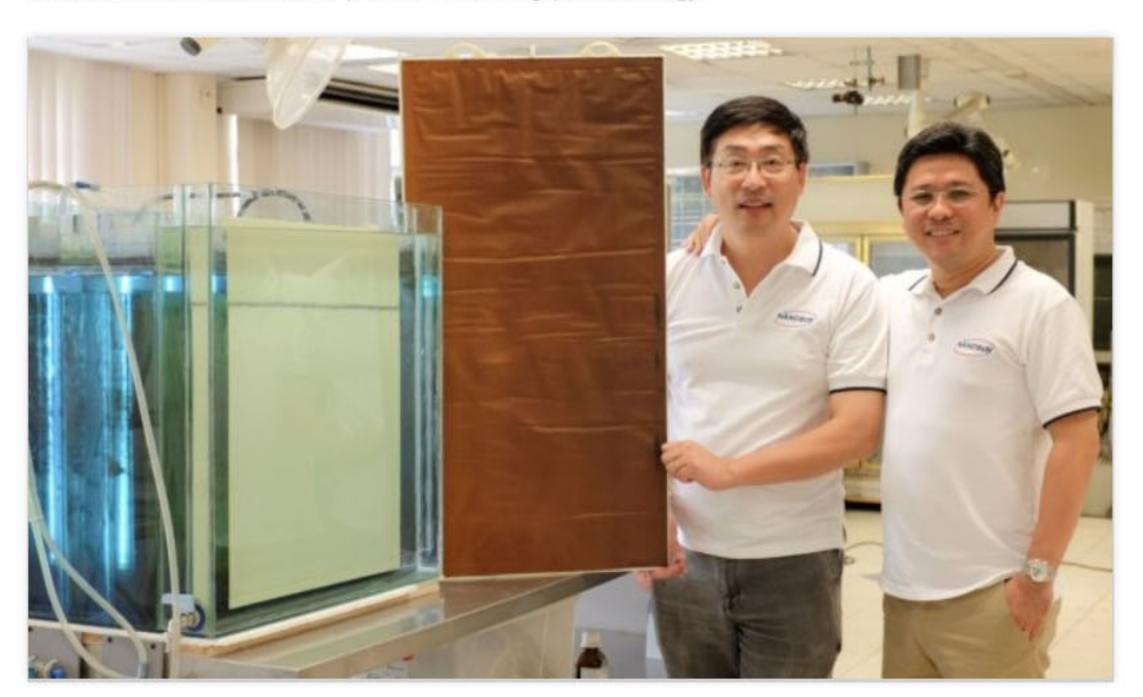
NanoSun Enters US\$3 Million JV With China's CCIEC

The joint venture will see one million liters of wastewater treated using NanoSun's membrane technology by August this year.

Asian Scientist Newsroom | March 26, 2015 | Technology



AsianScientist (Mar. 26, 2015) - NanoSun, a spin-off company from Singapore's Nanyang Technological University (NTU), has entered a S\$4.3 million (~US\$3.14 million) joint venture with China Commerce Group for International Economic Cooperation (CCIEC), a majority state-owned enterprise headquartered in Beijing.

The collaboration will see NanoSun deploy its membrane technology to treat industrial wastewater in the Qingdao National High-Tech Industrial Development Zone, a 20 sq km industrial zone in Shandong. As a start, the partners have taken orders to treat one million liters of wastewater from the textile industry to be delivered by August this year.

Within the next three to four years, the partnership is expected to treat about 100 million liters of wastewater. There are also plans by the partners to market the membrane products internationally in the near future.

NanoSun, a two-year-old start-up, was co-founded by NTU Associate Professor Darren Sun from the School of Civil and Environmental Engineering and Mr. Wong Ann Chai, the managing director of NanoSun.

The partnership will leverage a self-cleaning, 3D-printed membrane water filter technology developed by NanoSun which is able to clean industrial wastewater that conventional membranes find hard to treat. The patented system is not only able to meet discharge standards, but is also suitable for water reclamation. Water reclamation is an essential part of the strategy to encourage industries to reduce water usage by recycling.

"What we will demonstrate at Qingdao will be an affordable but effective technology that can turn polluted and industrial wastewater into a source of clean water, without the generation of secondary waste which other systems have," said Sun, who is Chairman of the Chemical Industries Specialty Group of the International Water Association, which advances sustainable water management.

The made-in-NTU 3D-printed membrane from NanoSun lasts twice as long when compared to conventional membranes. It is also highly resistant to breakage and has anti-bacterial and anti-biofouling properties. Furthermore, it allows for an unprecedented flow rate of at least ten times faster than current water filtration membranes.

The joint venture is expected to further boost NanoSun's efforts to increase its range of water treatment products to meet industrial demand. The start-up will also be working with various NTU schools to develop new membranes with innovative materials and processes.