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In The News

Hon'ble Union Minister Dr Jitendra Singh Chairs the 200th Governing Body Meeting of CSIR

Keeping in tune with the transformations happening in CSIR, the Minister of Science and Technology also released the new tagline, "CSIR — The Innovation Engine of India".



Hon'ble Union Minister for Science & Technology, Dr Jitendra Singh, who is also the Vice President of CSIR, addressed the 200th Governing Body Meeting of CSIR at the Science Centre in New Delhi on 17 December 2022 where he also announced the launching of "One Week, One Lab" countrywide campaign. Dr Jitendra Singh recalled that Prime Minister Narendra Modi, who is President of

the CSIR, had chaired the meeting of the CSIR Society on 15 October 2022 and appreciated the efforts of CSIR in the past 80 years.

The Prime Minister had urged CSIR in the Society meeting to develop a vision for 2042 when CSIR turns 100 years old and also highlighted the significance of documenting the journey of the past 80 years, which can help take a review of



Dr Jitendra Singh said, the legacy of CSIR is built on the cumulative contribution of its several national laboratories and institutes.

progress achieved and identify areas of lacunae which can be addressed. He also suggested that a virtual summit of all labs can be held regularly in which they can learn new things from each other's experiences.

At the 200th Governing Body Meeting of CSIR, Dr Jitendra Singh announced a Special Call for Research Grant Proposals for Women Scientists. The call for research grant proposals is for women scientists including those who have taken a career break and are interested in returning to research and reestablishing their careers. Keeping in tune with the transformations happening in CSIR, the Minister of Science and Technology also released the new tagline, "CSIR — The Innovation Engine of India".

The implementation of a paperless E-office across all labs with effect from 1 April 2023 and an E-performance appraisal system for administrative cadre staff for Reporting Year 2022-2023 was also approved.

Dr Jitendra Singh informed the Governing Body Members that he will soon write to Union Minister for Education Shri Dharmendra Pradhan

and all the Chief Ministers of States to evolve a mechanism for wider sharing of CSIR technological breakthroughs and innovations in schools for students and aspirants who want to pursue fundamental science and research as a strong career option.

Dr Jitendra Singh said, the legacy of CSIR is built on the cumulative contribution of its several national laboratories and institutes. He said, each laboratory of CSIR is unique and specialises in as diverse areas as genomics to geology, material technology to microbial technology and food to fuel.

Dr Jitendra Singh called upon a pool of over 4,500 CSIR scientists to reorient and revitalise the organisation to emerge as Global Centres of Innovations in the AmritKaal. He said, they must focus on emerging innovations in areas like Hydrogen in the energy transition, Carbon capture and storage, Accessible solar power, Plastic recycling and Cheap energy storage.

Dr N.Kalaiselvi, Director General, CSIR, gave a presentation on CSIR activities and achievements from the 199th to the 200th GB meetings.

Members of the present GB include Prof. Ajay Sood, PSA to the Government of India; Dr Samir V. Kamat, Secretary, DoD and Chairman, DRDO; Shri Gurdeep Singh, Chairman and Managing Director, NTPC; Dr Srinivasa Reddy, Director, CSIR-IICT; Dr N. Anadavalli, Director, CSIR-SERC; Finance Secretary and Secretary (Expenditure); Shri Baba A Kalyani, Chairman & MD, Kalyani Group; Prof. K. VijayRaghavan, Former PSA to GoI; Dr Vijay Bhaskar; Dr K.N. Vyas, Secretary, DAE and Chairman, AEC and Dr N. Kalaiselvi, DG-CSIR.

Dr Jitendra Singh said, CSIR breakthroughs in areas like Drone, Heliborne technology, state-of-the-art Sewage cleaning machines, and Aroma Mission has opened up huge opportunities for developing meaningful and equal stake partnership among Research, Academia and

Industry. The Minister said, the state-of-the-art Heli-borne survey technology with cooperation from Jal Shakti Ministry was applied last year in the States of Rajasthan, Gujarat, Punjab and Haryana and this could play an important role in positively contributing to Prime Minister Narendra Modi's Vision and Mission of "Har Ghar Nal Se Jal". Similarly, the mechanised sewage cleaning system developed by CSIR for wider dissemination will help in achieving the target of the Swachh Bharat Mission, he added.

CSIR was established on 26 September 1942 and was registered as a CSIR Society under the Societies Registration Act, 1860. The first meeting of the Governing Body was held on 9 March 1942 that framed the Bye-Laws for the Council amongst other agenda items.

Source: PIB



Director-General CSIR and Secretary DSIR Addresses the CSIR-IHBT Family



Dr N. Kalaiselvi, Director-General CSIR and Secretary DSIR addressed the scientists, staff and researchers of CSIR-Institute of Himalayan Bioresource Technology (CSIR-IHBT), Palampur, at its campus on 30 October 2022. DG-CSIR was attending the two-day CSIR Directors' Conference 2022 "CSIR for Society and Industry" at CSIR-IHBT, Palampur. Dr Sanjay Kumar, Director CSIR-IHBT, warmly welcomed Dr N. Kalaiselvi and introduced the institute.

In her address, Dr N. Kalaiselvi appreciated all the scientists, research scholars and staff members of the institute for their dedication towards research and development work. She also mentioned that CSIR-IHBT has done commendable work in the

field of startup, entrepreneurship and livelihood. CSIR-IHBT is one of the best institutes "where everything is in its place and there is a place for everything". She further said that there is immense potential in the field of science, and we can strengthen the country's economy through value addition and bring India to the ranks of leading countries at the global level. Encouraging the researchers of the institute, she further said, the 21st century belongs to India and through efficient leadership, sincere efforts, ideas and positive energy we can make our country the number one in the world.

Dr Sanjay Kumar assured that team CSIR-IHBT is committed to serving society through relevant science and technology.

Prof. Venu Gopal Achanta Elected as a Member of the International Committee for Weights and Measures (CIPM)

CIPM is a supreme international committee, which is responsible for the development and implementation of weights and measures globally Prof. Venu Gopal Achanta is among 18 members worldwide from different countries. He is the 7th Indian to be on the prestigious international committee.



In a historic election, Prof. Venu Gopal Achanta, Director, CSIR-National Physical Laboratory (CSIR-NPL), New Delhi, has been elected as a member of the prestigious International Committee for Weights and Measures (CIPM). Prof. Gopal was declared an elected Member of CIPM in the recently held 27th General Conference on Weights and Measures (CGPM) meeting during 15-18 November 2022 in Paris, France.

The election of Prof. Gopal is not only significant for CSIR-NPL and the advancement of metrology in the country, wherein metrology is the backbone of industries and national missions of Govt of India i.e. 'Atmanirbhar Bharat', 'Clean and green India', "Swasth Bharat, Sashakt Bharat", etc., but is also a pride of the nation as it would enhance India's global visibility and participation in global decision making. Prof. Achanta is among 18 elected members from different countries and the seventh in Indian history elected to CIPM.

The CIPM is a supreme international committee that functions under the authority of the General Conference on Weights and Measures (CGPM), the highest intergovernmental international organisation created as a diplomatic treaty called the Meter Convention signed on 20 May 1875 in Paris. It is responsible for the development



Prof. Venu Gopal Achanta, Director CSIR-NPL during 27th CGPM at Paris, France

and implementation of International Systems of Units, universally abbreviated as SI, its wide dissemination, making necessary modifications from time to time for the advancement of science and technology. The advancement of Industry in the country is directly dependent on the state of its metrology capabilities.

The Government of India enacted the “Standards of Weights and Measures Act” for the first time in 1956 to ensure that every citizen has access to uniform standards of weights and measures that are traceable to the SI units.

At present, CGPM is represented by 64 member countries and meets every fourth year at the International Bureau of Weight and Measures (BIPM), France. The CIPM advises and recommends the amendments, changes, and alterations to the SI to the CGPM for formal adoption. It can also pass resolutions and recommendations about the basic units of measurement, if needed, at its own authority. The primary objective of the CIPM comprising 18 members from 18 member states (nations), is to promote international harmonisation of SI, meet annually, and deliberate reports sent by its 18 Consultative Committees (CCs), among other matters brought to its notice as per mandate. Each member of the CIPM takes responsibility for the Chairmanship of one CC.

The CSIR-NPL, the National Metrology Institute (NMI) of India was established by the Council of Scientific and Industrial Research (CSIR), New Delhi on 4 January 1947. The Government of India enacted the “Standards of Weights and Measures Act” for the first time in 1956 to ensure that every citizen has access to uniform standards of weights and measures that

are traceable to the SI units. During the year 1957, India became the member of the CGPM.

After taking over the charge of the Directorship of CSIR-NPL, New Delhi, in June 2022, Prof. Venu Gopal Achanta is continuously working towards taking the metrology movement forward not only at the national level but internationally too. Dr K.S. Krishnan, the founder Director of CSIR-NPL was the first member elected to CIPM. The last elected CIPM member of India was Prof. E.S.R. Gopal, the then Director, CSIR-NPL (1991-1997).

This year CGPM has adopted seven important resolutions including new SI prefixes ronna (10^{27}), quetta (10^{30}), ronto (10^{-27}) and quecto (10^{-30}). With this nomenclature, mass of the electron (1 quectogram) and weight of earth (1 ronnagram) can be expressed easily in SI units. The CGPM also plans to resolve the issue of a leap second.

The details of all the important decisions taken during this CGPM are available at the BIPM

website: (<https://www.bipm.org/documents/20126/64811223/Resolutions-2022.pdf/281f3160-fc563e63-dbf7-77b76500990f>).

MoUs

CSIR-NIO signs MoU with BITS Pilani, KK Birla, Goa

CSIR-National Institute of Oceanography (CSIR-NIO), Goa, and BITS Pilani, KK Birla, Goa signed a Memorandum of Understanding (MoU) on 11 October 2022 to develop a long-term collaboration in the areas of education, training and research in the areas of biology, chemistry, marine instrumentation and high-performance computing.

The MoU was signed by Prof. Sunil Kumar Singh, Director, CSIR-NIO and Prof. Suman Kundu, Director, BITS, Pilani, K.K. Birla Goa Campus in the presence of Prof. D.M. Kulkarni, Dean Administration, Prof. Meenal Kowshik, Associate Dean, Sponsored Research and Consultancy Division, BITS Pilani, KK Birla, Goa and Dr V.V. Sanil Kumar, and Shri. Venkat Krishnamurthy of CSIR-NIO.



CSIR-NIO and BITS Pilani, KK Birla, Goa, have a long history of cooperation in various scientific domains of interest and this MoU will now facilitate a roadmap for further meaningful interactions that are drawn on mutual strengths of the two organisations in the specific fields of oceanography. CSIR-NIO by virtue of its systematic and focused

research in the field of ocean data collection, environmental impact assessment, and ocean modelling, has maintained the highest standards in this domain and thus this collaboration will now facilitate the utilisation and sharing of the expertise of both the organisations with the latest developments in the field of oceanography.

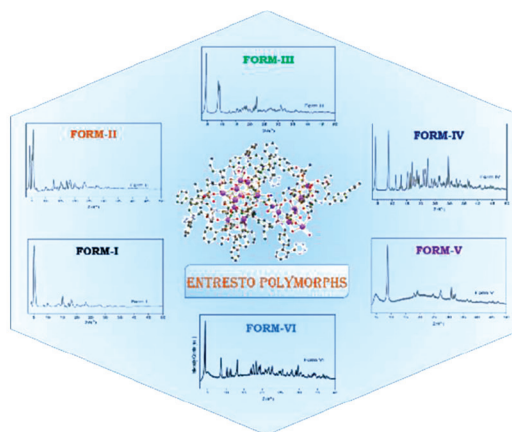
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R&D

CSIR-NCL and University of Hyderabad Discover Novel Hydrate Polymorphs of Entresto

CSIR-National Chemical Laboratory (CSIR-NCL), Pune, as part of a Mission Mode programme funded by the Council of Scientific and Industrial Research (CSIR), initiated research on novel crystalline hydrate forms and polymorphs of Entresto in 2018. Prof. Ashwini Kumar Nangia, then Director of CSIR-NCL, and Dr Rajesh G. Gonnade, Chief Scientist from the Physical and Materials Chemistry Division, led the project.

The comprehensive study has appeared in the Royal Society of Chemistry journal *CrystEngComm*, which deals with crystal engineering and drug polymorphs. The research team has successfully characterised and identified six different crystalline forms of Entresto, with varying amounts of water content and containing the Active Pharmaceutical Ingredients (APIs) valsartan and sacubitril in their anionic state with bonded sodium cations. The



Prof. Ashwini K. Nangia



Dr. Rajesh G. Gonnade

Prof. Gautam R. Desiraju says that the results are important because they have come at the intersection of cutting-edge science, legal questions, and commercial viability.

different hydrated forms of Entresto have 2.0-3.2% water and exhibit additional stability to temperature and moisture, which is vital for their long-term storage, shelf-life, and drug bioavailability. This paper is the first of its kind wherein investigators have shown that large supramolecular drug complexes pose unique challenges in the characterisation of polymorphs and hydrate structures by powder X-ray diffraction, thermal measurements, and spectroscopic techniques. The next task for the team will be to understand the molecular packing arrangement and hydrogen bonding with water by determining its crystal structures.

Prof. Gautam R. Desiraju, Emeritus Professor, IISc, Bengaluru, and former president of the International Union of Crystallography, commented on the significance of this novel disclosure, saying that these results are important because they have come at the intersection of cutting-edge science, legal questions, and commercial viability. He added that utmost scrutiny from various quarters is needed to safeguard IP from Indian labs and institutions. India is at the forefront of international crystal engineering research.

Entresto is the world's top-selling drug launched for the treatment of chronic heart failure in advanced critical patients, approved by the US FDA in

2015. It is different from other drugs having a multi-drug supramolecular complex of sacubitril and valsartan as a trisodium Hemi-pentahydrate salt-cocrystal. Most drugs in the market are single drug molecules, while others are Fixed Dose Combinations (FDCs) or administered as a combination of multiple drugs (cocktail dosage) for treatment. Entresto is a first-in-class drug designed and developed using crystal engineering principles, supramolecular synthons and pharmaceutical cocrystals published in the academic literature starting from the early 2000s and patents filed in subsequent years. A drug can exist in the solid state in more than one crystal form, referred to as polymorphs. These are important for tablet oral formulation and its bioavailability properties, such as solubility, permeability, and adsorption in the body.

Entresto is different from other drugs in other aspects too. For example, the cocrystal-salt complex's crystal structure comprises six sacubitril and valsartan molecules, each in their anionic form, along with 18 penta- and hexa-coordinated sodium cations and 15 water molecules, thus providing a molecular formula of $C_{288}H_{330}N_{36}O_{48}Na_{18}15H_2O$, of molecular weight 5748. On the other hand, most drugs have a molecular weight of less than 500.

Maternal Ancestry of Nepal is a mixture of South- and East-Asian Population, find researchers at CSIR-CCMB



Being at the crossroad of the Himalayan region, Nepal offers a unique ground to understand South and East Asian genetic ancestry. The Himalayan Mountains range of Nepal has served as a geographical barrier to population migration, while at the same time, its valleys have served as continuous trade and exchange. Yet, despite the long-term economic and cultural importance of Himalayan trade routes, little is known about peopling and the early population history of this region. An international team of researchers led by Dr K.Thangaraj, CSIR-Centre for Cellular and Molecular Biology (CSIR-CCMB), Hyderabad, India, have studied the maternal ancestry of Nepal populations, and the results were published on 15 October 2022 in the journal *Human Genetics*.

“This is the first largest study on the Nepali populations, where we have analyzed the mitochondrial DNA sequence of 999 individuals from different ethnic groups of Nepal, including Newar, Magar, Sherpa, Brahmin, Tharu, Tamang, and

populations from Kathmandu and Eastern Nepal and found that most Nepali populations have derived their maternal ancestry from the lowland populations than the highlanders,” said Dr K. Thangaraj, who is presently the director of DBT-Centre for DNA Fingerprinting and Diagnostics (CDFD), Hyderabad.

The results obtained from this study helped the researchers in filling several critical gaps about the history and past demographic events that shaped the present Nepalese genetic diversity. “Our study showed that the ancient genetic make-up of Nepalis was gradually transformed by various mixing episodes along the migratory path to Nepal; the carriers of some mitochondrial lineages may have crossed the Himalayas into Nepal, most likely via Southeast Tibet, between 3.8 and 6 thousand years ago,” said Rajdip Basnet, the first author of the study from Tribhuvan University, Nepal.

“Tibeto-Burman communities like Newar and Magar revealed distinct population history than contemporary

“This is the first largest study on the Nepali populations, where we have analyzed the mitochondrial DNA sequence of 999 individuals from different ethnic groups of Nepal, said Dr K. Thangaraj.

While interacting with the students, Prof. Aggarwal stressed the importance of building a career in basic sciences and enthralled the students with experiences from her own scientific and academic career.

high-altitude Tibetans/Sherpas. This study using history, archaeological and genetic information has helped us in understanding the population history of Tibeto-Burman communities of Nepal,” said Dr Niraj Rai, one of the authors from DST-Birbal Sahni Institute of Palaeosciences, Lucknow.

“The cultural ties of Nepal with India and Tibet reflected in their

genomic ancestry,” said Gyaneshwer Chaubey, a Professor from Banaras Hindu University and co-author of the study. “Such a study is helpful for establishing the genetic affinities of populations across our border and for better understanding of early human migration,” said Dr Vinay K. Nandicoori, the director of CSIR-CCMB.

Events

CSIR-NIScPR Organises Student-Scientist Connect Programme

“Science has no boundaries and passion is the prerequisite to be a scientist. Through path-breaking discoveries & inventions, scientists address the challenges of the general public.” Prof. Ranjana Aggarwal, Director of CSIR-NIScPR (CSIR-National Institute of Science Communication & Policy Research), New Delhi, shared these thoughts during her inaugural address in a Student-Scientist Connect Programme organised by CSIR-NIScPR.

The programme was conducted under the Jigyasa programme of CSIR in which 33 school students from Jaipur, Rajasthan visited NIScPR, Pusa campus, New Delhi, on 3 November 2022.

While interacting with the students, Prof. Aggarwal stressed the importance of building a career in basic sciences and enthralled the students with experiences from her own scientific and academic career. She conveyed how the country’s problems may be solved by developing indigenous solutions. She also encouraged the visiting students to be passionate about the same. Further, Prof. Aggarwal cited a few key examples of how CSIR-NIScPR is a unique platform of communication-policy research encourages participation from



Prof. Ranjana Aggarwal, Director of CSIR-NIScPR felicitating the students with certificates

the public in scientific events and on similar grounds, she asked the students to partake in the current and future events being hosted by the institute.

Science students (of classes 11-12th) along with their teachers of the Rajdhani School, Kanwarpura, Jaipur, were hosted at the Pusa campus of CSIR-NIScPR during a Student-Scientist Connect Programme of CSIR’s Jigyasa initiative. The students were familiarised with the contributions and technologies of CSIR laboratories that form a part of our daily life activities and were encouraged to be a part of such S&T innovations that contribute to nation-building.



Shri CB Singh, Head, Jigyasa, Training and HR Division of CSIR-NIScPR provided insights into the significance of Jigyasa's student-scientist connect programme. He explained how Jigyasa contributes to promoting scientific temperament among students through lectures, webinars, and training programmes in association with different CSIR laboratories all across the country. Mr Singh emphasised the importance of the recently launched *CSIR Online Virtual Laboratory Portal* that provides simplistic explanations for the scientific phenomenon and applications driving the everyday activities of humans.

Dr R.S. Jayasomu, Chief Scientist, CSIR-NIScPR, took the discussion further with his valuable talk related to a *Career in Science Communication*. He elaborated on how CSIR-NIScPR operates in imparting scientific knowledge back to society and thus is a unique CSIR institution. His talk also introduced the students to CSIR-NIScPR magazines and the '*Wealth of India*' encyclopedic series that imparts authentic knowledge of the vast plethora of India's flora, fauna and mineral reserves.

Dr Suman Ray, Principal Scientist and PI-Jigyasa, CSIR-NIScPR, delivered a brief presentation on the achievements of different CSIR laboratories since the induction of CSIR in 1942. This was followed by the students' visit to the

Printing Section, Ayur Vatika, Raw Material's Herbarium and Museum facilities housed at the campus.

Earlier, students also visited the Popular Science Division where Ms Shubhada Kapil briefed about the popular science magazines namely *Science Reporter* (English), *VigyanPragati* (Hindi) and *Science Ki Duniya* (Urdu). The students were made aware of the significance of the popular science magazines in taking science to the masses in a language they can understand. The students were also motivated to contribute to these popular science magazines.

On this occasion, Director, CSIR-NIScPR, distributed a special issue of the *VigyanPragati* magazine to all the visiting students and felicitated the students with certificates of participation.



Dr Suman Ray, Principal Scientist of CSIR-NIScPR explaining to visiting students about the medicinal values of the AyurVatika plants



Dr Sunita Garg, Emeritus Scientist, CSIR-NIScPR explaining the highlights of NIScPR's Herbarium of raw materials

CSIR-IHBT Promoting Saffron Cultivation in Himachal



Shri Mulkh Raj Premi, appreciated the efforts made by CSIR-IHBT for saffron cultivation and supporting farmers in Himachal Pradesh.

CSIR-Institute of Himalayan Bioresource Technology (IHBT), Palampur, conducted a one-day training-cum awareness programme on 28 September 2022, on “Improved Agro Technology of Saffron Production” at Baragran, Multhan, District Kangra, Himachal Pradesh.

Shri Mulkh Raj Premi, Hon'ble Member of Legislative Assembly, Baijnath Vidhan Sabha Constituency, Himachal Pradesh, was the Chief Guest on this occasion. In his address, Shri Mulkh Raj Premi appreciated the efforts made by CSIR-IHBT for saffron cultivation and supporting farmers in Himachal Pradesh. He emphasised the importance of the saffron crop and asked farmers to come forward for its cultivation. During the event, he also distributed the saffron corms among farmers. Several farmers from villages (Baragran, Nalhota, Kothikohad, Rajgundha, Ruling, Kukadgundha) including unemployed youth, Panchayat officials and agriculture officials participated in the training. In addition,

Shri Bhikham Kapoor, BJP Mandal President, and Smt Ramita Devi, Mahila Mandal President of Baijnath were also present during the programme.

Dr Sanjay Kumar, Director, CSIR-IHBT, also shared his views with the farmers and informed them that the institute is closely associated with the State Agriculture Department for saffron cultivation on a pilot scale in the region. The institute frequently organises such training camps to upgrade the skills of agriculture officers and empower farmers to make India self-sufficient in producing high-value crops.

In this training programme, Dr Rakesh Kumar, Senior Principal Scientist, CSIR-IHBT, and Dr Renu Sharma, Subject Matter Specialist from State Agriculture Department Multan, showcased farming techniques, including sowing, site selection, quality analysis, nutrient management, weed management, pest management, post-harvest practices and storage of saffron.

CSMCRI Organises Vigilance Awareness Week

CSIR-Central Salt & Marine Chemicals Research Institute (CSIR-CSMCRI), Bhavnagar, organised the Vigilance Awareness Week 2022 from 31 October to 6 November 2022 under this year's theme "Corruption Free India for a Developed Nation" in pursuance of the instructions issued by the Central Vigilance Commission. The programme was inaugurated on 31 October by Shri Subhash Chander, Administration Controller of the Institute, by administering the Integrity Pledge and National Integration Day oath to all the staff members and in respect of Vigilance Awareness Week 2022, Hon'ble President of India, Prime Minister, Minister of Science & Technology and others Messages from the dignitaries were also read out.

Various competitions, quizzes and lectures, etc. were organised throughout the week. On 2 November 2022, a lecture was presented by the Controller of Administration Mr SubhashChander on the topic "RTI Act-2005 –An overview and a tool to prevent corruption" in which the need to be vigilant in various areas of official work was emphasised.

On 3 November 2022, a detailed lecture was presented by Section Officer, Mr NripendraChandalia (Store & Purchase) on purchase-related matters. On 4 November 2022, Dr Ranjan S. Katoch, IAS (Retd) & IEM (CSIR)



delivered an online lecture on the topic "Corruption Free India for a Developed Nation". The director of the institute, Dr Kannan Srinivasan, in his address called upon all the employees of the institute to be aware and always alert. He said that in the changing environment where the trend of online has increased, the need for vigilance related to it has also increased.

Section Officer Mr Goravendra Shukla, Mr Sanjay Chauhan, Mr Sunil Dalal and other personnel associated with the administration made a significant contribution to organising Vigilance Awareness Week. The scientists and staff of the institute enthusiastically participated in the week-long events.

CSIR-IIIM Celebrates the 12th Tree Talk Foundation Day in collaboration with SFE, Jammu Chapter

CSIR-Indian Institute of Integrative Medicine (CSIR-IIIM), Jammu, celebrated the 12th Tree Talk Foundation

Day (1280th tree talk) on 19 December 2022 at the CSIR-IIIM Jammu campus in collaboration with Society for



The director of the institute, Dr Kannan Srinivasan, in his address called upon all the employees of the institute to be aware and always alert.



The broad theme of the event was “Medicinal and Aromatic Plants (MAPs) & CSIR-Aroma Mission Phase-2”.

Ethnopharmacology (SFE), India Jammu chapter. The broad theme of the event was “Medicinal and Aromatic Plants (MAPs) & CSIR-Aroma Mission Phase-2”. More than 200 participants from different walks of life, including scientists, tree talk enthusiasts, conservationists, ayurvedic doctors, academicians, students, researchers, poets, and traditional healers, participated in the programme.

Dr O.P. Vidyarthi (Retd IFS), Tree Talk Founder, gave a detailed presentation about the 12-year journey of the Tree Talk initiative wherein he shared his experience about the MAPs of J&K and their nutritional and economic potential for the betterment of society. He thanked all the stakeholders and participants who made the Tree Talk initiative successful over the years.

Chief Guest of the programme, Er Abdul Rahim, Chief Scientist and HOD, RMBD&IST Division, IIIM Jammu, gave details of research undertaken on MAPs at CSIR-IIIM. He conveyed the message of Dr D. Srinivasa Reddy, Director, IIIM Jammu. Dr Reddy, in his message, congratulated Dr O.P. Sharma on the 12th Tree Talk Foundation Day. On behalf of Director IIIM, Er Rahim assured full support to the SFE and Tree Talk initiatives in future endeavours.

Earlier, in his presentation, Dr Sumeet Gairola, Principal Scientist and Nodal Scientist CSIR-Aroma Mission Phase-2, gave details of CSIR-

Aroma Mission activities of CSIR-IIIM, Jammu. He apprised participants of the rich scientific history of CSIR-IIIM Jammu. He informed participants about the exemplary work done by great scientists like Col. Sir R.N. Chopra and Dr E.K. Janaki Ammal at CSIR-IIIM, Jammu.

Dr Prasoon Gupta, Principal Scientist, and Coordinator SFE, Jammu Chapter, informed participants about pan India activities and the mission of SFE. He urged all to join SFE for the betterment of Science and Society. In his address, Dr Dhiraj Vyas, HOD Plant Sciences and Agrotechnology Division, discussed the relevance of Tree Talks in conserving Biodiversity.

More than 30 posters on Ethnopharmacology and Medicinal plants were displayed under the competitive category. Participants exhibited several wild edibles, medicinal and religious plants, plant products, innovative cuisines, sweets, and teas. Tree Talk Enthusiasts who were felicitated on this occasion are Prof. Vijay Chandan, Prof. Ran Vijay Singh, Mr Kewal Parihar, Ms Taslima Sheikh, Mr Sham Lal Agnihotri, Dr Kiran Sharma, Prof. Parmil Kumar, Mr Sandeep Gupta, Dr Anzum, Mr Sumit Soodan, and Mr Purshotam Dubey Shastri.

The programme concluded with a vote of thanks by Dr Sumeet Gairola.

CSIR-IIIM Celebrates its 82nd Foundation Day



CSIR-Indian Institute of Integrative Medicine (CSIR-IIIM), Jammu, celebrated its 82nd Foundation Day on 1 December 2022. In this connection, an impressive programme was held, which was largely attended by eminent scientists, faculty members of research & educational institutions, entrepreneurs, invited dignitaries and members of CSIR-IIIM.

Prof. S.P. Gautam (former-Chairman, Central Pollution Control Board (CPCB), New Delhi), was the chief guest on the occasion. Dr D.Srinivasa Reddy, Director, IIIM, Jammu,

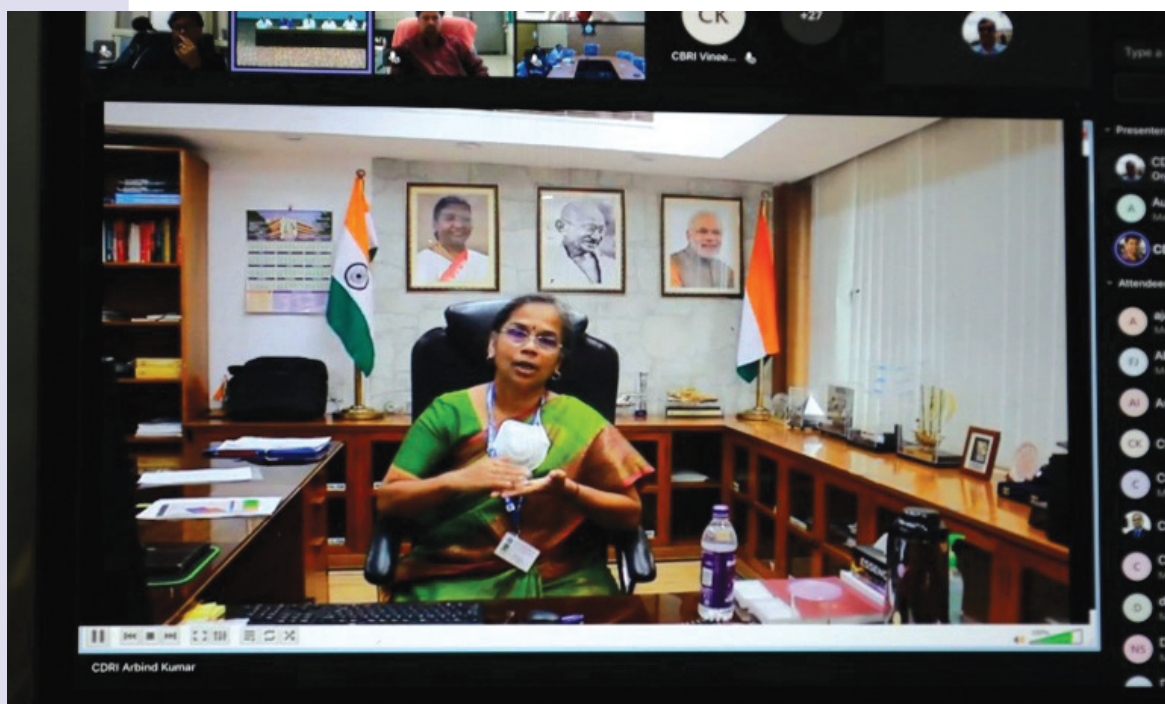
introduced him to the audience and described him as a versatile personality, an administrator and an academician par excellence.

On this occasion, the chief guest distributed prizes for different activities like the Best Research Paper Award, Science Quiz and winners of various tournaments/activities like Badminton and cricket organised as part of foundation day celebrations.

Dr Deepika Singh conducted the proceedings while Er Abdul Rahim, Chief Scientist & RMBD&IST Division presented a vote of thanks.

Training/Awareness Programme for PME Scientists/Financial Officials of CSIR Labs

CSIR-Human Resource Development Centre (CSIR-HRDC), Ghaziabad, organised two days training/awareness programme during 25-26 August 2022 for PME Scientists and Financial Officials of CSIR labs in the campus of



CSIR-Central Drug Research Institute (CSIR-CDRI), Lucknow. About 45 participants from various CSIR labs joined.

Prof. S.K. Barik, Director, CSIR-National Botanical Research Institute (CSIR-NBRI), Lucknow, inaugurated the programme that emphasised and

covered all aspects of CSIR Project Management, CSIR Budgeting and categorisation, project costing, procurement procedure of goods & services in CSIR. The programme was coordinated by Shri Ajeet Singh and Dr Shobhna Choudhary from CSIR-HRDC.



Empowering self and others for Organizational Effectiveness

CSIR-HRDC organised a half-day programme on "Empowering self and others for Organisational Effectiveness" on 19 September 2022 for all staff members of HRDC. Resource persons were from Brahmakumaries.



Orientation Training Programme for Newly Promoted Section

Officers Three days Orientation Training Programme for newly promoted section officers was organised during 12-14 October 2022 by CSIR-HRDC. The programme was inaugurated by Shri M.K. Gupta, Joint Secretary, CSIR. Twenty-five newly promoted section officers from various CSIR labs participated in this programme. Resource persons were experts from their respective domains within CSIR and outside CSIR too.



Visit of DG-CSIR Dr N. Kalaiselvi

Dr N. Kalaiselvi, DG, CSIR & Secretary, DSIR visited CSIR-HRDC on 17 October 2022. She interacted with the staff of CSIR-HRDC and discussed the future roadmap of CSIR-HRDC. DG, CSIR encouraged the staff to do their best to excel. A newly designed brochure of CSIR-HRDC was also released by DG-CSIR on this occasion.



Programme on Ethics in Research and Governance for CSIR Biological Sciences Cluster

A five-day Programme on 'Ethics in Research and Governance' was organised by CSIR-HRDC during 17-21 October 2022. The programme was inaugurated by Dr N. Kalaiselvi, Director General, CSIR & Secretary, DSIR. Scientists from various CSIR Biological labs participated in this programme.

Dr R.K. Sinha, Head, CSIR-HRDC, welcomed the participants and the dignitaries. Dr Shobhona Sharma, Former Sr Professor, Tata Institute of Fundamental Research (TIFR), Mumbai and Ombudsman Biological Sciences, CSIR, was the Guest of Honour. Dr Sharma shared her experience and knowledge with the participants.

The programme covered various aspects of CSIR policy on Ethics in Research and Governance. Resource persons were Prof. K. Muralidhar, Prof. S.C. Lakhota, Distinguished Professor (BHU) & SERB Distinguished Fellow, Cytogenetics Laboratory, Prof. A.K. Singhvi, Vice President INSA and Honorary Scientist, Physical Research



Laboratory, Ahmedabad, and many others from renowned institutes. Dr Avanish Kr Srivastava, Director, CSIR-AMPRI also shared his experiences during his valedictory address.

Fit India Freedom Run 3.0

On the occasion of Rashtriya Ekta Diwas or National Unity Day CSIR-HRDC organised Fit India Freedom Run 3.0 in which all staff members participated and enjoyed with great enthusiasm. They also took a pledge to be united and fit.



Visits

Visit of Norwegian Research Council Representatives to CSIR-NIO

Representatives from the Research Council of Norway, Ms Merethe Sandberg, Special Adviser, Ms Marianne Jensen, Head of Department and Ms Anicke Brandt-Kjeldsen, Head of Department, Mr Rahul Maheshwari, Advisor-Economic, Political and Public Affairs, Norway Consulate-General, Mumbai, visited CSIR-National Institute of Oceanography (CSIR-NIO), Goa, on 14 October 2022, to explore potential bilateral collaborations in ocean research.

Professor Sunil Kumar Singh, Director, CSIR-NIO briefed the delegation about the ongoing research programmes in the Institute. Heads of various divisions of the institute were



present in the meeting. The possibilities of scientific collaboration between CSIR-NIO and the Norwegian institutions were discussed in detail. It is suggested to have a series of interactions in future to develop bilateral collaboration in mutually interesting fields of Ocean research.

Awards & Honours

CSIR-NCL's technology business incubator Venture Center receives National Intellectual Property Award for Nurturing IP

The technology business incubator at CSIR-National Chemical Laboratory (CSIR-NCL), Pune, Venture Center has been declared the winner of the National Intellectual Property Awards 2021 & 2022 under the category of "Best Incubator for Nurturing IP". This award is given by the Office of Controller General of Patents, Designs, and Trademarks.

The award was given on 15 October 2022 at an event held in Delhi in the presence of Shri Piyush Goyal, Hon'ble Minister of Commerce and Industry.



Dr Soma Chattopadhyay, Head, Incubation & Mentoring, at Venture Center received the award. This award helps cement the Venture Center's positioning as the top inventive enterprise incubator in the country.



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