September 25-27, 2016 in Nice, France at The Hyatt Regency Nice Palais de la Méditerranée, will combine panels, plenary sessions and technical papers focusing on advanced technologies for water reuse and recycling that will make water available to municipal and industrial users.

A Call for Papers was issued, and accepted papers covering topics related to the technical sessions will result in additional speaker presentations in each session. The review process will soon be underway and the authors, presenters and their presentations will be announced in May.

Opening Ceremony and Welcome Reception

The conference kicks off on Sunday, September 25 with a late afternoon Opening Ceremony followed by a Welcome Reception. Confirmed keynote speakers for the Opening Ceremony include:

- Dr. Emilio Gabbrielli, IDA President, Brazil
- Dianne d'Arras, Executive Vice President, SUEZ Environnement, France
- Dr. Benedito P. F. Braga, President, World Water Council, Brazil
- Blanca Jiménez-Cisneros, Director of the Division of Water Sciences, UNESCO, France
- Paddy Padmanathan, President and CEO, ACWA Power, Saudi Arabia

Plenary Sessions

The robust program begins on Monday with a plenary session focusing on Global Water Reuse Advances and Success Stories. Leon Awerbuch, IDA Director and Conference Co-chair, USA, will be the moderator. Confirmed keynote speakers for this plenary session are Dr. Mark W. LeChevallier, Director, Innovation and Environmental Stewardship, American Water, USA, and Prof. George Tchobanoglous, Professor Emeritus, University of California, Davis, USA.

Tuesday morning's plenary session will focus on Key to Success of Water Reuse and Vision for the Future and will be moderated by Nikolay Voutchkov, IDA Director and Conference Co-chair, USA/France. Keynote speakers for the Tuesday plenary session include:

- Dr. Loay Al Mussalam, Executive Chairman and CEO, National Water Company, Kingdom of Saudi Arabia
- Domingo Zarzo, AEAS/AEDyR Spain
- Harry Seah, Chief Technology Officer, Public Utilities Board, Singapore
- Michael R. Markus, General Manager, Orange County Water District, USA

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Technical Sessions – Monday, September 26

Cutting Edge Technologies for Water Reuse - Part 1

Co-Chairs: Nikolay Voutchkov and Dr. Valentina Lazarova, USA/France

Keynote Speaker: Dr. In S. Kim, Professor, Gwangju Institute of Science & Technology, Director, Global Desalination Research Center, Korea

Non-Potable and Agricultural Water Reuse: Challenges and Successes

Co-chairs: Ghassan Ejeh, Belgium; Wade Miller, USA

Direct and Indirect Potable Reuse (DPR, IPR): Global Issues and Advances - Part 1

Co-chairs: Maurice Neo, Singapore; Udi Tirosh, Israel
Keynote Speaker: Wade Miller, Water Strategies Consulting, LLC, USA

Industrial Water Reuse and Recycling

Co-chairs: Michel Canet, France; Doug Eisberg, USA
Keynote Speaker: Dr. Josef Lahnsteiner, Director, Technology, Research & Development, VA TECH WABAG GmbH, Austria

Technical Sessions – Tuesday, September 27

Water Quality Monitoring: Control and Solutions

Co-chairs: Guillaume Clairet, Canada, Devesh Sharma, USA

Technologies for Joint Desalination and Water Reuse

Co-chairs: Fady Juez, UAE, Miguel Angel Sanz, France
Keynote Speaker: Dr. Boris Liberman, Chief Technology Officer, IDE Technology, Israel

Direct and Indirect Potable Reuse (DPR, IPR): Global Issues and Advances - Part 2 (IWA Sponsored Session)

Co-chairs: Prof. Dr. Jorg Drewes, Germany; Dr. Josef Lahnsteiner, Austria

Keynote Speaker: Dr. Jörg Drewes, Technische Universität München, Chair of Urban Water Systems Engineering/ International Water Association (IWA) Chairman of the Water Reuse Committee, Germany

Cutting Edge Technologies for Water Reuse - Part 2

Co-chairs: Dr. Boris Liberman, Israel, Dr. Corrado Sommariva, UAE

Panel Discussions

Monday's panel discussion will focus on Regulations, Tariffs and Funding for Reuse and Public Acceptance and will be moderated by Dr. Valentina Lazarova, France. Panelists include Dr. Abdullah M. Al Shehri, Governor Electricity & Co-Generation Regulatory Authority, Kingdom of Saudi Arabia.

Tuesday's panel discussion will explore the Role of Water Reuse in Solving the Systems, Water-Energy and Food Nexus, to be moderated by Christopher Gasson, UK. Panelists include Shannon McCarthy, Partner, United-4Water, Italy and IDA's 1st Vice President.

Closing Ceremony and Awards

At press time, closing ceremony keynote speakers included Dr. Emilio Gabbrielli, IDA President, Brazil; an AECOM representative; Leon Awerbuch, IDA Director and Conference Co-chair, USA and Nikolay Voutchkov, IDA Director and Conference Co-chair, USA/France.

As part of this inaugural Conference, IDA will also present three new awards during the Closing Ceremony in recognition of excellence in the area of Water Reuse and Conservation.

Water Reuse and Recycling Conference Updates

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The three awards of acknowledgement are:

- Outstanding Professional in Water Reuse and Conservation
- Exceptional Utility Leader in Water Reuse and Conservation
- Industry Technology and Innovation Leader in Water Reuse and Conservation

Details of these awards, the guidelines for nominations, and eligibility can be found on the IDA website at <http://idadesal.org/water-reuse-conference/awards/>

Registration for the Conference is now open. Please visit www.idadesal.org/water-reuse-conference/registration.

Thank You to Our Strategic Partner and Conference Sponsors

IDA wishes to thank the International Water Association for its support as a Strategic Partner of the International Water Reuse and Recycling Conference.

We also wish to acknowledge our growing roster of event sponsors:

- ACWA Power, Principal Sponsor
- AECOM, Gold Sponsor
- CDM Smith, Inc., Technical Session Sponsor
- IDE Technologies, Technical Session Sponsor

The conference is supported by IDA's Affiliate, the European Desalination Society (EDS), and the World Water Council.

IDA Announces Site Visit to Aquaviva Wastewater Treatment and Reclamation Plant as Part of Water Reuse Conference

Delegates to the upcoming IDA Water Reuse Conference are invited to attend a site visit to the Aquaviva Wastewater Treatment and Reclamation Plant on Wednesday, September 28.

Aquaviva is the first carbon-neutral wastewater treatment and reclamation plant in the world. It is designed to produce 88,000 m³ per day (300,000 p.e.) of high quality recycled water using membrane bioreactor technology with ultra filtration. The produced water is suitable for various urban uses, including landscape and golf course irrigation, cleaning of airport facilities and protection of biodiversity of the sensitive coastal estuary and marine environment.

This plant produces on site all the energy needed for its operation. A key feature of the plant is the array of 4,000 square meters of energy-producing solar panels (one thousand photovoltaic units supplied by the Pégomas-based company Tournaire Solaria Energie).

Equally important is that the plant sludge is processed into useful product, being dried on site and then packaged and used as natural fertilizer or fuel. Plant building walls are covered with vegetation selected to maximize carbon uptake.

Please visit idadesal.org for more details about time and logistics.



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Hotel Accommodation Information Now Available on IDA Website

When booking your room at the Hyatt Regency, please contact reservations.nice@hyatt.com and use the code provided on the IDA website to obtain the IDA discounted room rate (Single 265 Euros, Double 285 Euros). The room rate includes breakfast, VAT and service charges. The IDA website also lists information about other hotels within walking distance of the conference.

Hyatt Regency Nice Palais de la Méditerranée,
13 Promenade des Anglais, Nice, 06000, France
Telephone: + 33 (0) 4 93 27 12 34;
Email: nice.regency@hyatt.com

Please see www.idadesal.org/water-reuse-conference/venue-and-destination for more information and for links to hotel websites.

IDA Mentorship Program: A Changing Life Experience

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These activities also gave me the opportunity to meet outstanding professionals from whom I have learned a great deal. During our other sessions, Lisa and I spoke at length about the action plan we had developed and my progress, and as required, we made the necessary adjustments.

There is still a long way to go, but what I do not lack is the energy and desire required to make the journey a successful one.

The YLP Mentor Program and an exceptional mentor enabled me to see that there are many paths on which to pursue the same dream, and that regardless of the obstacles life throws our way, we can always find a way to move forward and reinvent ourselves.

Young Leaders Program

YLP Mentor Program Update

Established in 2015, the Mentor Program is a flagship initiative of the IDA YLP to transfer knowledge from seasoned professionals in desalination and water reuse, and broaden the horizons of the younger generation who will benefit from their experience.



The program pairs an established industry leader with a member of the YLP. Mentees benefit by learning from the mentor's experience as well as his/her technical and business knowledge, while mentors have an opportunity to encourage the next generation of leaders in desalination and water reuse.

IDA is pleased to announce that the number of mentors in the program has almost doubled from the original five to a total of 10. Plans are to continue to grow the number of mentors to accommodate more mentees as an increasing number of young professionals are taking advantage of the program.

In addition, the program has been extended to a six-month period to allow more interaction time among mentors and mentees. It is envisioned that the first three months is a period of building up a relationship and each side getting to know one another.

Victor Sim, Ph.D., a Process Engineer in CH2M Singapore's Water Business Group and affiliated as a Scientist with the Nanyang Environment and Water Research Institute (NEWRI), who along with Xing Yang is a Special Technical Coordinator of the IDA YLP Mentor Program, notes that each mentor is encouraged to give an assignment to the mentee to work on during the initial three-month period.

"Other than a good ice breaker, this approach provides a good avenue to identify the mentee's strength and character. Examples of assignments range from simply a

literature search that the mentor is planning for a paper's introduction to a specific research task or even a market analysis of products/trends/competitors. In the following three months, the outcome could be discussed in detail and provide mentorship opportunities to guide and/or advise the mentees in their research or career development," he says.

IDA wishes to thank the following individuals who are serving as mentors:

- Prof. Harvey Winters
- Leon Awerbuch
- Lisa Henthorne
- Lance Johnson
- Rodney Clemente
- Carlos Cosin
- Neil Palmer
- Prof. Tony Fane
- Prof. Tang Chu-yang

For more information about the program, contact Victor Sim at victor_sim@msn.com or victor.sim@ch2m.com.

IDA-YLP Holds Successful Event at KAUST



Dr. Muhammad Wakil Shahzad, Regional Coordinator (Middle East and Africa Region) for IDA's YLP Program, organized a very successful educational event for young professionals at KAUST. The program included a presentation on "Evolution and Prospects of Development of Thermal Desalination Processes" by Dr. Osman A.

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Hamed, B.Sc., Ph.D., at the Research & Development Centre, Saline Water Conversion Corporation (SWCC) Kingdom of Saudi Arabia.

Twenty young professionals attended the event, and IDA is pleased to report that five have joined IDA and the Young Leaders Program.



IDA Announces Plans for Energy and Environment Forum as Part of White House Water Summit

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these topics separately. Held in Huntington Beach in late 2010, “Desalination: An Energy Solution” was IDA’s first conference devoted to energy efficiency and cost savings using seawater desalination technologies. IDA’s first environmental symposium, “Desalination and the Gulf – The Relationship between the Environment and Meeting the Region’s Water Needs”, took place in Bahrain shortly thereafter. IDA followed this symposium by issuing a Blue Paper, “Desalination and the Environment,” in 2011. The Blue Paper is available for members-only download under the Publications Tab on the IDA website.

“IDA has long been committed to building a sustainable water future incorporating desalination, the world’s only new source of fresh water, and water reuse programs implemented by municipalities and industry. Today this vision is becoming a reality, as water reuse programs continue to grow and as the practice of desalination benefits greatly through technology advancements aimed at reducing fossil fuel consumption and lowering the cost of producing clean water. These developments include the use of renewable energy sources such as wind, wave and solar to power desalination plants,” said Patricia A. Burke, IDA’s Secretary General.

The Energy and Environment Symposium is part of IDA’s broader initiative to reduce energy consumption and promote best environmental practices in desalination and reuse. To this end, IDA, which serves as the point of connection for the world’s desalination and water reuse industry, will present an international conference on water reuse to be held in Nice, France this September, and its next World Congress, to be held October 16-20, 2017 in São Paulo, Brazil, will focus heavily on the issue of sustainability.

In addition, IDA is a founding member of the Global Clean Water Desalination Alliance (GCWDA) – H₂O minus CO₂ that was launched in late 2015. The GCWDA underscores IDA’s commitment to enhancing sustainability, as the action plan includes obtaining an amplified commitment by all Alliance members to use clean energy sources to power new desalination plants and to retrofit existing plants, whenever possible. The concept of the Alliance underscores that the initiative will ensure that the sustainability of the entire desalination process is taken into account beyond the sole issue of energy sources.

For more information about the Energy and Environment Symposium, other IDA events or IDA’s sustainability initiatives, please visit www.idadesal.org.

IDA Academy Spotlight

IDA Offers Four Levels of International Reverse Osmosis Certification (IROC)

IDA now offers four levels of International Reverse Osmosis Specialist Certification (IROC), through a collaboration with leading training firm David H. Paul, Inc.

Being a certified professional provides:

- Optimal knowledge and proficiency to operate, monitor, troubleshoot and maintain RO water treatment systems in the most cost-effective manner
- A competitive advantage for your company/agency
- A positive evaluation of your company by customers and investors

Training levels one (Fundamental) and two (Intermediate) are designed for everyone in RO and/or high purity water treatment. Levels three (Advanced) and four (Expert) are for lead professionals such as engineers, troubleshooters and service technicians.

Level one certification may be obtained through online (computer-based) training or through on-site training. Levels two, three and four are only available through on-site training. For questions about online training, please contact Darrell at dcunningham@dhptraining.com. Questions about onsite training should be directed to Dick at dyoumans@dhptraining.com. IDA members receive a significant discount on the courses.



For all other inquiries, please visit idadesal.org/academy.

IDA Desalination Academy Offers Courses at International Water Reuse Conference

The IDA Desalination Academy will present two courses in conjunction with the International Water Reuse Conference at the [Hyatt Regency-Nice Palais de la Méditerranée](#) in Nice, France.

On Sunday, September 25, IDA will offer a half day course entitled “[Optimization of Energy Footprint and Performance of Reverse Osmosis for Water Reuse and Desalination](#)”, taught by Nikolay Voutchkov, President, Water Globe Consulting, USA and Dr. Valentina Lazarova, Professor at Large and Senior Expert, SUEZ Environnement, France.

On Wednesday, September 28, IDA will present a full day course on “[A Comparison of Manufacturers’ Technology for Membrane Filtration and MBR used in Water & Wastewater Treatment](#)” led by Graeme Pearce, Ph.D., Director, Membrane Consultancy Associates, Ltd, United Kingdom.



Please visit www.idadesal.org to learn more.

IDA Affiliates Circle the Globe

IDA is proud to have a network of 16 regional and association affiliate members from around the world representing such regions as Australia, GCC, the Caribbean, China, Chile, Europe, India, Korea, Japan, Levant, Pakistan, Saudi Arabia, Singapore, Spain and the USA.

These organizations represent an important and valued part of IDA as a global organization. IDA leaders regularly attend events and conferences supporting its affiliates. For example, IDA President Dr. Emilio Gabbrielli, IDA 1st

Vice President, Shannon McCarthy, and IDA Secretary General Patricia A. Burke along with several other IDA Directors, will attend the EDS Conference – Desalination for the Environment: Clean Water and Energy at the Marriott Park Hotel, Rome Italy, May 22-26, 2016. Dr. Gabbrielli recently traveled to India to attend the InDA-APDA Conference and celebrate InDA's Silver Jubilee.

We invite you to take a moment to get to know IDA's Regional and Association Affiliate Members and their representatives on the IDA Board of Directors.

Regional Affiliate Members

Asociación Española de Desalación y Reutilización (AEDyR)

Mr. Miguel Angel Sanz

AEDyR was created in 1998 after the successful IDA Congress held in Madrid in 1997. This association intends to gather all individuals, companies and organizations dealing with desalination and water reuse in Spain. AEDyR is one of the world's few non-regional, country-specific desalination associations.



American Membrane Technology Association (AMTA)

Mr. Greg Wetterau

AMTA, IDA's North American affiliate, was originally named the National Water Supply Improvement Association (NWSIA) and was formed in 1972 to promote the improvement of national water supplies through desalting, reuse and other water sciences. Its mission is to promote, advocate and advance the understanding and application of membrane technology to create safe, affordable and reliable water supplies, and to treat municipal, industrial, agricultural and waste waters for beneficial use.



Australian Water Association (AWA)

Mr. Neil Palmer

The role of the Australian Water Association has been to support the water industry in Australia as it faces the challenges of managing its water environment. At the time of AWA's inception in 1962, post-war installation of water and sanitation was high on the agenda. Today's challenges include the need to address the current professional skills shortage, uncertainty arising from the impacts of climate change, stressed water resources on a national scale, and water reuse and recycling.

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WATER**

ASSOCIATION

Caribbean Desalination Association (CaribDA)

Mr. Shawn Meyer-Steele

The Caribbean Desalination Association (CaribDA) is a non-profit organization and represents members/sponsors from the Caribbean desalination and water reuse communities, utilities, industries, academia and government as well as individuals interested in water supply improvement in the Caribbean, specifically by means of desalination or water reuse



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Affiliates Spotlight

continued from page 15

European Desalination Society (EDS)

Mr. Borja Blanco

EDS is a Europe-wide organization for individual and corporate members including universities, companies, research institutes, government agencies and all concerned with and interested in desalination and membrane technologies for water.



Japan Desalination Association (JDA)

Dr. Hideaki Kurokawa

JDA aims to promote desalination technology by sharing information and tackling common problems through collaboration among members and relevant organizations; contributing to the improvement of the demineralization and the water treatment industry as well as the lives of Japanese people.



Levant Desalination Association (LDA)

Mr. Ziad Salibi

LDA is committed to the development and promotion of desalination technology in water supply, water reuse, water pollution control, water purification and water treatment in the Levant area including Jordan, Lebanon, Syria and Palestine.

The Association intends to achieve its mission through the organization of conferences and workshops with the aim to educate and promote the correct use of desalination and water reuse, while promoting sustainability and environmentally friendly solutions.



Water Desalination Engineering Chapter (WDEC)

Mr. Ahmed Al-Mudaiheem

WDEC's objectives include building outstanding engineering efficiencies that effectively contribute to the Kingdom of Saudi Arabia; creating a conducive environment for innovation, development and creativity that serve the requirement of the society and encouraging Saudi engineering firms and Saudi engineers to develop their competitive abilities.



Association Affiliate Members

Asia Pacific Desalination Association (APDA)

Dr. Masaru Kurihara

Asia-Pacific Desalination Association (APDA) is an affiliate of the IDA in the Asia-Pacific region. APDA is an organization that brings together experts, research institutions, companies and all people concerned about water protection from across the water desalination profession.



Asociación Latinoamericana de Desalación y Reuso de Aguas (ALADYR)

Mr. Juan Miguel Pinto

ALADYR was founded in 2010 during the International Desalination Seminar II in Antofagasta, Chile. One of ALADYR's main missions is to promote, protect and develop engineering, construction, technological applications and developments as well as equipment and materials for desalination and water treatment projects.



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Indian Desalination Association (InDA)

Dr. P.K. Tewari

InDA was formed in 1991 in Madras (now Chennai) with the main goal for the development and promotion of the appropriate use of desalination and desalination technologies nationwide in water supply, water reuse, water pollution control, water purification, water treatment, other water sciences and technologies and various solute-solvent separations.



Korea Desalination Plant Association (KDPA)

Dr. In. S. Kim

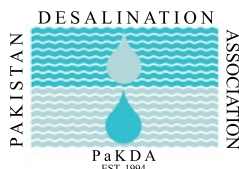
KDPA was established for the advancement of domestic desalination technology and contribution to national interest through entering international markets. Along with marketing for desalination and international cooperation and exchange activities, KDPA was also formed to improve the quality of life of the nation through providing clean water.



Pakistan Desalination Association (PakDA)

Eng. Fayyaz Muddassir Mubeen

The Pakistan Desalination Association (PakDA) is a non-profit organization dedicated to the development, promotion and appropriate use of desalination technology in Pakistan. The PakDA was established in 1994 by Fayyaz Muddassir Mubeen, a desalination expert and a mechanical engineer by profession who is also the current president of the association.



Singapore Water Association (SWA)

Mr. Foo Hee Kiang

The Singapore Water Association aspires to play a role in efforts to profile and promote Singapore as a one-stop center for all water-related services and water technology hub. This Association will bring together local companies for the mutual benefit of developing a vibrant and dynamic local water industry.



The Membrane Industry Association of China (MIAC)

Dr. Ruan Guoling

The Membrane Industry Association of China (MIAC) is a state-level industrial society established in 1995 by the former Ministry of Chemical Industry, the Chinese Academy of Science and the State Oceanic Administration and registered with the Ministry of Civil Affairs. Representing professional and commercial entities in China's membrane separation field, MIAC is a non-profit non-governmental organization that operates under the State-owned Assets Supervision and Administration Commission of the State Council. MIAC is also focused on early-stage evaluation of major membrane projects as entrusted by government departments and relevant companies.



Water Science and Technology Association (WSTA)

Mr. Ali Redha Hussain

The Water Science and Technology Association encourages and promotes interest in water sciences and strengthens scientific ties among water professionals in the Gulf Cooperation Council countries. It also encourages scientific research, training programs, and the development of local capabilities in the different fields of water sciences and technology.



Lisa Henthorne Named Comptroller of IDA



IDA Past President Lisa Henthorne has been appointed Comptroller of IDA, replacing Randy Truby, also a Past President and Director of the Association who recently stepped down from the position.

Ms. Henthorne is Senior Vice President and CTO of Water Standard, a position she has

held since 2009. She was appointed to the Board of the Produced Water Society and is recognized as a leading expert in water treatment worldwide in both industrial and municipal applications. Ms. Henthorne formerly headed the desalination business for CH2M Hill, acting as technical advisor on many of the most challenging desalination projects in the Middle East, Australia, North America, and Asia. She has more than 25 years of experience in the desalination and water treatment industry. Ms. Henthorne also holds three U.S. patents in water treatment, with multiple US and international patents pending.

Ms. Henthorne served as IDA's President from 2007-2009, 1st and 2nd Vice President from 2003-2007, Treasurer from 2009-2011, Editor from 2011-2013 and also served as a member of the Board of Directors for 16 years.

Ms. Henthorne graduated from the Colorado School of Mines with a Master's of Science in Chemical Engineering and Missouri State University with a Bachelor's of Science in Chemistry.

IDA Enters into Collaboration Agreements with PUB and IWA

IDA has recently entered into collaboration agreements with two major organizations in the world's water community, PUB and IWA.

IDA and PUB, Singapore's national water agency, which have a longstanding and close working relationship, have signed a collaboration agreement covering SIWW in 2016 and 2018. With this agreement, which is an extension of a previous agreement signed in 2011, IDA and PUB will jointly develop the program for the SIWW and Water Leaders Summit held at this event, which is one of the largest water conferences and exhibitions in the world. IDA has been involved in SIWW since its inception.



In addition, IDA and IWA have entered into a collaboration agreement that includes two specific events. The terms of the agreement include the following:

- IDA will be the designated strategic partner for the IWA World Water Congress & Exhibition, to be held in Brisbane, Australia on October 9-13, 2016. IDA will lead / support the organization of a workshop on "Water in the Driest Continent – New Sources When Weather and Climate Are Changing". IDA will also organize a one- or two-day IDA Desalination Academy course to be presented in conjunction with this event. In addition, IDA members attending the Congress are eligible for a 10% discount.
- IWA has been designated a strategic partner for IDA's international conference on Water Reuse and Recycling in Nice, France. As part of this arrangement, IWA has nominated Dr. Jörg Drewes to be part of the program / steering committee and will provide a keynote speaker for the event. In addition, IWA will lead / support the organization of the session on "Direct and Indirect Potable Reuse: Global Issues and Advances".



IDA Is Institutional Sponsor for 5th International Congress on Water Management in Mining, Water in Mining 2016

IDA has signed an agreement with GECAMIN to become an Institutional Sponsor for Water in Mining 2016, the 5th International Congress on Water Management in Mining, which takes place in Santiago, Chile from May 18-20 at the Hotel Grand Hyatt.

GECAMIN is organizing the Congress in collaboration with the Centre for Water in the Minerals Industry (CWMI), SMI, the University of Queensland, Australia, and the Brazilian National Institute of Science and Technology on Mineral Resources, Water and Biodiversity (INCT-Acqua).

This event is organized to provide a forum for mining professionals involved or interested in water management in mining who can share their experiences, discuss the latest issues, and attempt to answer the important questions on how to ensure responsible water use, protect surface and groundwater quality, and recover and treat mine water and effluents. The Congress's objectives are to promote the exchange of knowledge and experience about sustainable water management in mining and the development of professional networking on technical issues.

waterinmining2016
5º Congreso Internacional en Gestión del Agua en Minería

Renewable Energy in Conjunction with Membrane Technology: What Challenges Come With This?



IDA's Director and Past President, Leon Awerbuch writes about Advances in Membrane Technologies: The New Frontier in the February/ March 2016 issue of Water and Wastewater International (WWi).

To read more about Leon's article on the work going on in membrane research and development, please visit IDA "In the News" at www.idadesal.org/category/in-the-news.

IDA Talks Desalination with Pumps & Systems Magazine



IDA Director Doug Eisberg talks about desalination with Martin Reed of Pumps & Systems magazine. "I think with desalination trends in general, it's important to note when I speak to people about desalination, 'What is desalination?' Because it's really commonly misunderstood," he says.

To read more, visit IDA "In the News" at www.idadesal.org/category/in-the-news.

Calendar of Events

April 19-20, 2016

Global Water Summit 2016
Abu Dhabi, UAE
www.watermeetsmoney.com

May 10-12, 2016

Ozwater 2016
Melbourne, Australia
www.ozwater.org

May 18-20, 2016

Water in Mining 2016
5th International Congress on Water Management in Mining
Santiago, Chile
gcamin.com/waterinmining/english

May 22-26, 2016

Desalination for the Environment, Clean Water and Energy
Rome, Italy
www.edsoc.com

May 31-June 3, 2016

CaribDA 2016 Biennial Conference & Exposition
Trinidad
www.caribda.com/calendar

July 10-14, 2016

Singapore International Water Week
Singapore
www.siww.com.sg

September 25-27, 2016

IDA International Conference on Water Reuse and Recycling: Turning Vision into Reality
Nice, France
www.idadesal.org/water-reuse-conference

October 4-6, 2016

WETEX 2016
Dubai, UAE
www.wetex.ae/about/ChairmanMessage

October 5-7, 2016

DESAL 2016
5th Latin American Congress on Desalination and Water Reuse
Santiago, Chile
www.tinyurl.com/hdtrcyq

October 9-14, 2016

IWA World Water Congress
Brisbane, Queensland, Australia
www.tinyurl.com/hb862ju

October 19-21, 2016

XI International Congress Desalination and Water Reuse, AEDyR
Valencia, Spain
www.aedyr.com

November 6-9, 2016

Membranes in Drinking and Industrial Water Production
Leeuwarden, The Netherlands
www.edsoc.com

November 28-30, 2016

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

February 13-17, 2017

AMTA/AWWA 2017 Membrane Technology Conference & Expo
Long Beach, CA, USA
www.tinyurl.com/hmjly58

October 16-20, 2017

IDA 2017 World Congress
São Paulo, Brazil
www.tinyurl.com/ht6xzup

October 31-November 3, 2017

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

May 6-10, 2018

Desalination for the Environment, Clean Water and Energy
Nantes, France
www.edsoc.com

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