CSIR in Media



News Bulletin

1st to 5th February 2020









Noise levels beyond limit across MMR's silence, residential zones





Not just Mumbai, but rapidly developing cities and towns in Mumbai Metropolitan Region (MMR) are experiencing rising noise pollution levels with silence and residential zones breaching permissible limits, reveals a new study. Researchers at CSIR-National Environmental Engineering Research Institute (NEERI), Mumbai zonal centre, monitored noise levels in 153 locations based on land use and land cover in nine municipal corporations of Mumbai, Thane, Navi Mumbai, Panvel, Bhiwandi-Nizampur, Kalyan-Dombivli, Mira-Bhayandar, Ulhasnagar and Vasai-Virar under MMR, which is spread over 4354.50sqkms. Analysis of decibel levels revealed that emerging cities and towns of Ulhasnagar, Bhiwandi-Nizampur, Kalyan-Dombivli and Mira-Bhayandar were noisier than Mumbai, Vasai-Virar, Panvel, Thane and Navi Mumbai. All locations breached World Health Organization's (WHO) guidelines.

The study, 'Noise pollution in Mumbai Metropolitan Region (MMR): An emerging environmental threat', undertaken following directions of the Bombay high court, was published in Environmental Monitoring and Assessment, an international peer-reviewed journal, on January 30. "Urbanisation, unplanned developmental and commercial activities, increasing traffic congestion that escalates honking, construction and demolition and

industrialisation are contributing factors for the rising levels of noise pollution across MMR during working and non-working days," said the report, co-authored by Ritesh Vijay, scientist in charge, CSIR-NEERI (Mumbai). Researchers said assessing decibel levels in 153 locations comprising residential (48), commercial (36), industrial (35) and silence zones (34) and recommending control strategies are vital to preventing 20.1 million (Census 2011) MMR residents from being exposed to health hazards of noise pollution. Studies have shown that continuous exposure to high levels of noise can lead to irritation, lack of





concentration, sleep disturbance, insomnia, hypertension, restlessness and tinnitus. Exposure to high noise levels (80-85 decibels) over a long duration can lead to temporary and permanent loss of hearing, as per WHO. Among the nine locations, Ulhasnagar with 89.2% built-up area was found to be the noisiest while Navi Mumbai, considered a well-planned township with 44.5% built-up area, was the least noisy. Noise levels in Mumbai were lower than Bhiwandi-Nizampur, Kalyan-Dombivli, Mira-Bhayandar, Ulhasnagar and Vasai-Virar.

"Over the last 10 years, Ulhasnagar has become an important region for business with large number of electronics, confectionaries, clothes and furniture market. With so much development that has a bearing on other aspects such as traffic congestion, emerging commercial centres like Ulhasnagar and Bhiwandi-Nizampur have become noisy," said the

With large-scale infrastructure projects underway in MMR such as Metro, monorail or road widening projects, anti-noise activist Sumaira Abdulali said reduction of noise should be part of the planning process by government agencies. "Agencies want to keep costs at minimum. What they do not factor is cost to public health," said Abdulali, convener of nonprofit Awaaz Foundation who was not involved in the study. SC Kollur, chief scientist, Maharashtra Pollution Control Board, was unavailable for comment. VM Mothgare, joint director, refused to comment as he had not seen the study.

Published in: Hindustan Times





CFTRI Hosts Workshop On 'Library Services In Digital Era'







people have accepted technology as a way to make lives safer and more comfortable. Even in the field of Library Sciences, we need to be constantly learning and adapting to the changes in technology, especially when concepts like e-books, digital cataloguing, etc. are in trend." Resource person Dr. P. Devaki, International Conference on Agriculture, Animal Sciences & Food Technology (ICAFT)

Food Mysuru/Mysore: CSIR-Central Technological Research Institute (CFTRI), Mysuru, organised a one-day workshop on 'Innovation and Sustainable Library services in the Digital Era' at CFTRI campus in city this morning. Bangalore North University Vice-Chancellor Prof. T.D. Kemparaju inaugurated the workshop. CSIR-CFTRI Director Dr. K.S.M.S. Raghavarao delivered the presidential address. Speaking after inaugurating the event, Prof. Kemparaju said, "We are facing major challenges due to fast growing information and technologies. Because of information explosion, things are becoming more and more complex and

Retd. Head Dr. I.R.N. Goudar, Association of Food Scientists & Technologists India (AFSTI) President Dr. V. Baskaran and others were present.

> Published in: Star of Mysore



ಸೇವೆಗಳು ಕುರಿತ ವಿಚಾರ ಸಂಕಿರಣ



ವಣೆ ಅನಿವಾರ್ಯವಾಗಿದ್ದು, ಜನರೂ ಸಹ ಗುಣಮಟ್ಟದತ್ತ ಜಾಗೃತರಾಗಿದ್ದಾರೆ. ತಂತ್ರಜ್ಞಾನದ ಅಭಿವೃದ್ಧಿಯಿಂದ ಕಲಿಕೆ, ಗಂಥಾಲಯ, ಬೋಧನೆ, ಶಿಕ್ಷಣದ ಮೇಲೆ ಅತೀವ ಪರಿಣಾಮ ಬೀರಿದೆ ಎಂದ ಅವರು, ಡಿಜಿಟಲ್ ತಂತ್ರಜ್ಞಾನಕ್ಕೆ ತಕ್ಕಂತೆ ಕುಳಿತಲ್ಲೇ ಮಾಹಿತಿ ಪಡೆದು ತಿಳಿದುಕೊಳ್ಳಲು ಇಂದಿನ ಯುವ ಜನತೆ ಬಯಸುವುದ

ರಿಂದ ಸುಸ್ಥಿರ ಗಂಥಾಲಯ ಸೇವೆಗಳನ್ನು ಸದೃಢಗೊಳಿಸುವುದು ಅಗತ್ಯ ಎಂದು ಅಭಿಪ್ರಾಯಪಟ್ಟರು. ಸಿಎಫ್ಟಿಆರ್ಐ ನಿರ್ದೇಶಕ ಡಾ. ಕೆ.ಎಸ್ಎಂಎಸ್ ರಾಘವ ರಾವ್ ಅಧ್ಯಕ್ತತೆ ವಹಿಸಿದ್ದ ವಿಚಾರ ಸಂಕಿ ರಣದಲ್ಲಿ ಅಸೋಸಿಯೇಷನ್ ಆಫ್ ಫುಡ್ ಸೈಂಟಿಸ್ಟ್ ಅಂಡ್ ಟೆಕ್ನಾಲಜಿಸ್ಟ್, ಇಂಡಿಯಾ (AFSTI) ಅಧ್ಯಕ್ಷ ಡಾ. ವಿ. ಭಾಸ್ತರನ್, ಬೆಂಗಳೂರಿನ ಐಸಿಎಎಸ್ಟಿ ನಿವೃತ್ತ ಮುಖ್ಯಸ್ಥ

ವ್ಸುಸೂರು, ಫೆ. 4(ಆರ್ಕೆ)- ಅವರು ದೀಪ ಬೆಳಗಿಸುವ ಮೂಲಕ ಮೈಸೂರಿನ ಕೇಂದ್ರೀಯ ಆಹಾರ ಮತ್ತು ವಿಚಾರ ಸಂಕಿರಣವನ್ನು ಉದ್ಘಾಟಿಸಿದರು. ಡಾ. ಐಆರ್ಎನ್ ಗೌಡರ್, ಡಿಆರ್ಟಿಸಿಯ ತಂತಜ್ಜಾನ ಸಂಶೋಧನಾ ಸಂಸ್ಥೆ (CFTRI) ನಂತರ ವಿಜ್ಞಾನಿಗಳು, ವಿವಿಧ ವಿಶ್ವವಿದ್ಯಾ ಡಾ.ಪಿ.ದೇವಿಕಾ ಮಾದಳ್ಳಿ ಅವರು ಭಾಗ ಯಲ್ಲಿ 'ಡಿಜಿಟಲ್ ಯುಗದಲ್ಲಿ ಆವಿಷ್ರಾರ ನಿಲಯಗಳ ಪ್ರಾಧ್ಯಾಪಕರುಗಳನ್ನುದ್ದೇಶಿಸಿ ವಹಿಸಿದ್ದರು. 'Innovation and ಗಳು ಮತ್ತು ಸುಸ್ಥಿರ ಗ್ರಂಥಾಲಯ ಸೇವೆ ಮಾತನಾಡಿದ ಅವರು, ವೇಗವಾಗಿ Sustainable Library Services ಗಳು' ವಿಷಯ ಕುರಿತ ರಾಷ್ಠೀಯ ವಿಚಾರ ಬೆಳೆದಿರುವ ತಂತ್ರಜ್ಞಾನದಿಂದ ಸಮಾಜ in Digital Era' ಕುರಿತಂತೆ ಸಂಜೆವರೆಗೂ ಸಂಕಿರಣವನ್ನು ಇಂದು ಆಯೋಜಿಸಲಾಗಿತ್ತು. ಹಾಗೂ ಜನರ ಜೀವನದಲ್ಲೂ ಬಹಳಷ್ಟು ನಡೆದ ವಿವಿಧ ಗೋಷ್ಠಿಗಳಲ್ಲಿ ಸಂಪನ್ಮೂಲ ಬೆಂಗಳೂರು ಉತರ ವಿಶ್ವವಿದ್ಯಾನಿಲ ಬದಲಾವಣೆಯಾಗಿದೆ ಎಂದರು. ವ್ಯಕ್ತಿಗಳಾಗಿ ಭಾಗವಹಿಸಿದ್ದ ತಜ್ಞರು/ ಯದ ಕುಲಪತಿ ಮೊ, ಟಿ.ಡಿ. ಕೆಂಪರಾಜು ಇಂದಿನ ಡಿಜಿಟಲ್ ಯುಗಕ್ಕೆ ಬದಲಾ ವಿಷಯ ಮಂಡಿಸಿದರು.

Published in: Mysore Mitra





Students urged to become curious in quest for knowledge





"Curiosity is the foundation of any kind of invention or discovery. It helps in one's quest for knowledge," said Dr CD Mayee, a former vice-chancellor of Marathwada Agricultural University, while addressing students at the inaugural function of JIGYASA – Student-Scientist Connect Residential Programme on Monday. At the outset, Prakash Kumbhare, senior principal scientist (CSIR Neeri), gave a brief introduction of Mayee. Regarding'Jigyasa', Kumbhare said, "NEERI has organized this five-day programme for school-going children to make them aware about researches and scientists. As students only retain what they learn in textbooks, this programme will

connect them directly to scientists and various research programmes and that's why we have called it called it the Student–Scientist Connect programme."

Some activities are themes and experiments on water quality research, water audit, lab visits, on-site experiments and interactions with Neeri scientists. In his inaugural address, Mayee informed students about the importance of innovation, invention and research. He said the 'Green Revolution' has great significance. While explaining the importance of accidental inventions, Mayee spoke about the discovery of penicillin in particular. He also educated students about Dadaji Khobragade, a humble farmer who invented HMT rice.

Despite his invention, Khobragde remained poor, but people around him became rich because of the high quality of his rice.

"All these inventions and discoveries were a result of curiosity. Apart from textbook knowledge, students must develop curiosity and should ask more and more questions. This programme will encourage students and help them to get good exposure," said Mayee.





Dr JS Pandey, chief scientist, climatic change and skilling division (CSIR Neeri) felicitated Mayee with a memento. Dr Pradeep Salve, principal scientist, proposed a vote of thanks while Samruddhi anchored the programme.



Published in: The Times of India



अम्पाललों में प्रयोग किंग गए हैं जो रोगणाओं को हरा कर रोगी

CERTITIAN AND AND AND AND AND AND AND AND AND A			AND THE SOL AN THE	OLAUICII A RAILI IANG LIG O OU
घातक बीमारी का पता लगाने की	सभी प्रयोग सफल रहे हैं। सब कुछ	वैज्ञानिक बताते हैं कि	को रोग मुक्त कर सकेंगे।	बेहद सफल रहे हैं। सब कुछ ठीक
तकनीक खोज निकाली है।	ठीक रहा तो कैंसर रोगाणु जांच	चिकित्सक जब कैंसर रोग से	अनुसंधान करने वाली टीम के	ठाक रहा तो अगले कुछ समय में
वैज्ञानिकों की ओर से इजाद की गई	मशीन का फायदा अगले कुछ समय	प्रभावित रोगी की शल्य चिकित्सा	प्रभारी एवं सीरी संस्थान के वरिष्ठ	मशीन का उत्पादन शुरू करने के लिए
तकनीक से किए गए अब तक के	में रोगियों को मिलने लगेगा।	करते हैं तो उस समय रोगी के शरीर	प्रधान वैज्ञानिक डा. अजय अग्रवाल	तकनीक को ट्रांसफर किया जाना है।

Published in:

Rajasthan Patrika





Hyderabad: Groundwater levels rise slightly in city





Thanks to good rainfall last monsoon, the average groundwater level rose in some areas in the city. Last year the city has received a surplus amount of rainfall, it brought a slight improvement in the groundwater level and as it raised by 3.84mbgl when compared to premonsoon level. According to the report released by the Telangana groundwater department, it was 10.88 meters below ground level (mbgl) in May, and 7.04 mbgl in November.

The city received 831 mm of rain, nearly 16 % higher than the normal rate that is 750-800

mm. The prime areas which are always affected have seen a slight improvement in groundwater level include densely crowded areas like Marredpally, Asif Nagar, Trimulgherry, Musheerabad, Charminar, Shaikpet, and Ameerpet. In Marredpally, the water table has risen by 12.34 meters below the ground (MBGL) compared to per monsoon. In Trimulgherry water levels increase by 6.5 mbgl, Ameerpet the water table has increase by 3.09 mbgl and in Asifnagar is 2.73 mbgl and in Secunderabad 2.78 mbgl Dr Pandith Madhnure, the director of groundwater department, said, "The rise in groundwater levels was noticed as the city received a surplus amount of rainfall in October. Recharge of groundwater depends on rainfall intensity.

However, when compared to last year, there is a slight change in the groundwater levels and in 2018, it was 9.77 mbgl." Telangana State Ground Water Department (TSGWD) are jointly working with CSIR-National Geophysical Research Institute (CSIR-NGRI) on project called a National Hydrology Project, that started on January 2019 to improve the water level.





Also in some areas groundwater is affected due to pollution The affected areas are Patancheru, LB Nagar, IDA Jeedimetla, Bholakpur. On the pollution aspect, we are planning to work on a project called groundwater contamination in the Hyderabad city and this project is sponsored by National Hydrological Project (NHP) and it would conclude by 2021.

Levels in last 11 years Years Ground Water level 6.1 meters in depth 2009 5.2 meters 2010 5.5 meters 2011 2012 6.2 meters 7.3 meters 2013 9,46 meters 2014 2015 11 9 maters

Rise in levels raises hopes Ground water area Post monsoon Premonsoon 12.34 mbgl 18.01 mbgl Marredpally 6.2mbal 3.09 mbal Ameerpet 2.73 mbgl Asifnagar 7.59 mbgl Charminar 5.91 mbgl 5.30 mbgl 3.45 mbgl 4.32 mbgl 22.31 mbgl 6.15 mbgl 7.12 mbgl 2.78 mbgl 10.54 mbgl 3.00 mbgl

015	11.0 116612
016	12.5 meters
017	9.3 meters
018	7.3 meters
019	7.04 meters

Shaikpet Trimulgherry Secunderabad Musheerabad







Creating Value Chain Network For Food Micro-Entrepreneurs







and Co-Convener of CII Manufacturing Panel, Mysuru Chapter, assured that CII would share their expertise in making the network a reality soon. Dr. KSMS Raghavarao, Director, CSIR-CFTRI, expressed that MENT is a one-of-its-kind initiative by CFTRI for mentoring and transforming the micro-entrepreneurs to successful business leaders. In the panel discussion held, experts gave suggestions for building successful enterprises with constrained resources. Further, it was mooted to conduct periodical meeting mechanism to handhold the tiny micro-entrepreneurs and assist towards brand building.

CSIR-CFTRI, Mysuru, organised a one-day workshop on 'Value Chain Network for Food Micro-Entrepreneurs in Mysuru' in the area of agri-food processing under Micro-Entrepreneurs Network (MENT) Forum on Jan. 27. MENT was initiated to create a common platform for cottage and tiny food manufacturers to share their ideas and

Published in: Star of Mysore

address commonly faced challenges in running their enterprises. A group of AcSIR Ph.D students worked in bringing a total of 30 plus Micro-entrepreneurs in and around Mysuru on a common platform. Speaking on the occasion, B. Rajendra Babu, Factory Manager, Agri-Business Division, ITC Ltd.





IAF plane lands at Leh with bio-jet fuel; Bengaluru pilots execute landing







An IAF statement said Leh at an altitude of 10,682 ft above mean sea level, is amongst one of the world's highest and most difficult operational airfields, it is prone to extreme weather conditions. Even during clear weather conditions, landing and taking-off an aircraft at Leh, is challenging due to reduced power output of the aircraft engines in the rarefied atmosphere, turbulent wind conditions and

proximity of mountainous terrain. "Evaluating the performance of bio-jet fuel An AN-32 aircraft of the Indian Air Force (IAF), powered with a 10% blend of Indian under these conditions is important from operational perspectives. bio-jet fuel took-off from Kushok Bakula Rimpochee Airport, Leh. This is the first It validates the capability of the aero-engine time that both engines of the aircraft were to operate smoothly with bio-jet fuel at the extremities of the operational envelope," it powered by the bio-jet indigenous fuel. The added. The technology to produce this fuel aircraft was flight tested and its performance was developed by CSIR-IIP in 2013, but could was validated at Chandigarh Air Base prior not be tested and certified for commercial use to undertaking the operational flight to Leh. due to lack of concurrent aviation test The tests were conducted by a team facilities in the country. In 2018, the IAF comprising of test pilots from Bengaluru based Aircraft and Systems Testing sponsored this project and channelized its Establishment, the pilots material and human resources and the trom complete range of fuel testing. operational squadrons.





Bio-jet fuel is produced from non-edible 'Tree Borne Oils', grown and procured from the tribal areas of Chhattisgarh state. IAF's efforts would assist in reducing carbon footprint and India's dependence on crude imports.









CSIR-NCL develops world's most inexpensive technology for continuous large scale production silver nanowires





CSIR-National Chemical Laboratory (CSIR-NCL), Pune has developed a technology for manufacturing precision silver nanowires in large scale. Shekhar Mande, Director General, CSIR recently inaugurated the pilot plant for continuous flow manufacture of Silver Nanowires at CSIR-NCL campus.

The technology has been developed by the team led by Amol A Kulkarni from the Chemical Engineering and Process Development Division. This technology development was carried out under the Advanced Manufacturing Technologies (AMT) initiative by the Department

of Science and Technology (DST).

Globally, nanomaterials are being synthesized with deep interests for last three decades and specifically in the form of utilizable entities over last 15 years. Metal and metal oxide nanomaterials show wonderful properties that are different from bulk form.

Currently, more than 99% of the manufacturers of these materials are outside India. In general, India imports most of the nanomaterials (except a few inorganic oxides viz. TiO2 and carbon nanomaterials).

The manufacturers have evolved rapidly while developing various technologies that never existed before (viz. metal mesh technology for multi-touch screen, filters for optical components, polymer-nano composites for coatings, printable circuits, nanoceramic dental implants having, antimicrobial surface coatings, nano-diaphragms for acoustic sensing, accurate diagnosis etc.).





In the recent time, silver nanowires have caught attention due to their suitability for printed and flexible electronics. It is used in the tightly controlled markets (viz. touch screen, conducting inks, thermal coatings, IR shielding sector etc.) where India has almost zero foot print. Now, with this technology developed at CSIR-NCL, Indian industries will be able to enter in the manufacturing of this precision material.

Patents have been filed to protect the technology and the product has been tested for various applications including conducting inks in various forms," sources at NCL said.



<u>Published in:</u> The Times of India

TIMES NEWS NETWORK

Lucknow: A soil conditioner that will help boost plant growth will be the first of its kind to be launched by Central Institute of Medicinal and Aromatic Plants (CI-MAP) during the Kisan Mela to be held on Friday. Two other research-based products—a cream and a hair oil—will be launched at the event. CIM-Mridashakti, is made up of decomposing crop residue. It makes soil nutrientrich and retains water, which boosts plant growth," said principal scientist Pooja Khare.

of 10 years.

"Creams used for the treatment of psoriasis or other skin problems lead to thinning of skin, exposing it to more harmful UV rays. The PsoriaCIM cream is chemical-free, aromatic plant-based and gives the best results within two weeks," said principal scientist NP Yaday, who led the research. After a four-year research, the scientific institute has come up with CIMKES-H-a herb-based hair oil with zero chemicals, that

"At present, there is no soil conditioner in India that helps in plant growth, maCREATED BY CIMAP

The scientific institute has also created a herbal solution for treating skin problems like psoriasis and inflammatory skin conditions with the help of a nonsteroidal skin-friendly cre-

king it healthier and more am. The cream has been will help fight dandruff and productive. The product, developed after a research other hair-related issues.

Published in:

The Times of India

Published in: Dainik Jagran

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