



## NEWS

### Water Technopreneur Wins First Lee Kuan Yew Water Prize



Dr Andrew Benedek,  
Lee Kuan Yew Water  
Prize Winner 2008

Dr Andrew Benedek, leading researcher and successful technopreneur, has been awarded the first Lee Kuan Yew Water Prize\* for his pioneering work in developing low-pressure membranes. This Canadian has revolutionised the way water can be purified and now clean drinking water can be produced from various sources, including highly polluted water.

This technological leap benefits mankind on a global scale. Utility providers around the world have already incorporated Dr Benedek's technology into their water treatment processes. The technology was also instrumental in Singapore's development of reclaimed water, branded NEWater\*\*.

In addition, the use of low-pressure membranes in the pre-treatment stage in sea water desalination has made the process more cost-efficient and viable for many countries. To date more than 15 million cubic meters per day, of treatment capacity, has been installed and used worldwide.

The Lee Kuan Yew Water Award seeks to recognise individuals or organisations who have made outstanding contributions towards solving the world's water problems through revolutionary technologies and innovative policies or programmes that benefit humanity. Generously sponsored by the Singapore Millennium Foundation, this award brings with it a cash prize of S\$300,000. The foundation has pledged S\$1.5 million over five years to the award.

Nominations for this prestigious annual award went through a rigorous selection process where officials evaluated and selected their winning choice from 39 International nominations. The highly esteemed Nominating Committee comprises chief executives of multinational companies and water utilities, leading academicians in water research and government officers. While the Water Prize Council, which endorsed the nomination, is chaired by Dr Tony Tan, Chairman of the Singapore National Research Foundation. Dr Benedek's work stood out not only for its energy-saving policy and low operating cost, but for its ease of use and contribution to science.

Born in Hungary, 64-year-old Dr Benedek immigrated after the Hungarian revolution when the country opened up to private enterprise. He then became a citizen of Canada, where he first graduated from McGill University, Montreal in 1966 with a chemical engineering degree. The founding Chairman of ZENON Environmental Inc. embraced the vision to create a company dedicated to solving water quality problems through the use of advanced membrane technologies.

\*To find out more about the Lee Kuan Yew Water Award and/or nomination process: [www.siww.com.sg](http://www.siww.com.sg)

\*\* [http://www.pub.gov.sg/NEWater\\_files/index.html](http://www.pub.gov.sg/NEWater_files/index.html)

Other related websites:

[www.zenon.com](http://www.zenon.com)

[www.smf-scholar.org](http://www.smf-scholar.org)

## BRIEFS

### High profile attendance confirmed

The Singapore International Water Week has received a very positive response from key dignitaries around the world. About 180 ministers, government officials and top industry players have all confirmed their attendance at the Water Leaders Summit.

Other prominent participants to grace the inaugural event are: His Excellency Yoshiro Mori, President of the Asia-Pacific Water Forum/Japan Water Forum, HE Eng. Abdullah bin Abdul Rahman Al-Hussayen, Minister, Ministry of Water & Electricity, Saudi Arabia, His Excellency Fehied F. Alshareef, Governor, Saline Water Conversion Corporation, Saudi Arabia, His Excellency Nguyen Hong Quan, Minister, Ministry of Construction, Vietnam and Mr Hu Siyi, Vice Minister, Ministry of Water Resources, People's Republic of China.

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### Overwhelming response for Water Expo

With the sellout of Water Expo, delegates and trade visitors can expect to meet more than 300 participating companies from more than 22 countries and regions, including six national pavilions. This is an opportunity for buyers and the water community to establish networking opportunities and business opportunities, to increase and seek out global partnerships, as well as to get an update on the latest cutting-edge water technologies and products.

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### Fresh website look

The Singapore International Water Week website has a brand new look. Check it out at [www.siww.com.sg](http://www.siww.com.sg) and stay in the know with up-to-date information on the upcoming June '08 event.

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### Event road warriors with a noble mission

To help create awareness and increase potential participants coming to the Singapore International Water Week from around the various regions, the organisers have been travelling overseas to spread the word through a series of roadshows.

To date they have covered a sizeable territory, hosting informative events in China, the Middle East and Vietnam. Joining forces with the Southeast Asian Water Utilities Network in Hanoi and in Ho Chi Minh City, promoting the event at the Water Technologies, Energy And Environment Exhibition (WETEX) in Dubai and at the annual meeting of the China Urban Water Association (CUWA) throughout March. The organisers are indeed charging ahead in their noble mission as road warriors, to bring even more visitors to this exciting June event.



Water Technologies, Energy And Environment Exhibition (WETEX) in Dubai.



Reception cum briefing on Singapore International Water Week in Vietnam, jointly organised by Singapore International Water Week and Southeast Asian Water Utilities Network.



Promoting Singapore International Water Week at the China Urban Water Association (CUWA) meeting 2008 in Nanjing.

## **SPOTLIGHT**

### **Membrane Technology Looks to Nature for Advanced Water Purification Solution**

#### **Global water concerns increase**

With rising global concerns about the world's limited supply of fresh water from conventional sources, the water industry welcomes each new step on the path to a sustainable solution.

The common practice of desalination is known to require a large amount of energy and while being an important element of an integrated water supply solution, it is not the ideal method. Other existing water purification methods such as distillation, ion-exchange and activated carbon, vary in their reach, efficiency and cost. In the development of alternative water supplies, water purification using low-pressure membranes is energy-efficient, cost-effective and kinder to the environment.

The technique itself involves the application of low-pressure membrane filters, which are 100% efficient at retaining contaminants larger than their pore size. Five to 10 years ago, conventional membranes used relatively high pressures, 40 to 50 psi (pounds per square inch) to push unclean water through a tube that forces clean water out the sides.

However, through recent research advancements, GE ZENON Environmental Inc. has developed a low-pressure (2-3 psi) system that uses suction to pull clean water into many small tubes called hollow fibres. This is much like the way roots of a plant extract water from the earth. The membranes are capable of removing the last remaining traces of colloidal particles and microorganisms, while minimising energy intake throughout the process.

#### **Delivering a safe and energy efficient water supply**

This revolutionary discovery is set to change the face of the world and create an even greater focus on sustaining our planet. Low-pressure membranes require less space and equipment to operate and yet produce a higher quality end product compared to conventional water treatment processes. This sets the low-pressure membrane purification system ahead of its game.

By reclaiming secondary treated used water, the amount of used water discharged to the ocean is reduced, resulting in a new water source and an improvement in overall water quality in surface water bodies and groundwater basins, while preventing ocean water contamination.

The simplicity and affordability of this discovery means greater accessibility, allowing small and scattered communities to have access to portable water purification systems. This extended reach will ultimately have a profound and positive effect on humanity as a whole, supplying safe drinking water for the planet, and ensuring more productive used water treatments for the municipal and industrial market.



## Discovering Singapore

In the vast expanse of Southeast Asia, Singapore may be barely visible on the map but if you think Singapore is small, think again. At only 42 kilometers wide and with a total population of about 4.6 million, this city state is one of the world's most densely populated countries, comprising a multicultural mix of citizens and permanent residents. Chinese, Indians, Malays and others make up our beautiful island and provide us with a colourful society, rich with each one's national heritage.

Singapore's diverse population has led to the rise of many popular tourist destinations such as Chinatown, Arab Street and Little India which will delight the senses and suit most travellers budget.

Plan ahead and you won't be caught by surprise. You'll need two essentials as you head off on your island tourist trail - a pair of sunglasses and an umbrella. While Singapore is known for its glorious weather, it also has two distinct monsoon seasons: the North Eastern season is December - March and the South Western season is June - September (November and December being the wettest months). Temperatures vary throughout the year with daytime averages of 30°C and short bursts of rain when you least expect them. You'll experience a tropical climate with year round humidity (usually above 75%) so remember to always drink plenty of water.



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## Smart Shopping for Chic Looks

When it comes to fashion, Singapore has it all. If you are looking for catwalk chic, you are in the right city, with a buffet of shopping experiences not for the faint hearted.

Take a leisurely stroll down Orchard Road and feast on designer delights. The Shopping Gallery at Hilton\* is a firm favourite for designer labels, offering three levels of exclusive brands such as Giorgio Armani, Paul Smith and Valentino. While you are in the area check out Paragon Shopping Centre, a haven for high-end labels with Versace and Gucci paving the way to a palatable selection of world famous brands.

More exquisite choices await just a short taxi ride away. Or take the MRT (the islands' underground train system) across the city and within several stops, you'll meet with a treasure trove of style where even the most demanding fashionistas will be spoilt for choice - Marina Square\*\*. Set between two of Singapore's popular hotels (the Marina Mandarin and the Oriental Singapore), Marina Square offers the latest trends from the runway and fashion industry. Indulge your wardrobe and satisfy your senses with yet another exciting array of fashion choices at Vivo City\*\*\*. This iconic shopping mall is Singapore's largest lifestyle and retail destination. Experience it's bubbling energy as you surround yourself with more exclusive, international fashion labels.



\*<http://www.visitsingapore.com/aluxeaffair/hilton.html>

\*\* [www.marinasquare.com.sg](http://www.marinasquare.com.sg)

\*\*\* [www.vivocity.com.sg](http://www.vivocity.com.sg)

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# The Great Singapore Sale

Renowned as a shoppers' paradise, Singapore offers its popular, island-wide shopping therapy from 23rd May - 20th July 2008. At the Great Singapore Sale, you'll find everything from homeware & electrical goods to health & beauty items, offered at irresistible prices.

Pick up some fantastic bargains and unique trinkets. Shop till you drop with late night shopping bringing you extended opening hours till midnight on 9 nights\* and with Premier Tax Free and Global Refund promotions, tourists will get even more bang for their buck. Shoppers also stand to win cash and other great prizes in the SPH Shop & Win Draw promotion.



From the Central Shopping Belt to the outskirts and neighbourhood

centres, look out for exciting events and promotions that will make your shopping experience a fun and rewarding one. Every corner of Singapore will be packed with bargains this Great Singapore Sale, with plenty of prizes and surprises too.

\* For details on late night shopping [www.greatsingaporesale.com.sg](http://www.greatsingaporesale.com.sg)

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The World Cities Summit will be taking place alongside the Singapore International Water Week 2008.  
For more information please visit [www.worldcities.com.sg](http://www.worldcities.com.sg)

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