

CSIR IN MEDIA



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'Council of Scientific and Industrial Research to usher changes with its three missions' in Lucknow

CSIR-CIMAP

04th February , 2023

Council of Scientific and Industrial Research (CSIR) is coming up with three new mission projects-- waste to wealth, artificial intelligence (AI) and machine learning (ML) - based technologies for versatile applications and millet mission, said CSIR's first woman director general N Kalaiselvi on Friday.



Talking to TOI during 'One week, One Lab' programme organised by Central Institute of Medicinal Aromatic Plants (CIMAP), the DG also suggested that four city-based laboratories should not stick only to their expertise but take their research beyond the boundaries of the institutes' specialization.

"At present, I am prioritizing three new missions. The waste-to-wealth mission will bring the scientific processing of waste to the forefront to build a zero-landfill and zero-waste nation. All 38 CSIR laboratories will contribute to utilizing waste through research and innovation to provide maximum benefit to society," she said.

CIMAP has already taken steps in this direction by working on developing cutlery from waste from banana plant stalk and others, vermicompost from waste and growing mushrooms on agricultural waste and others.

Kalaiselvi said the AI and ML mission will make the best use of technology to take scientific inventions and research to a new level while the millet mission comes with the hope of developing new varieties of millet that are nutritious and can be easily grown in different

climates. Giving a message to promote young women scientists and science students, Kalaiselvi said: "Science and female have a lot of synergy. All female scientists and science students must know that science is one subject that could be restarted, revived and renewed at any point of time."

She said just like a computer can be rebooted at any time science can also be rebooted. If in case some female scientist or student is unable to continue her studies or research due to any reason, then even after a gap of one year or more she can very well reboot, she said.

Happy with rising number of science students in higher education institutes, the DG said: "I think we should not worry about the percentage of women in science at present as the number of girls pursuing higher education in science has gone up considerably."

She said gradually women's participation not only in science but in almost every field will increase. Days are not far when male community would demand special drives for increased participation of male students and professionals in every field.

'CSIR to usher changes with its three missions'

Council Chief For More Women Scientists

Mohita.Tewari
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N Kalaiselvi, the first women director general of CSIR, being felicitated at the event on Friday

CIMAP releases new variety of mint, herbal vaporizer

TIMES NEWS NETWORK

Lucknow: CSIR director general N Kalaiselvi released a newly developed variety of peppermint (Mentha piperita) 'CIM-surass' that has over 70% menthol component at CIMAP event.

A room freshener herbal vaporizer 'Aero-Clean' and a booklet titled "Cultivation, Processing, and Marketing of Suitable Aromatic Crops for North-Eastern Regions of India" to provide information on aromatic plants to the farmers of northeast were also released on the occasion. Kalaiselvi interacted with farmers, entrepreneurs, women entrepreneurs, small-scale industries and aroma mission beneficiaries from various states and

listened to their experiences, suggestions and problems.

"CSIR is transforming the lives of common people through its technologies," she said.

Appreciating the efforts of CIMAP, she said during CIMAP's 'Kisan Mela' value-added planting material is made available to the farmers that helps in increasing farmers' income.

"Main objective of organising this scientist, entrepreneur and farmer meet is to become an accessible medium to make CIMAP's research available to the public," said CIMAP director Prabodh Kumar Trivedi. CDRI director Radha Rangarajan and IITR director Bhaskar Narayan were also present at the event.

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सीएसआईआर तकनीकों से आम जनजीवन बदल रहा है: डॉ. एन. कलैसेलवी

देवेन्द्र मिश्र, लखनऊ संवाददाता ।

सी.एस.आई.आर.-केन्द्रीय औषधीय एवं संगंध पौधा संस्थान (सी.एस.आई.आर.-सीमैप), के लखनऊ स्थित मुख्यालय में 'एक सप्ताह, एक प्रयोगशाला' कार्यक्रम के अंतर्गत आज वैज्ञानिक, उद्यमियों एवं, किसानों के लिए संगोष्ठी आयोजित की गयी । समारोह में मुख्य अतिथि, डॉ. एन. कलैसेलवी, महानिदेशक, एवं सचिव सी.एस.आई.आर., डी.एस.आई.आर. भारत सरकार ने चन्दन के पौधे का रोपण, सुगंधित फसलों से आवश्यक तेल निशकर्षण के लिए बहुक्रियाशील मोबाइल सौर आसवन इकाई, किसान ड्रोन, सीएसआईआर-उत्तर प्रदेश समन्वय केंद्र, तथा पादप कार्यात्मक जीनोमिक्स एवं जीनोम एडिटिंग हेतु उन्नत ग्लासहाउस सुविधा का उद्घाटन किया।

इस अवसर पर सीमैप निदेशक डॉ. त्रिवेदी ने कार्यक्रम को संबोधित करते हुए अरोमा मिशन की सफलता के बारे में बताया कि इस वैज्ञानिक, उद्यमि, एवं, किसान संगोष्ठी के आयोजन का मुख्य



उद्देश्य यह है कि सीएसआईआर-सीमैप में हो रहे नित्य नए शोधों को जनमानस तक पहुंचाने का एक सुलभ माध्यम बने।

डॉ. कलैसेलवी ने अपने संबोधन में औषधीय एवं संगंध पौधों के उत्पादन में सी.एस.आई.आर.-सीमैप की भूमिका की प्रशंसा करते हुए कहा कि सीएसआईआर-सीमैप द्वारा आयोजित इस मेले में किसानों को सीमैप में विकसित औस कृषि प्रौद्योगिकी जनमानस को उपलब्ध करायी जा रही हैं, जिनकी खेती से किसानों की आय में पहले की तुलना में कई गुना वृद्धि हो रही है। उन्होंने किसानों को संबोधित करते हुए कहा कि देश की अर्थव्यवस्था को आगे बढ़ाने में किसान रीढ़ की तरह काम करते हैं। लखनऊ में स्थित सीएसआईआर की चार प्रयोगशालाओं व

सीएसआईआर की अन्य सभी प्रयोगशालाओं द्वारा हर प्रकार से मदद का आश्वासन दिया। इस अवसर पर मुख्य अतिथि द्वारा कुछ रिलीजेस जिसमे-मेंथा पिपरिटा की नव विकसित प्रजाति सिम-सुरस, जिसमें 70 प्रतिशत से भी ज्यादा मेन्थोल घटक पाया जाता है, रूम फ्रेशर हर्बल वेपोराइजर 'एरो-क्लीन', तथा पूर्वोत्तर राज्यों के किसानों को संगंध पौधों की जानकारी प्रदान करने के लिए कल्टीवेशन, प्रोसेसिंग, एंड मार्केटिंग ऑफ सुटेबल एरोमेटिक क्रॉप्स फॉर नॉर्थ-ईस्टर्न रीजन्स ऑफ इंडिया- नामक पुस्तिका का भी विमोचन किया।

कार्यक्रम के उपरांत मुख्य अतिथि द्वारा किसानों को मेंथा एवं जेरैनियम की उन्नत प्रजातियों की पौध सामग्री वितरित की

गयी। सीएसआईआर-सीमैप एवं उत्तराखंड स्टेट कार्बोसिल फॉर साइन्स एंड टेक्नोलोजी के मध्य एक समझौता पत्र पर हस्ताक्षर किए गए। इस समझौते द्वारा अरोमा मिशन की गतिविधियों को उत्तराखंड के दूरदराज के क्षेत्रों तक पहुंचाया जा सकेगा। इसके साथ ही सीएसआईआर-सीमैप एवं पिरेंस जनसेवा फाउंडेशन शिरडी के मध्य समझौता हुआ, जिसके अंतर्गत अपशिष्ट पदार्थों से बनी सुगंधित पेंसिल का विमोचन किया गया। तथा सीएसआईआर-सीमैप और मेघालय सरकार के मध्य सैनिटरी नैफकिन तकनीकी हस्तांतरण किया गया।

सीएसआईआर महानिदेशक ने देशभर से आए हुए किसान, उद्दमी, उद्दमी महिलाये, लघुउद्योग, व अरोमा मिशन लाभार्थियों के साथ संवाद में उनके अनुभवों, सुझावों व समस्याओं को सुना। एनबीआरआई, के वैज्ञानिकों, प्रशासनिक अधिकारियों, व शोधार्थियों को आपस में तालमेल रखकर देशहित में कार्य करने की अपील की।

Beneficiaries of Aroma Mission interact with experts at CSIR-CIMAP

CSIR-CIMAP

04th February , 2023

The CSIR-CIMAP (Council of Scientific and Industrial Research - Central Institute of Medical and Aromatic Plants) organised a convention on its premises here on Friday during which the beneficiaries of the Aroma Mission interacted with the new director general of the CSIR, Dr Nallathamby Kalaiselvi apart from other experts.

The Aroma Mission, launched in 2016 in India, aimed to increase the income of farmers through cultivation of aromatic plants.

Nearly 50 representatives of the beneficiary groups from all over India attended the event to interact with the HoDs at CIMAP. The group included members of tribal communities of Hyderabad and Assam, and also from farming villages in Odisha and Rajasthan.

Beneficiaries of the Aroma Mission programme have established natural perfume brands and also products which now have international reach. All these individuals had received training at CIMAP. Many had brought samples of their products as tokens of appreciation for the faculty here.

The director of CSIR-CIMAP, Dr Prabodh Kumar Trivedi said that that the main objective of organising this 'scientist, entrepreneur, and farmer meet' is to become an accessible medium to make the new research done in CSIR-CIMAP available to the public.

The DG also released a host of new products at the event - a newly developed variety of Mentha piperita 'CIM-suras', in which more than 70 percent menthol component is found; a room freshener herbal vaporizer 'Aero-Clean'; and also released a booklet titled "Cultivation, Processing, and Marketing of Suitable Aromatic Crops for North-Eastern Regions of India".

The director general said, she was immensely pleased to witness the impact the programme. "As

the largest publicly funded organisation, we have been asked what is that we are giving back to society? I feel proud of hearing these stories now,” said Kalaiselvi.

She also said that the department is looking at implementing new programmes focusing on wealth from waste, integration of artificial intelligence and machine learning, as well as another mission on millets. Speaking to HT, the DG said, “Besides all the avenues that have been explored, which were beyond my imagination, perhaps we could also think about producing perfumes or essential oil pellets or tablets that are easily carried around.”

We will prioritise industry connect, says CSIR head Dr. N. Kalaiselvi

CSIR-CECRI

03rd February , 2023

Recently, Dr. N. Kalaiselvi, director general of Council of Scientific and Industrial Research was in the city. TOI's Sandip Mishra speaks to her about her vision as the head of the organization

You are known as the "Lithium Battery Expert", what do you think are India's prospects in the sector?

Right now India is talking about self-reliance and indigenisation and the Lithium Battery sector no exception. We do not produce lithium in the country but still about five or six lithium battery manufacturing units have started functioning in the country. This is the starting point.

Do you think enough research is being done in the area? What more could be done?

In India, we have one CSIR-Central Electro Chemical Research Institute, Chennai, which is carrying out exclusive research in lithium ion battery and is the only institute in Asia doing so. Several other CSIR laboratories are also carrying out research on various components of the battery and this will increase further.

The vehicle market is shifting fast towards electric vehicles with more than 1.4 million such vehicles plying on Indian roads. What do you think is the future of the market?

E-mobility is going to be the order of the day. Whether it is battery operated vehicles or the hybrid ones, these are going to define the future of mobility in the country. India is also promoting the in-house development of infrastructure. Industries and institutes are also collaborating to promote the sector in a big way.

Battery used in e-mobility and others are considered to be eco-friendly, but the components of a battery still generates waste materials, what could be done to deal with that?

Batteries do not pollute the environment but the components do. Cobalt, nickel and other materials are toxic in nature. To deal with that, we are opting for the ec-friendly of using iron-based materials.

You are the first women director general of CSIR. What do you want to add as head of the organisation?

The government has given enough facilities in terms of infrastructure, human resources and finances. We will prioritise our connection with industries, startups and MSMEs that will translate into fulfilment of all initiatives and plans of the government.

Census of Himalayan Black Bear: About 130 samples of hair follicles sent for DNA test

CSIR-CCMB

03rd February , 2023

The first-ever census of Himalayan Black Bear in North Bengal has led to the collection of 130 samples of the hair follicles that has been sent to CCMB (CSIR-Centre for Cellular and Molecular Biology) Hyderabad for DNA test to ascertain its population. Bengal happens to be the first state in the country to survey Himalayan Black Bear.

According to a senior official of the Forest department, the analysis is expected to take two months and another month will be needed for compilation. So tentatively it will take another three months to come out with a figure of the population of the animal.

Concerned over the rising incidents of straying of Himalayan Black Bear in the foothills and plains of North Bengal, the state Forest department had decided to survey the species for proper management of their habitat.

The habitat area of the Bear was divided into 241 grids and barbed wire fencing was put in the middle of the grid. Lured by rotten meat, rotten fish oil, honey and similar things as bait which are very much to their liking, a portion of their body hair got stuck to it, once they tried to cross the

fencing. The hair follicles as samples, accordingly have been sent for DNA test at CCMB (CSIR- Centre for Cellular and Molecular Biology) Hyderabad to ascertain their population.

In 2021, there had been 40 incidents of straying and till date, there have already been 22 incidents when these species have entered into human habitat and have feasted on small animals like goats, hares and livestock too. There has been a single instance when a person was killed in a bear attack. The bears normally live at a height of 12000 feet but descend another 5000 feet during winter for having calorie-rich food so that they can go for peaceful

Hibernation which normally lasts for two months. During this period they hardly take water and defecate. In the last two years particularly, we have found that the bears are descending further.

“For management of the animals, we need to find out the reason for their straying which may be climate change affecting their migration, their hibernation getting disturbed or significant increase in population,” Debal Roy, state Chief Wildlife Warden said.

Two types of bear are found in Bengal which includes Himalayan Black Bear and Sloth Bear.

CSIR-CSMCRI

03rd February, 2023

सीएसआईआर-सीएसएमसीआरआई विश्व आर्द्रभूमि दिवस के अवसर पर निर्मित वेटलैंड का उद्घाटन



भावनगर। सीएसआईआर-केंद्रीय नमक व समुद्री रसायन अनुसंधान संस्थान (सीएसएमसीआरआई), भावनगर में 2 फरवरी विश्व आर्द्रभूमि दिवस के अवसर पर दूषित जल के प्रशोधन के लिए स्वदेशीय निर्मित वेटलैंड का

उद्घाटन किया गया। सीएसएमसीआरआई के वैज्ञानिक अपार्टमेंट कॉलोनी में निर्मित वेटलैंड से प्रशोधित जल बागवानी के लिए उपयोग में लाया जाएगा। यह तकनीक आर्थिक और पर्यावरण की दृष्टि से व्यवहार्य है।

Dr. G. Narahari Sastry, Took Over Additional Charge Of Director CSIR-IMMT Bhubaneswar

CSIR-IMMT

02nd February , 2023

Bhubaneswar : Dr. G. Narahari Sastry, (FNA, FNASc, FASc, FRSC) took over the additional responsibility as the Director of CSIR-IMMT Bhubaneswar. He took over the charge from the present director of the institution Prof. (Dr.) S Basu. Speaking on this occasion, Prof. (Dr.) S Basu, said, “I was the Director of CSIR - IMMT, Bhubaneshwar for the last 5 years. Today is



my last day here. This lab has progressed immensely in the last 5 years in all respect- R&D Ward, Human Resource Development, Research Funding from different agencies whether its combined agencies, ministerial agencies, or the external funding from the industries and the all-round development of the institute in terms of infrastructure has taken place. By midnight I will give up my duty. Now we have a very accomplished scientist- Dr.Narahari Sastry, Director of CSIR-North East Institute of Science and Technology, Jorhat, Assam. He belongs to IICT Hyderabad and has won the prestigious Bhatnagar Award. He is going to take charge over from today and will take this Institute forward. This is an interim arrangement where he will hold additional charge of the post of Director, CSIR-IMMT, till the joining of a regular Director.”

Shanti Swarup Bhatnagar Prize 2011 (considered as the highest national recognition in Science) winner Dr Sastry is currently positioned as the Director CSIR-North East Institute of Science and Technology Pulibor, Jorhat.

Taking over the additional charge Dr. G. Narahari Sastry, said, “It’s a privilege and pleasant duty to come here and see Prof. Basu who has taken this lab in a very big way in the last 5

years. Orissa is a state which has immense potentials. IMMT is a jewel in the crown of this state. IMMT is identified for its leading lab. The leadership Prof Basu has been shown as the Mission Directorate. His vision and the positive attitude to take the institute forward has placed it in a good position and am sure that whoever will be the new director he has big shoes to fill. I have heard people praising about the lab, its lush green campus and I hope in few months or less than that I will get the privilege to serve this institute.”

Dr Sastry is one of the most well recognized scientists of the country working in the interdisciplinary areas of chemistry, biology, material science, and artificial intelligence etc . Dr. Sastry is also involved in a number of outreach programs and widely travelled across the globe and has visited over 25 countries. Till date he has delivered more than 450 lectures at different Universities/Institutions and 100 overseas talks in international conferences.



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