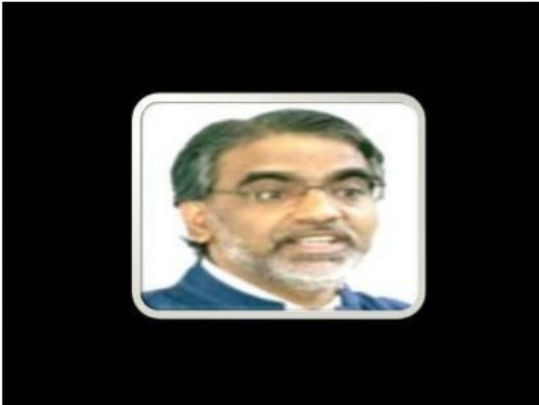


## 'Unsustainable use in farming depleting groundwater'

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AHMEDABAD: Professor of Indian Institute of Technology, Madras (IIT-Madras), T Pradeep, known for inventing water purifiers that provide drinking water for Rs130 a year for a family, delivered a talk at Indian Institute of Technology-Gandhinagar (IITGn) on Tuesday. He said that use of groundwater in an unsustainable manner for farming is leading to its depletion.

Pradeep made his observations in his talk, "Clean Water Using Advanced Materials: Science, Incubation and Industry" delivered for an annual public lecture series, "Roddam Narasimha Distinguished Lecture", at IIT-Gn. Set up in 2012, the lecture series brings various professionals to the institute to present their works in areas of national importance.

During the talk, Pradeep shared glimpses of global issues related to accessibility of clean and affordable drinking water. He said that though being scarce, potable water is being used in mindless ways.

"It is ridiculous that the groundwater is pumped up extensively and used for farming in an unsustainable fashion," said Pradeep, adding, "If efficient methods of water purification are developed, then the issue of groundwater depletion will be addressed effectively," he said.

The chemistry professor and his team of students have developed affordable nano-composites which can filter microbes and toxic components such as arsenic, lead and other contaminants to provide clean and safe drinking water. The nano-composites

which look like and behave like sand, filters the water as it passes through, without requiring electricity. Pradeep, who has recently co-founded a company for research and manufacturing in clean water technology said, "We have implemented purification systems for several arsenic affected parts of India. In the next 12 months, we are expected to provide arsenic-free water to 10,00,000 people."

Pradeep has authored over 380 scientific papers and more than 75 patents and patent applications. His arsenic removal technology has reached about 600,000 people so far.