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Professor uses nanotechnology to build affordable water filter

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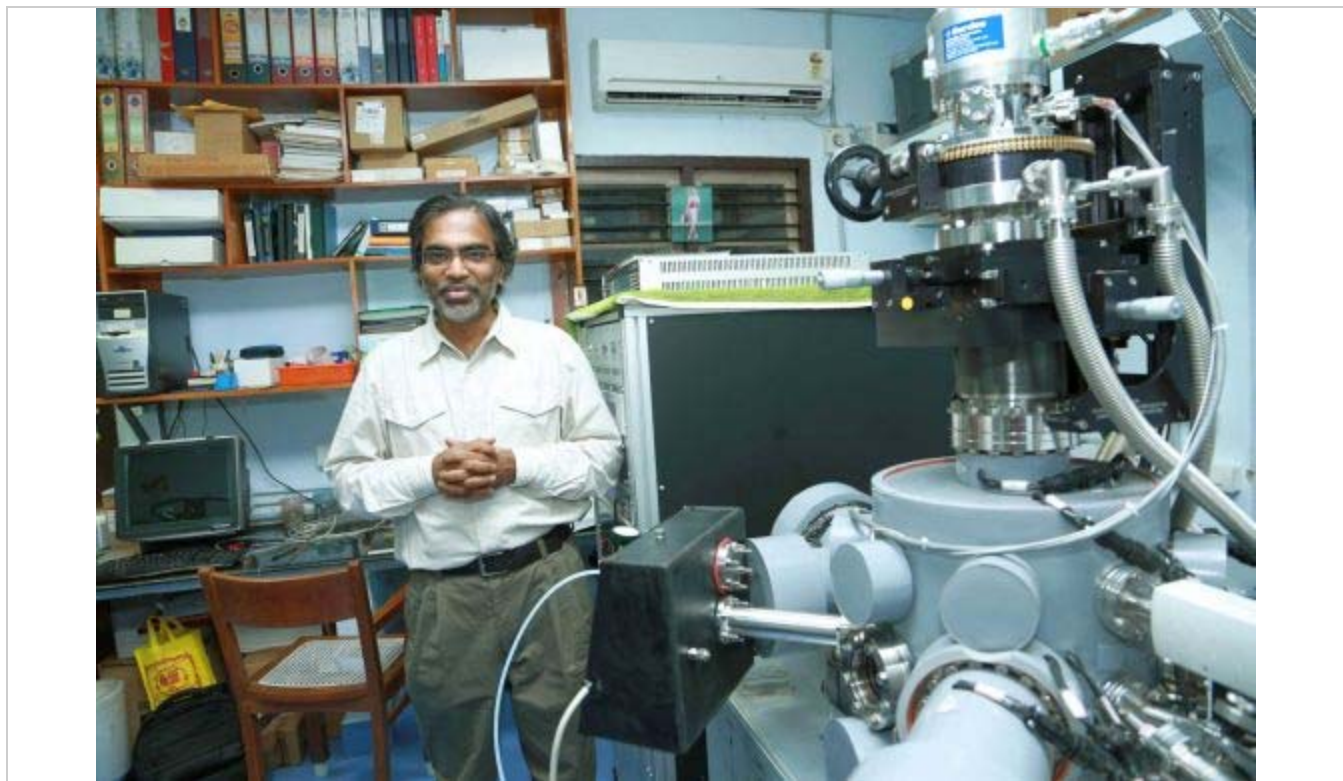
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Shobha Warriar

Prof T Pradeep talks about the nano material he and his associates have fabricated and how it can be used in an affordable water filter in an interview with *Rediff.com's* Shobha Warriar.

Professor T Pradeep is a professor of Chemistry at IIT, Madras, with research interests in molecular and nanoscale materials. One of the notable inventions of the professor with about 50 patents is the material he and his students invented at the IIT, Madras lab named, *Biopolymer-reinforced synthetic granular nanocomposites*. They created a material at room temperature without contamination. Though the material can be used for many purposes, he has tested it for use in purification of water.

Prof Pradeep received his PhD from the Indian Institute of Science and had post-doctoral training at the Lawrence Berkeley Laboratory, University of California, Berkeley and Purdue University, West Lafayette.

Zara



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He is a recipient of several awards including the Shanti Swaroop Bhatnagar Prize, BM Birla Science Prize, National Award for Nanoscience and Nanotechnology and the India Nanotech Innovation Award.

He is an author of many books on nanotechnology.

Did you start working on developing a water filter because of the water pollution in India?

If you can provide clean water, you have provided solution for almost everything: education, development, nation building, etc. If a child is kept away from school because of diarrhoea, a part of his life is affected.

I was interested in the problem in 2003 largely because there was this huge issue of pesticide contamination in Kasargode in Kerala. We wanted to use the material that we developed there. We found that nano materials can break pesticides such as endosulfan. That became our first effort and a patent application in 2004.

Did you try to take it to the market?

Yes, we worked with Eureka Forbes to take it to the market as a product. In 2007, they introduced this product in the market. That became the first nano-chemistry based water product ever in the world.

When water flows on the nano particles, water containing the pesticide interacts with the nano particles and the pesticides breaks down, and finally it becomes clean water.

When we introduced this, many people said nano technology should not be used in water, etc. But I was of the view that the unusual chemistry that happens on nano surfaces would be the way to decontaminate water.

People in India have been using gold and silver for purification for ages.

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Image: Professor T Pradeep

Photographs: Sreeram Selvaraj

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Affordable pure water - !!

by [bhatta](#) ([View MyPage](#)) on Jun 10, 2013 12:02 PM

Congrats to Dr Pradeep.....Let his tribe flourish.. thru all these beuracratc hurdles..

Can anybody publish his contact details please..!!!...so that ordinary public can get in touch with him directly for a better living.....!!!

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water purifier nano

by [sedric fernandez](#) ([View MyPage](#)) on Jun 08, 2013 10:10 AM

Congratulations to Prof. Pradeep and his young team, this is what India needs the most, the most basic and most essential of all stuff...water, pure water, 'water- the elixir of life'- that was one of my chapter headings in school, lets hope, people like Prof. Pradeep get all the support they need from Govt, industry and the scientific community.

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Well done professor

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well done profess pradip.Hats off to you for your work. Keep it up to serve the nation. I know you may come across many hurdles from the politicians,if you are not successful in India because of this, think of foreign countries;. Many scientists have languished in this land because of our politicians corrupt practices. Carry on your hard work. Jai Hind

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Fast ModusOperandi:
WhoAre TheTargets: NRIs and OutOfTown Owners

How ItWorks:
TheMafia keeps an eye on apartments, flats,houses, Locked for few months.

