SINGAPORE — Angel A Teng
to treat wastewater in China
NTU spin-off in S$4.3m deal
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From a university lab to a
lucrative business deal: A two-year-old local start-up has clinched a S$4.3 million joint venture with a Chinese state-owned enterprise to treat industrial wastewater in the city of Qingdao, in what could be a springboard to the billion-dollar water treatment industry in Asia’s largest economy.

Under the deal with the China Commerce Group for International Economic Cooperation (CCIEC), the start-up NanoSun will deploy its advanced membrane technology to treat industrial wastewater in the Qingdao National High-Tech Industrial Development Zone, a 20 sq km zone in the northern coastal province of Shandong.

NanoSun was founded in May 2013 by company chairman Darren Sun, 55, an associate professor from the Nanyang Technological University (NTU) School of Civil and Environmental Engineering, and managing director Wong Ann Chai, 47, an associate professor from NTU’s Nanyang Business School.

In some ways, the deal is a serendipitous turn of events for NanoSun. The company previously only conducted laboratory research and had not considered the extent of the value of the technology until meeting with CCIEC officials a year ago. CCIEC quickly saw the vast potential of NanoSun’s self-cleaning, 3D-printed membrane water filter technology in China, where rapid industrialisation is driving demand for extensive wastewater treatment.

However, the road to success has been long and arduous: Mr Sun dedicated 17 years of research into the technology before perfecting it to what it is today. The professor also created other processes during the course of his research, such as reducing the size of sludge waste in certain industries by 95 per cent through chemical engineering, thereby saving on space for disposal.

“What we will demonstrate in 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 … We see great potential for our innovative made-in-NTU technology to succeed in China and beyond,” said Mr Sun, who is also the chairman of the Chemical Industries Specialty Group of the International Water Association.

CCIEC president Chen Yu said: “This is a unique weapon to maintain competitiveness … A new innovative product that I envision can create a new market and a new industry.”

“There is a huge demand from the industries to find unique technology to treat wastewater. China’s textile industry produces two billion metric tonnes of wastewater per year. This collaboration is in relation to our central government’s policies for a green economy,” he added.

Mr Chen said he chose NanoSun because of the ties he has with NTU. Mr Chen, previously the chief representative of the Qingdao city government in Singapore, had resided here for a number of years and has a close relationship with the university.

CCIEC will hold a 51 per cent stake in the joint venture and NanoSun will take up the other 49 per cent. NanoSun will supply the 3D-printed membrane technology as well as future value-added activities in Qingdao, while CCIEC and its board of directors will direct strategic decisions and provide capital fund raising.

The joint venture is expected to treat about 100 million litres of wastewater in the next three to four years, with plans to expand to the rest of China and beyond.

Besides the Qingdao agreement, NanoSun has also signed other deals — with an Indonesian firm and an industrial paper mill firm in Guangzhou to provide wastewater treatment.

Sharp to cut 6,000 jobs in global restructuring: Source

TOKYO — Japanese consumer electronics giant Sharp plans to slash 12 per cent of its workforce in a global restructuring expected to cost more than 200 billion yen (S$2.29 billion), a person familiar with the plan said yesterday.

Job cuts at the 102-year-old Sharp will total around 6,000, half of which would come in Japan through early retirement while the rest would be overseas, said the source, who was briefed on the matter, but declined to be identified as a formal decision has not been made.

On track for its third annual net loss in four years, the consumer electronics and LCD manufacturer has been in talks with banks, seeking to secure its second major bailout since 2012 while working on a fresh plan to overhaul its business.

Sources have said a debt-to-equity swap would be a logical option and that Sharp has also asked Japan Industrial Solutions, a corporate turnaround fund, to invest up to US$250 million (S$347 million) in capital. The source who spoke to Reuters yesterday said a debt-to-equity swap and an investment from the fund would probably help cover the restructuring costs.

Sharp declined to comment on reports of restructuring plans, saying that it has not made any announcements. However, the expectations that Sharp would embark on further restructuring with the blessing of its banks helped its shares end 2.2 per cent higher.

Any decision to slash headcount would come on top of 5,000 jobs cut in Sharp’s previous round of restructuring that began three years ago when it was bailed out by banks with loans and credit lines worth 800 billion yen.

Media reports have also said new steps that Sharp may embark on include lowering pay for workers in Japan, shedding its North American television business, shutting a factory in Mexico and cutting the size of its North American sales division.

However, Sharp, which supplies screens to Apple and other smartphone makers, so far seems unwilling to bite the bullet on problems in its LCD panel business, said UBS analyst Ryo Katsura who rated a “sell” rating on its shares.

“Sharp’s LCD panel factories are currently operating at close to full capacity, but with demand limited ... we believe inventories are building up, which is a problem the firm seems to be putting off,” he said. REUTERS