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## India's science start-ups

BY RAJESH PARISHWAD | 11 NOVEMBER 2017

Backed by government programmes, Indian entrepreneurs are overcoming cultural and infrastructure barriers to commercialise their research

Thalappil Pradeep from the Indian Institute of Technology in Madras is on his second start-up: InnoDI Water Technologies. Based on a desalination technology, the company is addressing drinking water purity problems in India, especially along the coastal belt. Its product uses a simple and inexpensive cellulose-derived and stacked carbon fibre network to treat brackish water of up to 2500ppm TDS (total dissolved solids) and make it potable.



Source: AMRIT

Thalappil Pradeep's Amrit water purification technology has been installed at 900 sites across India - such as this school

Over the next six months, the company will be installing units across India to deliver drinking water at a cost of 6–12 paise (0.07–0.1 pence) per litre, depending on the volume. Pradeep's first company – InnoNano Research – also focused on water purification, using nanocomposite materials that filter out arsenic from water. Over 900 of these water filter units, called Amrit (meaning nectar in Sanskrit), have been installed across the country.

In what is considered a first in India, the company received funding of £13.5 million from the US-based energy and water investment firm NanoHoldings. The company aspires to be an exporter of water technologies and plans to set up a manufacturing facility, a research laboratory, and technology delivery offices across North America, Asia and Africa. Pradeep represents a growing trend for Indian academics to become entrepreneurs, breaking away from traditional academic priorities.