



# SAWEA TALK

ISSUE 01 | JUNE 2015

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ARABIA 2015

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CONSERVE  
WATER

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HIGHLIGHTS

# SAWEA NEWS



## Water Arabia 2015

Water Arabia 2015 was successfully held February 17-19 at Le Meridien Hotel in Khobar, KSA with over 1,200 Water and Waste Water Professionals from over 20 countries attending. In addition, 51 companies were represented in the exhibition and there were 7 companies who sponsored the workshops and technical presentations. The event was supported by the Ministry of Water and Electricity, Saudi Aramco, the Saudi Arabian Water Environment Association, the Water Environment Federation, Dammam University and the International Desalination Association.

Day 1 of the conference included three (3) design workshops:

**THE BASIC SANITARY WASTEWATER DESIGN WORKSHOP WAS PROVIDED BY AECOM AND IT WAS ATTENDED BY 120 PARTICIPANTS.**

**THE BASIC DESALINATION DESIGN WORKSHOP WAS GIVEN BY IDA AND IT WAS ATTENDED BY 130 PARTICIPANTS.**

**THE INDUSTRIAL WASTEWATER TREATMENT WORKSHOP WAS TAUGHT BY SIEMENS AND IT WAS ATTENDED BY 80 PARTICIPANTS**

Overall, 330 water and wastewater professionals participated in the design workshops.



The events on day 2 included the opening ceremony, the plenary sessions, several keynote presentations, a poster contest for university students and the exhibition. 610 people attended the conference and exhibition on day 2. A VIP dinner was held during the evening of the second day with two speakers. The VIP Dinner was attended by 250 delegates.

AL-KHOBAR—Water Arabia, a conference that brought Saudi government representatives and industry water professionals together, was held Feb. 4-6 in the Kingdom.

# UPCOMING WATER EVENTS

## IDA WORLD CONGRESS

August 26 – September 4, 2015  
San Diego, California, USA

## WEFTEC 2015

September 26 – September 30  
McCormick Place  
Chicago, Illinois USA

## POWER-GEN MIDDLE EAST CONFERENCE & EXHIBITION

4-6 October 2015  
Abu Dhabi  
National Exhibition Centre

## 2016 MEMBRANE TECHNOLOGY CONFERENCE & EXPOSITION

February 1-5, 2016  
Henry B. Gonzalez Convention  
Center, San Antonio, Texas

## MEMBER HIGHLIGHTS



**SUBI JESHI**  
Saudi Aramco  
Water Treatment Specialist

“Water is life”, says Subi Jeshi. Meet our highlighted member this quarter, Subhi Jeshi. He has been an active member of SAWEA for 5 years. Subhi works for Aramco as a water treatment specialist. Mr. Jeshi joined SAWEA in order to promote new technologies to the water and wastewater treatment sector.

Currently he supports SAWEA as a technical support member of the board. When asked what advice Subhi has for new members he says, “Be fully aware of all available water and wastewater treatment technologies and latest research findings in evaluating new technologies.”

# 17 ways to conserve water in the home and yard:

## WATER CONSERVATION IN THE HOME BY MOHAMMED AL-ABDULLATIF



### 01 CHECK FAUCETS AND PIPES FOR LEAKS

A small drip from a worn faucet washer can waste 20 gallons of water per day. Larger leaks can waste hundreds of gallons



### 02 DON'T USE THE TOILET AS AN ASHTRAY OR WASTEBASKET

Every time you flush a cigarette butt, facial tissue or other small bit of trash, five to seven gallons of water is wasted



### 03 CHECK YOUR TOILETS FOR LEAKS

Put a little food coloring in your toilet tank. If, without flushing, the color begins to appear in the bowl within 30 minutes, you have a leak that should be repaired immediately



### 04 USE YOUR WATER METER TO CHECK FOR HIDDEN WATER LEAKS

Read the house water meter before and after a two-hour period when no water is being used. If the meter does not read exactly the same, there is a leak



### 05 INSTALL WATER-SAVING SHOWER HEADS AND LOW-FLOW FAUCET AERATORS

Inexpensive water-saving low-flow shower heads or restrictors are easy for the homeowner to install. "Low-flow" means it uses less than 2.5 gallons per minute

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## FOR NEW INSTALLATIONS, CONSIDER BUYING "LOW FLUSH" TOILETS, WHICH USE 1 TO 2 GALLONS PER FLUSH INSTEAD OF THE USUAL 3 TO 5 GALLONS.

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### 06 TAKE SHORTER SHOWERS

One way to cut down on water use is to turn off the shower after soaping up, then turn it back on to rinse. A four-minute shower uses approximately 20 to 40 gallons of water



### 07 TURN OFF THE WATER AFTER YOU WET YOUR TOOTHBRUSH

There is no need to keep the water running while brushing your teeth. Just wet your brush and fill a glass for mouth rinsing



### 08 USE YOUR DISHWASHER AND CLOTHES WASHER FOR ONLY FULL LOADS

Automatic dishwashers and clothes washers should be fully loaded for optimum water conservation. Most makers of dishwashing soap recommend not pre-rinsing dishes which is a big water savings



### 09 WHEN WASHING DISHES BY HAND, DON'T LEAVE THE WATER RUNNING FOR RINSING

If you have a double-basin, fill one with soapy water and one with rinse water. If you have a single-basin sink, gather washed dishes in a dish rack and rinse them with a spray device or a panful of hot water

## WATER CONSERVATION IN THE YARD AND GARDEN:



### 10 PLANT DROUGHT-RESISTANT LAWNS, SHRUBS AND PLANTS

If you are planting a new lawn, or overseeding an existing lawn, use drought-resistant grasses such as the new "Eco-Lawn". Many beautiful shrubs and plants thrive with far less watering than other species. Replace herbaceous perennial borders with native plants. Native plants will use less water and be more resistant to local plant diseases. Consider applying the principles of xeriscape for a low-maintenance, drought resistant yard



### 14 ADD ORGANIC MATTER AND USE EFFICIENT WATERING SYSTEMS FOR SHRUBS, FLOWER BEDS AND LAWNS

Adding organic material to your soil will help increase its absorption and water retention. Areas which are already planted can be 'top dressed' with compost or organic matter



### 15 DON'T RUN THE HOSE WHILE WASHING YOUR CAR

Clean the car using a pail of soapy water. Use the hose only for rinsing - this simple practice can save as much as 150 gallons when washing a car



### 11 PUT A LAYER OF MULCH AROUND TREES AND PLANTS

Mulch will slow evaporation of moisture while discouraging weed growth. Adding 2 - 4 inches of organic material such as compost or bark mulch will increase the ability of the soil to retain moisture



### 16 USE A BROOM, NOT A HOSE, TO CLEAN DRIVEWAYS AND SIDEWALKS



### 12 DON'T WATER THE GUTTER

Position your sprinklers so water lands on the lawn or garden, not on paved areas. Also, avoid watering on windy days



### 17 CHECK FOR LEAKS IN PIPES, HOSES, FAUCETS AND COUPLINGS

Leaks outside the house may not seem as bad since they're not as visible. But they can be just as wasteful as leaks indoors. Check frequently to keep them drip-free. Use hose washers at spigots and hose connections to eliminate leaks



### 13 WATER DURING THE EARLY PARTS OF THE DAY; AVOID WATERING WHEN IT'S WINDY

Early morning is generally better than dusk since it helps prevent the growth of fungus. Early watering, and late watering, also reduce water loss to evaporation. Watering early in the day is also the best defence against slugs and other garden pests. Try not to water when it's windy - wind can blow sprinklers off target and speed evaporation

Water conservation comes naturally when everyone in the family is aware of its importance, and parents take the time to teach children some of the simple water-saving methods around the home which can make a big difference.



# TECHNOLOGY HIGHLIGHTS

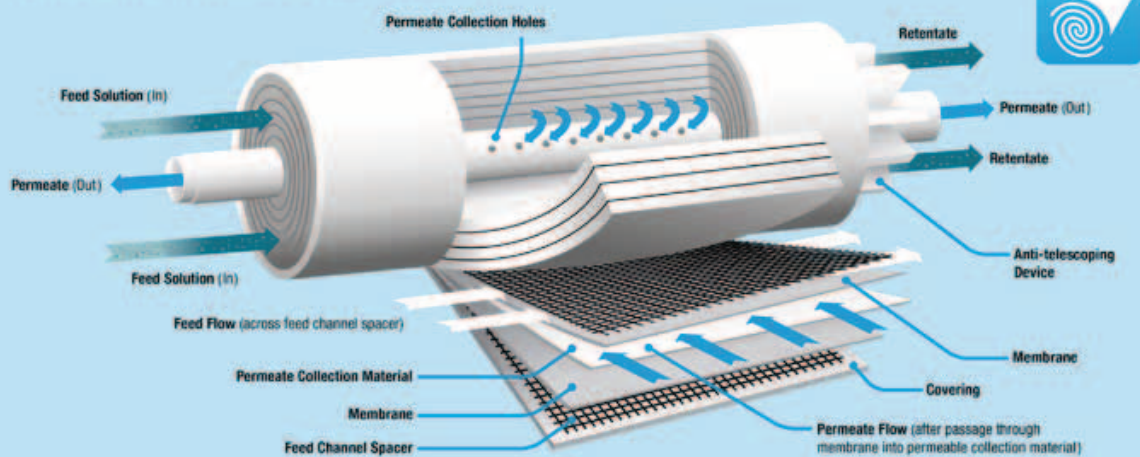
## NanoClear Water Clearing Separation Application

The following article was found at (<http://www.water-technology.net/news/newsdais-analytic-secures-funding-for-wastewater-treatment-technology-development-4524088>)

Technology provider Dais Analytic has received a \$1m grant under the US Army's Small Business Innovation Research (SBIR) program to continue with the development of its NanoClear water clearing separation application. The application is equipped with the firm's Aqualyte nanomaterials, which is a patented membrane used to clean contaminated grey-water sources. The NanoClear grant project is entitled as 'Non-Fouling Water Reuse Technologies'. Dais NanoClear program manager Abram Nashed said: "Two key attributes of the Aqualyte(TM) nanomaterial make the NanoClear application highly resistant to fouling, a common issue that leads to failure and downtime in other technologies.

"The pore-free nature of Aqualyte eliminates locations that are prone to fouling, while the novel surface chemistry of the polymer makes it difficult for contaminants to attach to the material". SBIR has contributed for the project based on the firm's previous innovations and initiatives taken for potable water generation. Dais plans to launch first commercial water filtration module by June this year. The additional SBIR funding will increase the scope of the innovation to compete in the growing contaminated water separation and wastewater industry, starting from 2016, the company said. Dais chief technology officer Brian Johnson said: "Our approach is radically different from today's water purification technologies. Our unique membrane selectively absorbs the water molecules into nanometer-sized regions within the solid plastic that act as channels to promote the flow of the water molecules through the membrane. "With these unique channels, we are able to process pure water without the high pressures required in today's common processes".

### Spiral Membrane Configuration



الجمعية العربية السعودية للبيئة المائية  
Saudi Arabian Water Environment Association

Member Association  
**Water Environment Federation**  
the water quality people®



If you have articles, suggestions or newsworthy items for future issues, please email the Editor: Patricia Fakhreddine, Email; [yfakhreddine@sawea.org](mailto:yfakhreddine@sawea.org)