NTU start-up inks $4.3m deal with Chinese firm

By ARIEL LIM

A TWO-YEAR-OLD start-up from Nanyang Technological University (NTU) has signed a $4.3 million joint venture with a majority state-owned Chinese company to treat industrial wastewater.

NanoSun will use its membrane technology in the Qingdao National High-Tech Industrial Development Zone, a 20 sq km industrial zone in Shandong.

It will own a 49 per cent share of the joint venture, while the China Commerce Group for International Economic Cooperation (CCIEC) will own 51 per cent.

NanoSun was founded in 2013 by NTU Associate Professor Darren Sun from the School of Civil and Environmental Engineering, and NanoSun managing director Wong Ann Chai, who is an adjunct professor with Nanyang Business School.

It was incubated by NTUitive, a subsidiary of NTU that gives start-ups by staff and students access to mentorship and funding.

NanoSun unveiled its new membrane technology last year. It claims that its membranes, which are produced through 3D printing, last twice as long as conventional membranes and allow a flow rate that is at least 10 times faster.

Their patented titanium dioxide nanotechnology also kills bacteria and breaks down material that clogs up conventional membranes, said NanoSun.

The venture has taken orders to treat one million litres of wastewater from the textile industry, to be completed by August.

It says it is expected to treat about 100 million litres within three to four years.

Mr Wong said the plant is expected to begin operations in the second half of this year.

CCIEC vice-general manager Zhang Gangju noted that NanoSun's technology has an advantage over the biological and chemical treatments currently used to remove dye from wastewater produced by the textile industry, as it did not generate secondary wastewater.

He added that the water shortage in northern China has led to high water costs.

The treated water will be reused for industrial purposes.

NanoSun has previously inked deals with Indonesian firm PT Pelaksana Jaya Mulia and an industrial paper mill in Guangzhou.

It says it expects the joint venture to act as a "springboard" to China's billion-dollar industrial-wastewater treatment market.

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