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IMAGINE A DAY WITHOUT WATER!

Congratulations! SAWEA Board Members for the 2018-2019 Term!



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Nidhal S. Al-Dossary Vice President



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Nidhal S. Al-Dossary receives Bedell Award

Article from The Arabian Sun newspaper

DHAHRAN, 2/26/2018 – Nidhal S. Al-Dossary, Field Compliance Coordinator, Utilities and Facilities Services Department was presented the 2017 Arthur Sydney Bedell Award by Thamer S. Mutairi, the new President of the SAWEA and former President Mohammad Abdulatif, on February 26 at a ceremony held in the Kempinski Al Othman Hotel Al Khobar. Dossary is the fifth person to receive this award in the Kingdom of Saudi Arabia

The Bedell award is granted by the Water Environment Federation (WEF), a global nonprofit association that trains and educates thousands of professionals in the field of water treatment. The Bedell Award was established to acknowledge the extraordinary contribution of members to a Water Environment Federation member association, such as the Saudi Arabian Water Environment Association (SAWEA). SAWEA is a Saudi Aramco professional group of water quality engineers and scientists supported by the Environmental Protection Department and the Utilities and Facilities Services Department.

For his outstanding contributions to water conservation and innovative treatment technologies, Dossary, who is a past president of SAWEA, received the award.

Dossary played a key role in organizing many of SAWEA's major conferences and workshops for the past three years including the most recent "Water Arabia" conference in Khobar in October 2017. Water Arabia 2017 attracted more than 1100 participants from 22 countries, with 36 exhibitors and numerous technical presentations. In addition 8 KSA university students presented posters explaining their water conservation research projects. The "Water Arabia" event is regarded as the preeminent water conference held in the MENA region.

SAWEA Board

MEMBER HIGHLIGHTS



THAMER AL-MUTAIRI

Currently serving as President

Thamer earned his BSc. in Chemical Engineering from King Fahd University of Petroleum & Minerals (KFUPM) and earned his MSc. in Environmental Science from Texas University in the USA. In addition, he holds a Professional Engineering license.

Thamer has 17 years of professional experience in Saudi Aramco and is currently managing the Water Conservation. His area of expertise includes design, construction, operations, maintenance, and inspection of water and wastewater treatment systems. He participated in solving and troubleshooting various wastewater systems and was instrumental in developing an innovative patented technology to treat oily wastewater for re-use.

During the last three years, while managing all aspects of water conservation, his main focus was evaluating and promoting alternate water sources to groundwater. Thamer has delivered many successful lectures in water conferences and events, and has created several impactful water conservation related presentations in effort to emphasize the need to find solutions to the water scarcity challenge that is facing the Kingdom of Saudi Arabia and the region, thus sharing Saudi Aramco's accomplishments in this regard.

A SAWEA member since 2005 has been involved in the organization of SAWEA's Water Arabia conferences and other events. Through the years he has noticed the significant strides that SAWEA has taken and is proud to see what has been accomplished thus far.

His advice for new engineers is: Highly enncourages to focus on water and wastewater treatment as a result of the water scarcity issue which is one of the major challenges in the Kingdom of Saudi Arabia.

Additional Fast, Fun Facts about Thamer:

He was born: in Qasim, Saudi Arabia

His favorite vacation spot: Has travelled to many places around the globe but Spain is definitely his favorite.

His favorite food: Seafood.

Is currently reading: High temperature impact on water treatment equipment.



SAWEA Board

MEMBER HIGHLIGHTS

ABDUL HAMID AL-MANSOUR

Currently serving as Director



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Abdul Hamid holds a bachelor degree in Mechanical Engineering from King Fahd University of Petroleum and Minerals (KFUPM), Dhahran, Saudi Arabia (1976) and his master's degree in Engineering Management is from Northeastern University in Boston, USA (1981).

Has attended various management programs from schools such as Harvard, Wharton, and University of Wisconsin -Madison. Received a two-year training program with SWCC's Consulting firm "Development Analysis Associates Inc." at Cambridge Massachusetts.

He worked on the comprehensive design for the Jubail Power Plant (capacity of 1250MW). Has published and presented numerous technical papers in different desalination and HVAC conferences. Joined Saudi Saline Water Conversion Corporation (SWCC) in 1977 and for 25 years held various engineering capacities. Served five terms in the International Desalination Association (IDA) Board and was President from 2003-2005.

In 2005 joined Saudi Tabreed Company (ST) as the CEO (ST's capital is SAR 316 MM), ST specializes in developing district cooling schemes and was a key member for this company's operations in Saudi Arabia.

A SAWEA Board member since 2010 and has been a key member involved in the organization of SAWEA's Water Arabia Conferences. Abdul Hamid is very clear in stating that the main drive behind his SAWEA long lasting membership, is that he feels indebted to the Desalination industry because of his years of service in this field, and to the wonderful people he's been fortunate to work with.

It's very important that the Kingdom and the Region as a whole need to continue to invest in educating the new generations of Engineers that are now taking lead. So this makes associations such as SAWEA even more important to link Government's officials with the people working in the industry such as engineering consulting and manufacturing companies. Thus, renewing their knowledge and keep them abreast of the latest development in the desalination and water recycling industries.

Abdul Hamid is very impressed by the enthusiasm and dedication of the SAWEA Board members and the hard work this association does to invest in disseminating the knowledge about the lastest development in the water industry.

His advice for new engineers is: "Work hard on yourself to learn all the details of the industry and subscribe to desalination and water recycling publications. Also become a member in technical associations in order to widen your network with the people working the field, make it a goal to learn new things in the process. I strongly encourage you to take on the endeavor of publishing an annual technical paper or article in future conferences, workshops and technical magazines because you will be the main beneficiary during this creative process".

Additional Fast, Fun Facts about Abdul Hamid:

He was born: in Al-Khobar, Saudi Arabia, does sports daily and has been part of many of Al-Khobar's Marathons. **His favorite vacation spot:** likes to spend most of his vacations in Washington State, USA where his two sons are attending schools in Washington.

His favorite food: Lebanese cuisine.

Is currently reading: The Arabic translation of a book titled "Naked Economics" by Charles Wheelan.



Thanks to recent rains, the four million residents of Cape Town, South Africa won't run out of water in August 2018, as feared. Day Zero is now pushed out into 2019. (Brett Boyd comments)

Cape Town 'Day Zero' pushed back to 2019 as dams fill up in South Africa

ENVIRONMENT APRIL 3, 2018 / 3:57 PM

Ed Stoddard

JOHANNESBURG (Reuters) - South Africa's droughtstricken Cape Town has pushed back its estimate for "Day Zero," when taps in the city run dry and people start queuing for water, to 2019 from August of this year, and data show dam levels rising elsewhere in the country.



An El Niño-triggered drought two years ago hit agricultural production and economic growth throughout South Africa. Cape Town was particularly hard hit, and lack of good subsequent rains around the city has made its water shortage worse.

The City of Cape Town said on its web site that Day Zero had been "pushed out to 2019." Residents have been living with stringent consumption restrictions, which now stand at 50 litres per person per day. Those restrictions remain in effect.

Dam levels for the Western Cape province, which includes Cape Town, were at 18.3 percent last week compared with 19 percent the week before, according to South Africa's Department of Water Affairs. Elsewhere, the water situation has been improving.

The Vaal Dam, a major supply source for Gauteng, the province that includes Johannesburg, Pretoria and much of South Africa's industry, was at 94.7 percent, up from 83.5 percent the week before. Levels in the Katse and Mohale dams in neighboring Lesotho, which are key water storage systems for Gauteng, have a combined capacity now of almost 54 percent. In late January, they were at 32 percent, raising concerns that the water crisis would spread beyond Cape Town.

Relief for Cape Town, a major tourist draw famed for its mountain backdrop, beaches and nearby wine farms, may also be imminent, with good seasonal rains forecast. Cape Town typically gets rain in the southern hemisphere winter, starting around May. Above-average-rainfall is now forecast over the next three months, according to the latest seasonal outlook from the South African Weather Service.





Michael Irving February 16th, 2018



Dong Han Seo, of the CSIRO, holds a flask of water taken from Sydney Harbour, which has been purified to a drinkable standard thanks to a graphene-based filter(Credit: CSIRO)

Among graphene's long list of superpowers, filtering water may be one of the most directly beneficial. Now a team of Australian scientists has demonstrated how effective a specially-designed form of graphene can be at purifying water with a pretty challenging test: the filter made water from Sydney Harbour safe to drink in one step.

As well as being extremely strong and an excellent conductor of heat and electricity, graphene has proven itself to be an effective water filter. These devices could take the form of biofilm sheets floating on top of dirty or salty water, which absorb and purify the water. Other methods include a graphene-oxide membrane that can filter even the smallest salts out of water without impeding the flow.

The newest graphene water filter system was made using a form of the material dubbed "Graphair," which was developed last year by a team at the CSIRO. Graphene is normally created using an energy-intensive process of chemical vapor deposition onto metal substrates, but Graphair is made from soybean oil, an inexpensive and renewable material.

In the new study, the team coated a commercial water filter with a thin film of Graphair, which contains microscopic nano-channels that block contaminants while allowing water to pass through. To really put it to the test, they ran samples of water from the heavily-polluted Sydney Harbour through these filters, some with a layer of Graphair and some without. After just one pass, the Graphair filters had purified the water to a drinkable standard.

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This New Graphene Invention Makes Filthy Seawater Drinkable in One Simple Step



"In Graphair we've found a perfect filter for water purification," says Dong Han Seo, lead author on a paper describing the project. "It can replace the complex, time consuming and multi-stage processes currently needed with a single step. All that's needed is heat, our graphene, a membrane filter and a small water pump."

The Graphair filters also managed to keep their filtration rate higher for longer. One of the main problems with regular filters is that the unwanted material tends to build up on the membrane, eventually slowing down the rate that water can pass through. In these tests, the team found that after 72 hours, filters in the control group were only half as effective as they'd been initially. The Graphair filters didn't have this problem, with membranes 4 cm² (0.6 in²) in size processing about 0.5 liters (17 oz) per day.

The researchers say they hope to start field trials of the Graphair water filters in developing countries next year. In the long run, the technology could be scaled up to clean a home or town's water supply, and may eventually be used to filter seawater and industrial wastewater on a large scale.

The study was published in the journal Nature Communications. Source: CSIRO



Water we up to??



Stay tuned for more information to come in the near future!!



You are invited to attend:

Towards Development of Eco-Friendly Plastic Bottle Symposium

يوم الأحد الموافق April 29, 2018 / Shaban 13, 1439 يبدأ التسجيل الساعة 8 صباحا

Date: April 29, 2018 (from 8 am —2.30 pm)

Location: Imam Abdulrahman Bin Faisal University (Engineering College. A13)

Registration: You may register onsite at the entrance

Cost: FREE

