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Due diligence mandatory before filing patents: Government to labs

CSIR

5th April 2017

"The filing of patents do follow a process of evaluation at various stages, which has been followed in all cases of patent filing. Appropriate due diligence for techno-commercial evaluation has now been made mandatory in filing of patents of CSIR," Chowdary said.

The Council for Scientific and Industrial Research (CSIR) has asked its laboratories to file patents with proper techno-commercial evaluation and utmost due diligence owing to high costs, the government said today.

In a written response to a question in the Rajya Sabha, Union Minister of State for Science and Technology Y S Chowdary said due diligence for techno-commercial evaluation has now been made mandatory.

The CSIR, under the Ministry of Science and Technology, is a premiere research body with nearly 38 laboratories under its wing that work on diverse topics.

"In order to align the Intellectual Property strategy of CSIR with the priorities of socio-economic development, including escalating costs of patent filings, this message was sent to exercise utmost due diligence in filing of patents.

"The filing of patents do follow a process of evaluation at various stages, which has been followed in all cases of patent filing. Appropriate due diligence for techno-commercial evaluation has now been made mandatory in filing of patents of CSIR," Chowdary said.

In a similar question asked in the Rajya Sabha in December last year, Chowdary had said CSIR had bagged 13,365 patents in the last three financial years and over 13 per cent of the body's total number of patents were put to commercial use as compared to the global average of 3 to 4 per cent.

It also spent over Rs 50 crore on its maintenance over the last three years.

Published in:

Economic.IndiaTimes

IndiaToday

NRDC Inks MOA with CSIR- CSIO, for "Commercializing IPs & Technology"

CSIR-CSIO

5th April 2017

(NRDC) & CSIR- Central Scientific Instruments Organisation (CSIO), Chandigarh has entered into Memorandum of Agreement (MOA) for marketing the inventions/innovations, patents, formulations, know-how/processes developed by these institutes and also collection of Premia and Royalties arising from these activities.

Dr. H. Purushotham, Chairman & Managing Director, on behalf of National Research Development Corporation (NRDC) and Prof. R.K.Sinha, Director, CSIR-CSIO, Chandigarh has signed the MOA, senior officials from both the organizations were also present.

NRDC has been serving the nation for more than six decades in development, promotion and commercialisation of technologies emanating from R&D organization, PSUs and academia. It has so far licensed technologies to more than 4800 entrepreneurs/ companies in the country in almost all sectors of industry and provided technical and financial assistance for filing about 1700 patents in India and abroad. NRDC connecting the technologies to start-ups.

Central Scientific Instruments Organisation (CSIO) is a multi-disciplinary research & development organisation developing in the areas of Agrionics; Medical Instrumentation and Prosthetic Devices; Optics and Cockpit based Instrumentation; Fiber/Laser Optics based Sensors & Instrumentation; Analytical Instrumentation; Advanced Materials based Transducers etc.

CSIR-CSIO and 'NRDC' recognise the respective strengths of the two organisations and accordingly agree to cooperate for successful transfer of their technologies to industry for commercial exploitation and socio economic benefits.

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PSUConnect

CRRI calculates fuel-wastage cost

CSIR-CRRI

6th April 2017

Idling vehicles at traffic intersections wasting fuel is nothing new, but for the first time a study by Central Road Research Institute (CRRI), under Council of Scientific and Industrial Research (CSIR), has quantified the fuel wastage in monetary terms. The pilot study also shows reduction in CO2 and NOx emissions after vehicles were switched off.

"The aim was to quantify the total amount of fuel lost by idling vehicles during the red phase at signalised intersections," said Dr Purnima Parida of CSIR-CRRI.

The study was conducted at the behest of Petroleum Conservation Research Association (PCRA) at Bhikaji Cama Place intersection in phases — before an awareness campaign against idling vehicles, during the campaign and after. "The study was commissioned to explore means of conserving the fast depleting reserves," said Dr Mukti Advani. This intersection has at-grade traffic of 1.03 lakh.

The "before" phase was assessed without any intervention after which a weeklong rigorous awareness campaign was undertaken. "A switching off behaviour assessment survey was conducted during the campaign. An "after" assessment was done seven days after the campaign got over," said Parida.

The fuel savings in monetary terms shot up when engines were switched off. "The estimated fuel savings was Rs 17,368 when 62.33% of vehicles switched off at the intersection. It dropped to Rs 13,518 when 52.88% switched off," said Parida. Before the study, only 19.96% of vehicles would switch off at the intersection, said Advani, leading to fuel savings of only Rs 5,499.

There was also a reduction in the CO2 load at the intersection in the "during" and "after" stages. "Before the awareness campaign, the CO2 load reduction was 280.23 kg per day. This shot up to 893.38 kg per day during the campaign and came down to 689.03 kg per day afterwards," said Parida. Similarly, the levels NOx and CO emissions also dropped during the primary phase of the campaign.

Advani said the findings would go a long way not only in helping change traffic behaviour, but also in devising ways to mitigate the wastage of fuel at intersections. The data collected during the study including classified traffic volume counts, delay studies, switching-off behaviour observations, fuel consumption and emission levels.

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TOI

Chain of islands lies buried in Bay of Bengal, says study

CSIR-NIO

6th April 2017

The Bay of Bengal was once dotted with islands similar to the Maldives in the Indian Ocean or Hawaii islands in the Pacific Ocean. The chain of islands that existed above sea level for 12 million years — from 80 million years to 68 million years — today lie buried under the world's largest bay, a study led by the CSIR-National Institute of Oceanography (NIO) has revealed.

"A series of natural processes that connected each other in the geological past caused the island chain to go first below sea level, then into the water, and finally below the sea floor," KS Krishna, CSIR-NIO, Goa, told HT. "These islands are submerged under thick sediments discharged from the Ganges and Brahmaputra river systems."

meant passing this chain before reaching the Andaman Islands.

What's more important, said researchers was these islands would have protected the Indian mainland from tsunamis on the east coast of India.

"Intensive tsunami waves, as witnessed in 2004, are being occasionally generated as a result of high-magnitude earthquakes near the region of Andaman and Sumatra islands, which travel towards the east coast of India," said Krishna. "These island chains would have served as a geo-wall to the main land by pushing the waves back. The entire east coast would have been a safe zone from these hazardous waves, and that's a big benefit indeed we have lost."

Another advantage that the country has lost is economic in nature. "The area surrounding islands would have been India's EEZ (exclusive economic zone), and could have been potential for natural resources. But we lost the opportunities to natural processes," said Krishna.

It was in 1982 that experiments carried out by researchers from various countries identified this specific structure as a massive structure completely buried under three to four kilometre of sediments. This led to the question on evolution of the structure with many hypotheses, which could not convince the scientific community.

Over the past five years, NIO, a premier institution of Council of Scientific and Industrial Research, intensified its investigations on cross-sections of this structure by studying high quality geo-physical datasets generated by the international and national petroleum and oil industries.

The researchers said these present day buried structures ran as a chain of mountains above sea level in the Bay of Bengal 80 million years ago, with elevations ranging approximately from 500 to 1000 metres — like today's Maldives and Hawaii islands. These mountains were rested on a solid surface that was formed nearly 120 million years ago beneath the Bay of Bengal.

Owing to their weight and thermal cooloing, these massive mountains on a solid surface and went below the sea level 68 million years ago said K. Srinivas, CSIR-NIO, regional centre, Visakhapatnam.

Alongside, major river systems in the Indian sub-continent such as the Cauvery, Krishna-Godavari and Mahanadi carried sediments from the continent that got deposited — though at a very low rate — into the Bay of Bengal. This process continued till 23 million years, said researchers.

“We have a situation where on one hand the mountains were subsiding; on the other hand, the sediments were getting deposited on the sides of these structures. So, at 23 million years, the deposited sediments covered the mountains,” said M. Ismaiel, CSIR-NIO, Goa.

This was also the time when the Indian sub-continent collided with the Asian continent at 40 million years, and pushing towards the north that led to the formation of the mighty Himalayas. Having reached their maximum elevation during this period, the Himalayan mountains started interacting with the atmosphere which eventually led to the onset of the monsoon in Asia. With monsoons, eroded sediments from the Himalayan mountains were carried by the Ganga and the Brahmaputra through Bangladesh to the Bay of Bengal.

“The deposited material was four times more than the sediments deposited by the peninsular rivers. As a result, three to four km of sediments sat on top of the mountains, causing them to subside further. This is how the mountains went below the sea floor, and today lies buried,” said Srinivas.

The island chain stretched from Odisha coast to middle of Bay of Bengal, Sri Lanka and close to the equatorial region. “We are confident that at least in the Bay of Bengal, these mountains may have survived as islands,” said Krishna.

In a recent paper published in January, the team investigated the internal structure of the mountain to find its origin. “We found some evidence of volcanic activity, making it one of the most possible explanations of the evolution of this mountain,” said Krishna.

The study was released in Current Science, published by the Current Science Association in collaboration with the Indian Academy of Sciences.

Published in:

Hindustan Times

एक घंटे मे 450 लीटर पानी साफ करेगा सोलर 'ओ नीर'

CSIR-IITR

4th April 2017

आइआइटीआर ने बड़े संस्थानो और ग्रुप हाउसिंग के लिए बनाई तकनीक, कम खर्च पर लोगों को मिल सकेगा ठंडा पानी

अमर उजाला ब्यूरो

लखनऊ।

कम आय वर्ग के लोगों के लिए पानी साफ करने की तकनीक बनाने के बाद अब इंडियन इंस्टीट्यूट ऑफ टॉक्सिकोलॉजी रिसर्च (आईआईटीआर) ने बड़ी संस्थाओं, कंपनियों और ग्रुप हाउसिंग के लिए नया मॉडल तैयार किया है। ओ नीर के नाम से बनी इस नई तकनीक से एक घंटे में 450 लीटर पानी साफ किया जा सकता है। आईआईटीआर के वैज्ञानिकों ने सौर ऊर्जा से चलने वाली इस मशीन में मेंटेनेंस फ्री तकनीक होने का दावा किया है।

आईआईटीआर के निदेशक डॉ. आलोक धवन का कहना है कि कम कीमत में लोगों तक साफ पानी पहुंचाने के लिए यह तकनीक वैज्ञानिकों ने तैयार की है। इसे

ऑक्सीडेशन प्रोसेस पर काम करेगी मशीन

ओ नीर फिल्टर्स की मदद से पानी साफ नही करता। यह ऑक्सीडेशन प्रोसेस पर काम करता है। इससे प्रोटोजोआ, बैक्टीरिया, फंगस, वायरस, कम मात्रा में आर्सेनिक, फ्लोराइड जैसी अशुद्धियां भी दूर हो सकती है। आर्सेनिक की मात्रा ज्यादा होने पर एक डिवाइस अलग से लगानी होगी। फिल्टर नही होने की वजह से मशीन से खर्च एक पैसा प्रति लीटर तक हो जाता है।

एक साथ ज्यादा लोगों की जरूरत को पूरा

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Amar Ujala, Page 8

Citizens to get lesson in solid waste management

CSIR-NEERI

4th April 2017

National Environmental Engineering Research Institute (Neeri), Institute of Science, and Institute of Forensic Science (IFS), Nagpur, Waste-to-Energy Research and Technology Council (WTERT), in association with Swacch Nagpur a non-governmental organization and Mohota Alumni Association are jointly organizing a workshop to sensitize the community about the solid waste management

The workshop will begin at 9 am on April 6 at Chitnavis Centre, Civil Lines. The interactive workshop will raise the concerns and problems faced by the community while managing waste. The issues will be later discussed in an international conference on 'Integrated Solid Waste Management Practices in Developing Countries' on April 11 and 12 at Neeri.

"Through this workshop we want to sensitize the society and raise their problems while managing the waste and try to spread awareness in the city," said Sujata Deo, convener of the programme, in a press conference on Monday.

The workshop will be open for all and citizens can raise their concerns with the experts. Experts from every facets of waste treatment will be addressing the workshop. Ramnath Sonawane, additional commissioner of Nagpur Municipal Corporation, Rakesh Kumar, director CSIR-NEERI, Sudhir Paliwal, director MAHAGAMS, Nagpur and many other experts will deliver lectures. "Many such workshops take place but the impact is never seen, so in this pre-conference workshop we want citizens to participate to increase its impact," Deo added.

Topics like waste management, Ewaste, biomedical waste, sanitary napkins, nirmalya composting will be discussed. Corporators, experts and citizens will also take part. The main focus will be on avoiding incidents like Bhandewadi dumping yard fire and to encourage people to collect the dry and wet garbage separately. More than 15 NGO's from the city working in waste management will also take part. The workshop will be inaugurated by Mayor Nanda Jichkar. Anup Kumar, divisional commissioner, AD Sawant, president of WTERT, Jairam Khobragade, director of IFS, will also be present.

Published in:

TOI