

Varsity licences wastewater treatment tech to Mumbai firm

It was developed in-house by a research group at its Centre for Pollution Control and Environmental Engineering

SPECIAL CORRESPONDENT PUDUCHERRY

Pondicherry University has successfully commercialised the wastewater treatment technology that was developed in-house by a research group at its Centre for Pollution Control and Environmental Engineering, School of Engineering and Technology.

Gurmeet Singh, Vice Chancellor of Pondicherry University said that the inexpensive and eco-friendly wastewater treatment technology developed by the research group, comprising S.A. Abbasi, S. Gajalakshmi and Tasneem Abbasi, had been licensed to a Mumbai

firm. Vision Earthcare (P) Limited, a Mumbai-based company, has been granted licence for non-exclusive rights on the use of the University's patented technology. According to the inven-



Unique design: Pondicherry University has licensed its patented wastewater treatment technology to a Mumbai-based company. • SPECIAL ARRANGEMENT

tors, the unique feature of Pondicherry University-licensed technology is that it is over six times less expensive than the next cheapest conventional technology while being as effective and efficient as the best.

It is also 'self-propagating', requiring very low energy inputs, material inputs and maintenance effort.

B.M. Jaffar Ali, coordinator, Intellectual Property Rights Cell, Pondicherry University said in 2018, a patent



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This technology is promoted under the trade name 'SHEFEROL' (acronym for 'sheet-flow root level' reactor), comprising channels in which short-statured terrestrial, amphibious, or aquatic weeds are packed to capaci-

ty. The unique design and operation of SHEFEROL enables it to achieve removal of numerous pollutants in a single step, or 'pot', in contrast to conventional technologies which need several different units in series.

Low ecological footprint
This entails very significant cost advantage and reduction of ecological footprint. The developed technology is particularly suited for the treatment of sewage.

"As of now over 75% of it is discharged untreated, playing havoc with our rivers, lakes and ponds. It is also believed to be the biggest source of most water-borne diseases, leading to avoidable expenditure of billions of rupees per year in health-care and lost man-days," the University said.

The research group is actively involved in the field of mitigating pollution and ren-

dering environmental remediation and have published over 17 research articles in indexed international journals on the various scientific and technological aspects of the wastewater treatment technology.

It is hoped that commercialisation of SHEFEROL will lead to the emergence of many more such technologies from Pondicherry University in the near future.

Pondicherry University has also patented related downstream technologies developed by this research group, with which the sludge and the spent plants coming out of SHEFEROL reactors and similar sources, can be converted into organic fertilizer.

However, this is the first patented technology coming from the research laboratory of the Pondicherry University that is getting commercialised.