# CSIR in Media





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# Efficient waste management need of hour: Harsh Vardhan



9<sup>th</sup> March 2017



Science and Technology Minister Harsh Vardhan said that India has been a key player in promoting the efficient waste management system in the world.

"Prime Minister Narendra Modi has played a key role at the international platform to develop the sense of waste management and material cycles. Now we need a directional change and positive approach for making a bigger impact," he said.



conference on Material Cycles and Waste Management on Wednesday. The conference focuses on promoting techniques of the waste management and spread the concept of Reduce, Reuse and Recycle (3R) principles. Delegates from Japan, Korea and Germany are participating in the three-day conference, organized by the CSIR-Indian Institute of Petroleum (IIP). Chemical and Fertilizers Minister Anant Kumar pointed out that about 4,500 urban areas in the country generate 55 million ton of waste every year out of which only one million ton is converted into compost which ideally should be 5.5 million tonnes annually. For the first time, he said, the Modi government was giving subsidy for making compost from waste and a 50 kg bag of

### compost would cost only Rs. 75 for farmers.







# NIO finds a new canyon system close to Kovvada coast







# For the first time, ocean floor between Visakhapatnam and Srikakulam has been clearly mapped

Scientists of CSIR-National Institute of Oceanography (NIO) in Visakhapatnam are an ecstatic lot. They have found three new canyons forming a major canyon system in the depths of Bay of Bengal close to Kovvada in Srikakulam district.

The finding has been evading them since the last 50 years, and for the first time they have clearly mapped the

ocean floor between Visakhapatnam and Srikakulam by sending over 32 high density beams to the depths of the sea.



our find interesting is that we could locate and clearly map a new system in the Bay of Bengal off the coast of Visakhapatnam and after nearly five decades," said the acting director of NIO S. Prasanna Kumar.

### LaFond's discoveries

The last canyon systems off the Visakhapatnam coast were discovered in 1963 by American geologist E.C. LaFond of U.S. Navy Electronics Laboratory, who was carrying out marine studies at Andhra University. The data was collected on board

### research ship Anton Bruun.

Prof. LaFond then discovered three canyon systems between Viskhapatnam and a few kilometres north of Bheenumipatnam and they were named as Andhra after Andhra University, Mahadevan after Prof. Mahadeven, who is considered to be the father of Geology in India, and Krishna after the then Vice-Chancellor of AU Prof. V.S. Krishna, said V.S.N. Murty, scientist in-charge of NIO-Visakhapatnam.

"Prof. LaFond had then stated that there were three other canyon systems, but we did

not have any proof. But now we have discovered them and also, prominently mapped them with the help of state-of-the-art facilities on board RV Sindhu Sankalp research vessel," said Chief Scientist, NIO-Mumbai, A.K. Chaubey.

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According to P.S. Rao, Chief Geologist on board RV Sindhu Sankalp, the new canyon system is very huge and probably formed by the river Kandivalasa. The depth of the canyon varies from about 90 metres from the starting point to about 2,500 metres at the deepest point, and it extends to about 50 to 70 km deep into the sea and the width varies from 50 metres to two km.

As per the findings, the depth is more than the Grand Canyon, which is about 1,857 metres, said Dr. Prsanna Kumar.

### Great scope for study

According to him, most of the canyons in the ocean system across the world act as channels for depositing sediments in the shelf region. "The more the deposit, the more are the chances of finding hydro-carbons. But it is too early to say on this aspect, as we have just discovered the canyon and the shelf region is yet to be explored," said Dr. Prasanna Kumar.

"But, the discovery of the canyon is not only a major breakthrough in underwater geological formations, but also gives us immense scope to study and explore new benthic ecosystem," he said.

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flourish at low oxygen level and high current system can lead us to understand human heart diseases better and help us develop new treatment system," said Dr. Prasanna Kumar.

#### **Published in:**

The Hindu

#### Also Published in:

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# **RV Sindhu Sankalp completes 100 expeditions**

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10<sup>th</sup> March 2017

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## It played a key role in conducting seabed geophysical and environmental surveys in KG Basin

as fishing training vessel (FV Chisio From a distance it looks like any other ship of smaller capacity or a big-sized Maru ) by the Japanese Government in fishing trawler. But what makes it 1989, was procured by NIO from Japan distinct from the others is its milk in 2008. white colour, the gadgets and the people inside the vessel. "It underwent extensive refit and modernisation to become one of the state-of-the-art ocean-going research Well, the inference is about Research vessels," said Acting Director of NIO Vessel (RV) Sindhu Sankalp , the flagship research vessel of CSIR-S. Prasanna Kumar. National Institute of Oceanography (NIO).

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The vessel is presently docked in Visakhapatnam after completing a historic 100 oceanographic successful expeditions.

The city of Vizag will remember the vessel, as on its 100 expedition, the scientists on board led by P.S. Rao discovered a new canyon formation off the coast of Vizag and close of Kovvada.

The vessel not only houses the ones from the sea-faring community but senior geologists and scientists from various fields of sciences.

The vessel sailed across Bay of Bengal, Andaman Seas and Arabian Sea and has provided invaluable data and samples to understand the ocean processes and mapping

of sea floor and water column variables, said Dr. Prasanna Kumar.

Equipped with CTD system, multi-beam bathymetric system, echo-sounder and subbottom profiler, RV Sindhu Sankalp played a key role in conducting seabed geophysical and environmental surveys in KG Basin.

According V.S.N. Murty, Scientist in-charge, NIO-Visakhapatnam, it also played a key role in identifying offshore developments and mineral prospecting, including hydrocarbons.

Dr. Kumar said the new canyon that was discovered by the ship may be named after the ship and called as 'Sankalp canyon'. "We have proposed it and it has to be cleared by the government," he said.

Published in:

The HIndu

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# **National Safety Day at CSIR-IIP**

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10<sup>th</sup> March 2017

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Dr Anjan Ray, Director, CSIR-IIP, lights a lamp to inaugurate National Safety Day in Dehradun on Wednesday.

National Safety Day-2017 and the foundation day of the National Safety Council was celebrated at the CSIR-Indian Institute of Petroleum (IIP) here on Wednesday.

clarion call in December 1965 at a conference on industrial safety regarding the need to mitigate accidents at workplaces. The day of the formation of the council was later

Dr Neeraj Atray, Senior Scientist, informed the gathering that the National Safety Council was formed on March 4, 1966. The then President of India, Dr S Radhakrishnan, had given a

designated as National Safety Day and is being celebrated as such since 1972. It was the 46th National Safety Day celebrations today.

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that although petroleum, petroleum products and petro-chemicals are essential for the growth of the nation, any error in its use, experiment or production can cause great loss".

Ray reminded all present about the Bhopal gas tragedy of 1984 and Japan's Fukushima Daiichi nuclear disaster of 2011. He said the IIP is a miniature of the industry and should be careful about the harmfulness of chemicals while dealing with them.

Dr Geeta Khanna, president of the IMA, was introduced by Dr Neeraj Atray. Dr Geeta Khanna gave a technical presentation on safety and health. She said nutrition was the backbone of health. She talked about various aspects of home safety and explained various precautions to be taken on staircases, tiled floors, rugs, bathroom, kitchen and also in rooms.

Dr Khanna talked about chemical hygiene, emergency preparedness and crisis plans, concept of safety for children, workplace safety, violence, occupational diseases and accident prevention. She said behaviour modification was most importance and should

be included in human resource programmes. She also talked about disease prevention, food safety and diet, proper clothing, water safety, public sanitation, road safety and vaccination.

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Administration, CSIR-IIP, proposed a vote of thanks.

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# FILLIP TO TASTY AND READY-TO-EAT FOOD THAT LASTS LONGER

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8<sup>th</sup> March 2017

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### CSIR-CFTRI director Ram Rajasekharan said modernisation has led to loss of nutrition from food

The proverb "Give a man a fish and you feed him for a day. Teach a man to fish, and you feed him for a lifetime" was practically implemented by the Council of Scientific and Industrial ResearchAccording to the institute officials, they released the technologies to prepare food items like amla candy, fruit spreads, ready-to-use idli and dosa batter, composite ragi bread, green

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The institute said a total of 4,539 people have registered for downloading the technologies and over 125 have already started production or are in the process of launching their products.

Experts said that these technologies ensure that nutritional value of the product is kept intact.

### CSIR-CFTRI director Ram Rajasekharan said modernisation has led to loss of

nutrition from food.

Addressing the meet, he said that processed food loses its nutritional values and encouraged the entrepreneurs to adopt methods to make sure this doesn't happen.

He pointed out at the growth of junk food consumption and its negative effects on people. The CSIR-CFTRI has always been known for its innovations in food items, and the institute in involved in research and development in the field of food science

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# papad making press and Rice Mix milk.

According to Rajasekharan, most of the technologies made available for free were being used in Karnataka, Tamil Nadu, Maharashtra, Andhra Pradesh and Kerala. Ready-to-use idli and dosa batter technology was the most sought after by entrepreneurs, he said.

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### Published in:

#### **Bangalore Mirror**

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# Mysuru's CSIR-CFTRI designs Smart Cart to empower street food vendors

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The Council of Scientific and Industrial Research (CSIR)-Central Food Technological Research Institute (CFTRI), Mysuru, has now designed a Smart Cart to empower the street food vendors to produce safe and hygienic foods. It has been designed as a novel and energy-efficient solar-powered Research (AcSIR) students last year, it was observed that the carts used by street vendors were inadequate in infrastructure and ergonomics. This is where our institute intervened by designing and developing a new mobile cart with features which ensure better hygiene, improved food safety, ease of

### modular street vending card.

For the institute, the effort to design the Smart Cart is to help the street vendors have quality mobile infrastructure to deliver hygienic street food. It can be adopted pan-India and can be used for street food vending preparation.

# operations and unique aesthetics," stated Ram Rajasekharan, director, CSIR-CFTRI.

"Giving more strength to the Swatch Bharat Mission, our Smart Cart adds to the solutions to the solutions for advanced hygiene in the street food arena. The cart which is about four feet

"In a survey conducted by the design makes it easier to cook, hold and Association of Scientific & Innovative serve the food," he added.

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The Smart Cart also includes a restaurant-grade kitchen made with stainless steel, an on-board refrigerator, a food warmer and a sink with separate tanks for fresh and waste water system, helping to create a better culinary experience for consumers," he

The cart also comes with a built-in system to hold a gas cylinder and a dustbin. The array and design of the units in the Smart Cart can be realigned as desired by the end-user without changing its core features on food safety, operational and energy efficiency.

"Further, the eco-friendly, self-sufficient Smart Cart has a solar panel on its rooftop and stores energy in its battery. The system is powered with a 1,500-VA inverter

# system to support the energy needed for about six hours," said Rajasekharan.

"The solar panel is sensitive to absorb even low light. This provides a cost-free, pollution-free source of electrical energy for the operations. The cart also has ease of mobility on wheels and an option for towing," he added.

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जमशेदपुर :एनएमएल-सीएसआइआर में सभागार में बुधवार को विश्व महिला दिवस मनाया गया. इस मौके पर स्वास्थ्य जांच शिविर में महिलाओं एवं दंपत्तियों के स्वास्थ्य को जांच की गई. इसमें टाटा स्टील के भी पदाधिकारी शामिल हुए. डा जया मोइत्रा, डा आरके राम एवं डा एके आर्य ने अपनी सेवाएं दीं. प्रदीप, अभिषेक, हेमंत, सुदीप, मनीषा पांडेय आदि फार्मासिस्ट का सराहनीय योगदान रहा. इस मौके पर एनएमएल के निदेशक डा आइ चट्टोराज ने महिलाओं की तुलना चायपत्ती से करते हुए कहा कि इन्हें अपनी ताकत का एहसास ही नहीं है. गरम पानी मिलते ही चाय अपना असर करती है. उनके अनुसार कुछ कहना है तो पुरुष से कहें और कुछ करना है तो महिलाओं से कहें. प्रिंसिपल साइंटिस्ट डा एस नायर ने सौन्दर्य

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Dainik Bhaskar Hindustan Prabhat Khabar

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tist dwelt on CSIR-800 and ering his 20 years experience and proper way, the people can ITANAGAR, Mar 7: CSIR- long programme. Dr Jagat C Borah, Se in- role of CSIR-NEIST, Jorhat on 'Cultivation of Aromatic get the benefits significantly. North East Institute of Science & Technology, Branch Itana- charge, NEIST Br Itanagar and NEIST, Br Itanagar for' Plant in Arunachal Pradesh and Later, hands-on demonstrations were provided to gar organized a training pro- gave a brief on the institute socio-economic develop- its marketing scopes'. He mentioned that there are the beneficiaries. gramme on 'Cultivation of Ar- and assured to provide all ment of North East India, omatic Plant and distillation technical support and help Attending as resource lots of scope and advantages. NEIST, Br ltanagar catended person, Dr Budhen C Baru- in cultivation of the medicinal thanks to Dr D Ramaiah, Directechnology' under the CSIR- to the concerned quarters. 800 programme at the institute He also requested all to ah delivered talks on the top- and aromatic plants in ter CSIR-NEIST Jorhat, Dr P Arunachal Pradesh, Due to Sengupta, Coordinator, CSIRpremises in Naharlagun teday: come forward to take the ad- ic of the programme. About 40 farmers/villag- vantage of technologies de- Another resource person, lack of awareness and proper NEIST (Britanagar) and Dipaners/beneficiaries from differ- veloped by CSIR-NEIST, Tadar Tempo, Chairman, M/s knowledge success rate in this kar Neog, Sr Scientist cum Prinent parts of Arunachal Jorhat and Br Itanagar for Tempo Medicinal and Aromet- area is not very high, he said cipal Investigator among oth-

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