

## Newspaper Clips March 21, 2017

### **Fresh hope of bringing Yamuna river to life**

<http://timesofindia.indiatimes.com/city/delhi/fresh-hope-of-bringing-yamuna-to-life/articleshow/57740789.cms>



NEW DELHI: The Uttarakhand high court's order on Monday declaring the Ganga and the Yamuna as legal or living persons has given hope to scientists and activists who had almost given up on government projects to revive the "dead" Yamuna. Although how it will be interpreted into policy remains to be seen, they hope that the order will be treated as more than mere tokenism.

TOI has reported repeatedly that the dissolved oxygen (DO) levels in the Yamuna, particularly at Nizamuddin and Okhla, are nearly zero. DO is the level of oxygen in water, a must to sustain life.

As a large stretch of the Yamuna is technically dead due to release of untreated sewage into it, many activists wonder if the order would ensure that every drain that enters the river carries treated water or if a minimum "ecological flow" will be maintained to sustain life in the river.

It's a "golden letter day for rivers" and "is a great step forward", said Manoj Mishra of Yamuna Jiye Abhiyan. "It has come through judicial action, now it should translate into a legislative action. All projects, schemes, work affecting the rivers should be reviewed in the light of this order."

Professor A K Gosain of IIT Delhi, who prepared the drainage master plan for Delhi, said, "To ensure that a river is treated like a living person, it should be considered in its entirety. For example, a river would not just mean the river, but also its floodplains, all tributaries, including natural and artificial drains, opening into it.

"No pollution should enter these drains because these are organs of the body. If one is damaged, it can become cancerous for the river."

The authorities should ensure that only treated water is let into the river, he added. C R Babu, professor emeritus at Delhi University, added that no river could live without an ecological flow. "There is not a drop of water downstream of Hathnikund. It's dead. Pollution is secondary but you have to ensure the lean season flow at least through the year in the entire stretch. This can be done by storing the excess water during monsoons."

Mishra also questioned how the four dams at Lakhwar and Vyasi in Uttarakhand and Renuka and Kishau in Himachal Pradesh would be treated, considering that they would interrupt the flow. The only other country which recently gave a living person's rights to a river is New Zealand.

The Uttarakhand high court said on Monday that the rivers, all their tributaries, streams, every natural water flowing of these rivers would have the status of a legal person with all corresponding rights and duties "to preserve and conserve Ganga and Yamuna".

### **IIT Roorkee has a new mission: Save Ganga**

<http://www.hindustantimes.com/education/iit-roorkee-has-a-new-mission-save-ganga/story-xg5E9eRDIAbU6UTY5sVIGO.html>



IIT Roorkee's Cognizance 2017 team will be exploring crowdfunding options to build bio toilets on the ghats of the Ganges and develop drones to monitor water pollutions

IIT Roorkee (IITR)'s annual fest Cognizance 2017 this year features a social campaign - Saving the Ganges. Indiscriminate use of the river is definitely bound to lead to disaster and this will be highlighted at the fest to be held on campus from March 24 to 26. The students are also getting innovative, exploring crowdfunding options to make bio-toilets on busy 'ghats' (points) of the river and designing drones to monitor water pollution

Named Aviral Ganga, the campaign highlights Ganga degradation. The students of Cognizance IIT Roorkee, living in the foothills of the Himalayas, acknowledge that the issue of exploitation of the river is "alarming" and have pledged to work for the rejuvenation of "our revered lifeline," says Dr Sanjay Upadhyay, faculty coordinator, Cognizance 2017.

The initiative is being guided by UNESCO, UNEP, Centre for Environment Education (CEE) and South Asian Youth Environment Network (SAYEN).



Siddhant Aggarwal, co-founder of Veditam Ganga, being honoured by the chief guest Dr Arvind Kumar, chairperson, India Water Foundation, at the curtain raiser of Cognizance 2017.

As part of the project, which was launched on March 6 with an environment conclave, Cognizance has dedicated a team of more than 70 students to conduct various events both on and off ground. The conclave featured a felicitation programme to recognise “unsung heroes” working to clean the Ganges - but those who had not received the recognition they deserved. They were: Vikas Chandra, founder of the Ganga Bachao Andolan 2000; Jaiprakash Dabral, founder of the Himalayan Chipko Foundation; Akash Sinha, founder of Omni Present Robot Tech; Ankit Agarwal, co-founder of Help Us Green; and Siddhant Aggarwal, co-founder of Veditam Ganga.

Money is being raised innovatively by Cognizance IIT Roorkee through crowdfunding in collaboration with Quash Products Pvt Ltd to set up bio-toilets along the busiest ghats of Ganga. An online photography competition - Waters of India - has invited entries on ‘clean and serene’ rivers.

About 50 volunteers from Cognizance and the NSS unit of the institute will start an awareness campaign at Har ki Paudi in Haridwar soon. A drone-making competition will also be organised to make drone models capable of monitoring pollution levels of water-bodies.

Apart from the river campaign, the main theme of Cognizance is Eureka 2.0, a three-day extravaganza with guest lectures, exhibitions, panel discussions, workshops, events, entrepreneurial summits and entertainment nights. The event will be inaugurated by the railway minister Suresh Prabhu. Others expected to attend are HRD Minister Prakash Javadekar; K K Paul, governor of Uttarakhand; Anil Kumar, ounder of Indian School of Business; Jamil Ahmad, deputy director UNEP USA, amongst others.

More than 5,000 students will compete in more than 200 events ranging from robotics to gaming.

Workshops will also be organised by technology giants like IBM, Microsoft and Samsung on topics ranging from augmented reality, digital marketing, stock market investing, Android app development and robotics.

### **IIT-M develops portable system to purify water**

<http://timesofindia.indiatimes.com/city/chennai/iit-m-develops-portable-system-to-purify-water/articleshow/57741493.cms>

CHENNAI: A container with layers of charcoal and sand could be an effective and low-cost alternative to expensive filters to kill harmful bacteria in water and make it potable.

Researchers at Indian Institute of Technology-Madras who developed the portable water treatment system on Monday signed a memorandum of understanding with Tamil Nadu Small and Tiny Industries Association (TANSTIA)-FNF Service Centre to take the technology to entrepreneurs.

The system — designed for households in poor communities that are most prone to water-borne diseases — is easy to use and made with locally available material.

Ligy Philip, a professor with the institute's department of civil engineering, said along with the technology for the water treatment system, IIT-M will transfer to small industries two simple water test kits, one that can test 14 parameters and another to test 24. Users can test pH levels, total hardness, chlorides, dissolved solids, calcium and bacteriological quality of water samples with the kits.

Philip said the researchers tested the technology for three years in Mylai Balaji Nagar slum in Velachery. "We first made something big, but improvised later and made it portable," she said.

The system's simple technology uses one layer each of activated charcoal and sand in a 100-litre container. A user pours water directly into the container, within which the sand attracts visible impurities and the charcoal absorbs other sediments and odour. A 2mg chlorine tablet in the water kills harmful bacteria.

The user can collect 20 litres of treated water in 30 minutes from the system.

"The filter material can be changed depending on water turbidity levels," Philip said, adding that the system purifies most types of polluted water but cannot treat industrially contaminated or heavy metal-tainted water.

TANSTIA-FNF Service Centre will identify entrepreneurs to make the water filters and distribute it to people who need it most. Tanstia-FNF Service Centre chairman C Babu said the plan is to take the technology to 1,500 entrepreneurs in five years.

IIT-M did not patent the technology and is giving it away almost free of cost.