# CSIR IN WEDLA



# NEWS BULLETIN 16 TO 20 AUGUST 2024









# Microplastics found in internal organs of Penguins in Antarctica

CSIR-NIO 20<sup>th</sup> August , 2024

Research by scientists from different organisations including the CSIR-National Institute of Oceanography here has confirmed the presence of microplastics in the gastrointestinal tracts of Adelie Penguin in Antarctica, hinting at the "impending emergence of microplastic hotspots" in Antarctic ecosystems.

The study, published in the "Science of the Total Environment" journal last week, claimed to be the first comprehensive examination of microplastics across various tissue types, gastrointestinal tracts and scat samples obtained from Adelie Penguins inhabiting mainland Antarctica.

The research was conducted by a team of scientists including Mahua Saha, Shrayan Bhattacharjee, Chayanika Rathore, Akshata Naik, Praveen Tudu, Prabir Ghosh Dastidar, Subarna Bhattacharyya, Jacob de Boer and Punarbasu Chaudhuri from research institutes including CSIR-NIO, University of Calcutta, Ramakrishna Mission Vivekananda Centenary College (Autonomous), Academy of Scientific and Innovative Research (AcSIR), SGT University, Polar Science Division of the Ministry of Earth Sciences (MoES), School of Environmental Studies of Jadavpur University, and Vrije University, Netherlands.

Microplastics in natural environments present a formidable global environmental threat, the research paper said, adding that among the five identified polymer types, low-density polyethylene (LDPE) emerged as the most prevalent one, in approximately 63 per cent of the total microplastics.

The findings underscore the need for heightened attention and mitigation efforts to safeguard Antarctic ecosystems, the scientists said. Adelie penguins, it is believed, either ingest microplastic fibers inadvertently, or ingest them indirectly through their prey species. Local or long-range airborne transport appeared to be additional sources of MP fibers found in lung



and trachea tissues, the study said. Past investigations into microplastics pollution across diverse penguin species have raised alarming concerns, hinting at the impending emergence of microplastic hotspots in Antarctic ecosystems, it noted.

The latest findings underscore the urgency for future extensive research, the paper added.

# Published in: Deccanherald



### Former CSIR Director General Girish Sahni passes away

#### CSIR

20<sup>th</sup> August, 2024

Former CSIR Director General Girish Sahni, known for developing clot busters for treatment of cardiovascular diseases, died on Monday, the Council of Scientific and Industrial Research said. He was 68. "The CSIR family mourns the loss of its former Director General, Dr Girish Sahni," the CSIR said in a post on X.



Sahni, who specialised in protein engineering, molecular biology, and biotechnology, contributed significantly in the area of protein cardiovascular drugs especially 'clot busters' and their mode of action in the human body. The team led by Sahni was responsible for producing technology for India's first indigenous clot blusters, natural streptokinase and recombinant streptokinase. He also developed clot-specific streptokinase, a drug whose licensing rights were sold to Nostrum Pharmaceuticals in New Jersey, the US, in 2006. "His work on streptokinase was a block buster, what he used to call as a clot buster. His was one of the most visible tech transfers in Indian Academia," former Director General of CSIR Shekhar Mande said in a post on X.

Born on March 2, 1956, Sahni earned his PhD from Indian institute of Science, Bangalore. His post-PhD career included a stint each in University of California, Santa Barbara, Rockefeller University New York and Albert Einstein College of Medicine, New York. Sahni joined CSIR-Institute of Microbial Technology in Chandigarh in 1991 and became institute's Director in 2005. Sahni served as CSIR Director General from 2015-18.

#### Published in:

Deccanherald



# FSSAI to check microplastic contamination in Indian foods

CSIR-IITR 18<sup>th</sup> August, 2024

The Food Safety and Standards Authority of India (FSSAI) on Sunday launched an innovative project to tackle the growing concern of microplastic contamination in food.

Microplastics are tiny pieces of plastics that range in size — from five millimetres to one micrometre. From human blood to testicles, to flora and fauna, these have long been known as a significant environmental and health concern worldwide.

FSSAI initiated the new project in March this year to develop and validate analytical methods for detecting micro and nano-plastics in various food products. It is also aimed at assessing the prevalence and exposure levels of microplastics in India.

The project will develop standard protocols for micro/nano-plastic analysis, conduct intraand inter-laboratory comparisons, and generate critical data on microplastic exposure levels among consumers.

"While global studies have highlighted the presence of microplastics in various foods, it is imperative to generate reliable data specific to India. This project will help understand the extent of microplastic contamination in Indian food and guide the formulation of effective regulations and safety standards to protect public health," FSSAI said.

The project is being implemented in collaboration with leading research institutions across the country, including the CSIR-Indian Institute of Toxicology Research (Lucknow), ICAR-Central Institute of Fisheries Technology (Kochi), and the Birla Institute of Technology and Science (Pilani), FSSAI said.

Recently, the Food and Agriculture Organization (FAO) in a new report highlighted the



presence of microplastics in common food items such as sugar and salt. The FSSAI noted that although the global prevalence of microplastics was detailed in the report, the need is "for more robust data to fully understand the implications for human health and safety, particularly in the Indian context".

The findings from the new project "will not only inform regulatory actions but also contribute to the global understanding of microplastic contamination". It will make Indian research an integral part of the global effort to combat this environmental challenge.

# Published in: Munsifdaily



# NDMC to rope in CRRI for proper construction and upkeep of roads

CSIR-IITR 18<sup>th</sup> August, 2024

To ensure proper construction and maintenance of its roads, pavements, etc, New Delhi Municipal Council is set to sign an MoU with Central Road Research Institute (CRRI). The latter will provide technical guidance in ascertaining quality control and maintenance of the road network in Lutyens' Delhi, said NDMC vice-chairman Satish Upadhyay. A draft proposal in this regard was approved in the council meeting on Friday. The initiative is likely to cost Rs 4.7 crore to the council and will be implemented for a period of five years. As per the agreement, training will also be given to engineers and staff supervising the road construction work in the NDMC area.

"To make sure these facilities are operational and remain in good condition, NDMC intends to hire the services of CRRI. Besides helping in road improvement works, it will provide technical guidance in ascertaining the maintenance requirements and thickness of overlays or carpeting layers for improving the riding quality of NDMC roads. Sharing details of quality control with the broad objective to provide technically sound and economical solutions will also be the responsibility of CRRI," stated the proposal. An official said, "In the meeting, it was proposed that an MoU will be signed for providing maintenance and rehabilitation measures of NDMC roads, quality control during the execution of works, including preparing job mix formulas for bituminous works, and training on pavement evaluation techniques and their applications for maintenance and rehabilitation." According to the proposal, CRRI will provide the consultancy for each road, and a decision in this regard was taken last year in a meeting. While NDMC's finance department advised adding a clause in case of delay in the implementation of the task, the council officials stated that CRRI was found delivering consistent performance in past proposals, so no such clause is required to be added.



presence of microplastics in common food items such as sugar and salt. The FSSAI noted that although the global prevalence of microplastics was detailed in the report, the need is "for more robust data to fully understand the implications for human health and safety, particularly in the Indian context".

The findings from the new project "will not only inform regulatory actions but also contribute to the global understanding of microplastic contamination". It will make Indian research an integral part of the global effort to combat this environmental challenge.

# Published in: Munsifdaily



### CSIR-IIIM celebrates 142nd Birth Anniversary of Col Sir RN Chopra

CSIR-IIIM

18<sup>th</sup> August, 2024

The CSIR-Indian Institute of Integrative Medicine (CSIR-IIIM), Jammu celebrated 142nd Birth Anniversary of Col Sir RN Chopra, the Founder Director of IIIM, here today. Dr Zabeer Ahmed (Director, CSIR-IIIM Jammu) along with Scientists, Technical & Administrative Staff, Scholars and other workers paid homage to Col Sir RN Chopra by offering floral tribute to his statue. The CSIR-



IIIM family proudly commemorated his Birthday to cherish the vision & excellence of this great son of the soil.

While addressing the staff, Dr Zabeer recalled Colonel Chopra's great contributions toward advancement of Indian Systems of Medicine. The recommendations of the Committee on Indigenous Systems of Medicine at which he had presided and brought focus on the Indian systems and the process for their consolidation started during his time only.

Dr Ahmed said, "Though the integration of Indian and Western Systems still remains a far cry but a beginning was made by him for preparing the Ayurvedic and Unani pharmacopoeias through the respective committees chaired by him" and added that Col RN Chopra was a pride of Jammu, known as father of Indian Pharmacology, who at that time when no facilities were available, had done quite remarkable work on Cannabis and other potential medicinal plants.

He entrusted his S&T colleagues of CSIR-IIIM that real tribute to this great scientist would be if we endeavour hard to accomplish his dreams of doing cutting edge science for globalization of our indigenous knowledge which would have far reaching impact particularly



in the healthcare system. Prominent among many others present were Abdul Rahim, Head RMBD & IST and Head Branch Lab Srinagar, Dr Shashank K Singh, Senior Principal Scientist, Dr Dhiraj Vyas, Head, Plant Sciences and Agrotechnology Division (PSA), Dr Deepika Singh, Head, Quality Management & Instrumentation Division and Dr Saurabh Saran, I/C Technology Business Incubator and AIC.

# Published in: Dailyexcelsior



### NDMC to rope in CRRI for proper construction and upkeep of roads

CSIR-CRRI 17<sup>th</sup> August , 2024

To ensure proper construction and maintenance of its roads, pavements, etc, New Delhi Municipal Council is set to sign an MoU with Central Road Research Institute (CRRI). The latter will provide technical guidance in ascertaining quality control and maintenance of the road network in Lutyens' Delhi, said NDMC vice-chairman Satish Upadhyay. A draft proposal in this regard was approved in the council meeting on Friday. The initiative is likely to cost Rs 4.7 crore to the council and will be implemented for a period of five years. As per the agreement, training will also be given to engineers and staff supervising the road construction work in the NDMC area.

"To make sure these facilities are operational and remain in good condition, NDMC intends to hire the services of CRRI. Besides helping in road improvement works, it will provide technical guidance in ascertaining the maintenance requirements and thickness of overlays or carpeting layers for improving the riding quality of NDMC roads. Sharing details of quality control with the broad objective to provide technically sound and economical solutions will also be the responsibility of CRRI," stated the proposal. An official said, "In the meeting, it was proposed that an MoU will be signed for providing maintenance and rehabilitation measures of NDMC roads, quality control during the execution of works, including preparing job mix formulas for bituminous works, and training on pavement evaluation techniques and their applications for maintenance and rehabilitation." According to the proposal, CRRI will provide the consultancy for each road, and a decision in this regard was taken last year in a meeting. While NDMC's finance department advised adding a clause in case of delay in the implementation of the task, the council officials stated that CRRI was found delivering consistent performance in past proposals, so no such clause is required to be added.

#### Published in:

Times of India



# **Women Boost Self-Reliance Through Marigold Farming in Ramban,**J&K

CSIR 17<sup>th</sup> August , 2024

Women in Ramban district of Jammu and Kashmir are increasingly turning to marigold farming to achieve self-reliance. This shift comes under the 'Mission Floriculture' scheme spearheaded by the Council for Scientific Industrial Research (CSIR) under the Union Ministry of Science & Technology. The initiative offers farmers, most of whom are women, training through workshops and provides free hybrid seeds.

Dr. Iqra highlighted that marigold farming benefits soil health and is resilient against monkey attacks, making it a preferred crop in affected areas. Floriculture expert Tejinder Singh informed ANI, "It was a joint exercise. Marigold can maximize the potential of Batote, a promising agricultural area. Previously, 100–150 farmers cultivated marigold; this season, the number appears to be rising."

Women are shifting from traditional maize farming to marigold due to its convenience, profitability, and shorter cultivation time. The flowers are quickly sold in places like Katra and Jammu, where demand is high due to the presence of temples, including the Mata Vaishno Devi shrine.

Members of the all-women Self Help Group 'Sehar Ki Duniya' in Batote have embraced marigold farming and are encouraging other women to do the same. A farmer shared with ANI her satisfaction, stating, "Marigold farming is visually pleasing and easier than maize cultivation." The Department of Agriculture provides free seeds and training, with officials regularly visiting the fields. Agricultural officers and Krishi Vigyan Kendra scientists in Ramban continue to guide these women to optimize their marigold yields and profits.

#### Published in:

Devdiscourse



# AcSIR gets 11th NIRF ranking among research institutions

CSIR 17<sup>th</sup> August , 2024

The Academy of Scientific and Innovative Research (AcSIR) has secured 11th position in the National Institutional Ranking Framework (NIRF) 2024 among 'Research Institutions'.

Prof Manoj Kumar Dhar, Director of AcSIR, while congratulating all stakeholders for this stupendous achievement, expressed his gratitude to Dr Jitendra Singh, Minister of Science and Technology for his visionary leadership. He also thanked the Chancellor, AcSIR, DG CSIR, DG ICMR, Directors of National Laboratories affiliated to AcSIR, Faculty members and students. "This achievement is a reflection of the hard work and dedication of our faculty, researchers and students. It underscores our mission to drive scientific research and innovation that addresses real-world challenges and contributes to the nation's development," he said.

AcSIR has been at the forefront of scientific research, with a focus on interdisciplinary and collaborative approaches. The institution's robust research programs span various domains, including Biological Sciences, Chemical Sciences, Engineering Sciences, Mathematical & Information Sciences, Physical Sciences, Medical Research, and Agricultural Sciences. AcSIR is an institution of National Importance established by an Act of Parliament. It is an overarching Institution encompassing 37 National Laboratories of CSIR, 28 of ICMR, some laboratories of DST and other prestigious Institutes of the country. AcSIR is the largest in terms of having more than 6500 PhD scholars on the rolls. About 630 students were awarded PhD degrees during 2023. AcSIR recently introduced one of its kind iPhD program, which is program is described as innovative, imaginative, and industry-linked, designed to bring out the innovator within students. The program emphasizes creative and entrepreneurial skills. It is backed by industry partnerships and guided by experienced mentors. Admission for Jan-2025 session is open and last date to apply is 16th September 2024.

#### Published in:

Dailyexcelsior



#### CSIR launches floriculture mission to aid Uttarakhand farmers

#### CSIR-CIMAP

17<sup>th</sup> August, 2024

The Council of Scientific and Industrial Research (CSIR) has launched a floriculture mission to aid farmers, who were previously forced to abandon agriculture due to a lack of irrigation resources and threats from wild animals.

Under this initiative, scientists from Central Institute of Medicinal and Aromatic Plants (CIMAP), located at Pantnagar University in Udham Singh Nagar district, are providing a group of farmers with free technical training and high-quality plant materials, to revive farming activities in the region.

RK Upadhyay, the lead scientist behind the project, is encouraging farmers to diversify their crops by cultivating roses, jasmine, and tuberose as primary crops. This would not only broaden the crop cycle but also significantly boost farmers' incomes.

"The mission was launched last year and flower cultivation has already been initiated on 32.5 acres of land in Uttarakhand. Our goal is to establish model flower clusters across the country, creating self-reliant planting material production and fostering commercial farming," he said.

"We will develop regional multiplication centres and clusters for producing certified planting materials. This technology will open new entrepreneurship and employment opportunities, especially for women. This initiative is expected to enhance profits and livelihoods while ensuring a steady supply of high-quality floral raw materials to industries," he added.

#### Published in:

Times of India



# IIIM celebrates 78th Independence Day at Jammu and Br. Lab Srinagar

CSIR-IIIM 17<sup>th</sup> August , 2024

The CSIR Indian Institute of Integrated Medicines (IIIM) Jammu celebrated the 78th Independence Day with great enthusiasm and gaiety at its main campus, Jammu Branch Lab. Srinagar and field stations at Jammu, Srinagar & Leh. The main programme was held at Jammu campus where Dr Zabeer Ahmed, Director CSIR-IIIM hoisted the National Flag on the occasion and took salute at the ceremonial march past by security men of the Institute and students of Regional Research Laboratory High School.

Dr Zabeer Ahmed on the occasion extended warm greetings to the audience and recalled the supreme sacrifices of the national heroes like Mahatma Gandhi, Dr. Rajinder Prashad, Lal Bahadur Shastri, Lala Lajpat Rai, Chandra Shekhar Azad, Bhagat Singh, Rani Lakshmibai, Khudiram Bose, Sukhdev Thapar, Vallabhbhai Patel, Mangal Pandey, Tantya Tope, Ashfaqullah Khan, Ram Prasad Bismil, Udham Singh, Bal Gangadhar Tilak, Gopal Krishna Gokhale, who laid down their lives for the country.

The Director also addressed the large gathering of employees, their families, students and members of the civil society. In his Independence Day address, the Director extended his warm greetings to all present and remembered our freedom fighters whose sacrifices allowed us to breathe in today's free environment. While recollecting the patriotic contributions of great leaders of Indian's freedom movement, he exhorted the audience to tread the path of righteousness and contribute towards nation building with their full might. In his address, Dr Ahmed also enumerated the various achievements of the institute in not only the R&D areas but also towards the institutional commitment and efforts towards its societal missions. He further reminded the gathering that the greatest gift that we can give to our nation is our continuous and unwavering support and effort towards the goal of making India a self-reliant and prosperous nation. The address was followed by various thrilling cultural performances by the students of the RRL High School with patriotism as the common thread.



This was very much appreciated by the large and receptive audience which included Er. Abdul Rahim Head RMBD & IST, Vikram Singh, Sr.CoA and other HoDs, and Principal RRL High School.

The flag hoisting and Independence Day celebrations were also held at the Branch Laboratory Srinagar, besides field stations and experimental farms at Chatha in Jammu and Palam at Leh.

# Published in: Risingkashmir



# Hyderabad: CCMB invites applications for Ph.D program

CSIR-CCMB 15<sup>th</sup> August, 2024

The Hyderabad-based Centre for Cellular and Molecular Biology (CCMB) has invited applications from eligible candidates to pursue research in modern biology leading to a Ph.D. Degree for its January 2025 Ph.D program.

The projects offered for Ph.D. would be in the broad areas of Cell Biology, Molecular Biology, Genetics, Genomics, Developmental Biology, Plant Molecular Biology, Conservation Biology, Ecology, Protein Structure and Function, Biology of Macromolecules, Biology of Infection, Immunology, Epigenetics, Chromatin Biology and Bioinformatics.

September 16 is the last date to submit online applications, which then will be screened and eligible candidates will be called for a computer-based written test at one of their preferred centres on September 29. Candidates who qualify in the test and with a valid fellowship to pursue PhD will be shortlisted to appear for an in-person interview at CCMB in the second/third week of October.

The CCMB notification has urged candidates to frequently check out the website of CCMB (ccmb.res.in) for more updates.

#### Published in:

Telanganatoday



### CIMAP MoU to help Odisha's tribal farmers

#### CSIR-CIMAP

15<sup>th</sup> August, 2024

The Central Institute of Medicinal and Aromatic Plants (CIMAP) signed an MoU with Bromhon Solution Private Limited, Bhubaneswar, to expand lemongrass cultivation among tribal farmers in Odisha.

On its 46th annual day on Wednesday, CIMAP also announced to transfer the technology for lutein production from marigold flowers to



Sunfed Farm Private Limited, Varanasi. The event was inaugurated by deputy CM Brajesh Pathak. "The institute's ongoing research and development work in medicinal and aromatic plants, particularly in developing new plant varieties that offer higher yields are directly benefiting farmers, leading to increased productivity and income. I recently visited Brazil, where I observed the integration of technology in agriculture. I urge Indian scientists to develop similar technologies that can reduce human intervention in farming processes, thus making agriculture more efficient and sustainable," he said.

CIMAP director, Prabodh Kumar Trivedi said, "The institute's efforts under the CSIR Aroma Mission have successfully expanded the cultivation of aromatic crops to more than 1,100 hectares across India."

### Published in:

Times of India



### Please Follow/Subscribe CSIR Social Media Handles



CSIR INDIA



CSIR IND







