



The Innovation Engine of India

## NEWS BULLETIN

# 01 TO 05 M&Y 2023



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### **India-Israel Friendship - Beginning of a New Era of Industrial Research and Development Cooperation**

CSIR-NAL, NCL, IICT





In a momentous milestone in S&T cooperation between India and Israel, a Memorandum of Understanding (MoU) on Industrial Research and Development Cooperation was signed between the Council of Scientific and Industrial Research (CSIR) under the Ministry of Science and Technology (MoST) of the Republic of India and the Directorate of Defense Research and Development (DDR&D), under the Ministry of Defense of the State of Israel.

Dr N Kalaiselvi, DG, CSIR and Secretary, DSIR thanked the Hon'ble Minister of State(IC), Ministry of Science and Technology and Earth Sciences, GoI and Vice President, CSIR Society for gracing the meeting and his continued support to CSIR. She welcomed the dignitaries and gave an overview of CSIR, showcasing its technological and research prowess as also the ongoing collaboration discussions with DDR&D, Israel in Aerospace, Healthcare, Energy. Sharing CSIR's priority topics she concurred to the interest of DDR&D for furthering collaboration with Israel in high technology areas such as Artificial Intelligence, Quantum and semiconductors, synthetic biology etc.

Acknowledging the ongoing cooperation efforts of CSIR and his team, Dr. Daniel Gold, Head,





DDR&D envisioned that the CSIR-DDR&D cooperation would be beneficial for the welfare of both the countries. He added that DDR&D welcomes collaboration not only with R&D organizations but also with start-ups and companies, venture capitals on both sides. He apprised that AI and photonics are strengths of Israel and welcomed cooperation with CSIR in High Technology sectors which would pave the way for building a better future.

Stressing the successful completion of three decades of India-Israel successful diplomatic relations, Mr. Naor Gilon, Ambassador of Israel to India emphasised the close friendly relations between Israel and India, which have culminated into a strategic partnership after the complimentary visits of Prime Ministers of both the countries in 2018. The present CSIR-DDR&D cooperation would add another feather and be a milestone for India-Israel relations.

Dr N Kalaiselvi and Dr. Daniel Gold signed the CSIR-DDR&D MoU in the august presence of Hon'ble Minister of S&T, Government of India and Vice President, CSIR Society, Dr Jitendra Singh.

The MoU shall enable cooperation in the industrial R&D programs in mutually agreeable industrial technology fields through implementation of specific projects. The collaboration would encompass some of the key industrial sectors including Healthcare; Aerospace & Electronics Instrumentation; Civil, Infrastructure & Engineering; Chemicals and Petrochemicals, Sustainable Energy including Energy Devices; Ecology, Environment, Earth

& Ocean Sciences and Water; Mining, Minerals, Metals & Materials; Agriculture, Nutrition & Biotechnology. The collaboration through the MoU would be steered and the execution monitored by a Joint Steering Committee led by the heads of the CSIR and DDR&D for taking forward mutually benefiting Industrial and technology cooperation.

Specific collaboration on Hydrogen and Aerospace currently under discussed between CSIR and DDR&D were briefed by Dr Abhay Pashilkar, Director, CSIR-National Aerospace Laboratories (CSIR-NAL), and Dr Ashish Lele, Director, CSIR-National Chemical Laboratory





# (CSIR-NCL); they welcomed collaboration on futuristic technologies in these domains, including in High Altitude Platform, Hydrogen Valley programs of CSIR, respectively.

Specific collaboration on Therapeutics between CSIR-Indian Institute of Chemical Technology (CSIR-IICT) and M/s 101 Therapeutics for conducting clinical trials of a COVID-19 drug having enormous therapeutic potential was briefed; if successful this would prove to be highly appropriate and effective for preparation of future pandemics. The cooperation MoU between CSIR-IICT and M/s 101 Therapeutics was also signed during the meeting.

In his remarks, Dr Jitendra Singh said that it is a very important year in the S&T sphere of India under the leadership of PM of India as India is holding G20 presidency, celebrating the International year of Millets, as also India and Israel completed 30 years of successful



He apprised that CSIR has specialized laboratories in almost all the identified priority sectors therefore assured appropriate competence for this cooperation. For e.g. indigenous Hydrogen Fuel Cell bus by CSIR-NCL, purple revolution (Lavender cultivation) by CSIR-IIIM. He welcomed technology partnership with Israel and congratulated both sides for for their efforts to strengthen the India-Israel relationship.

Dr. Rama Swami Bansal, Head, International S&T Affaris Directorate (ISTAD), CSIR thanked

the Hon'ble Minister for his continued support to CSIR, the team from Israel for building and formalizing the cooperation and her colleagues from CSIR and MEA for their kind and gracious presence during the MoU signing meeting today.

#### **Published in:**

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# India and Israel will enhance partnership in areas like innovation and StartUps, and usher in a new phase of deeper bilateral collaboration, says Union Minister Dr Jitendra Singh

CSIR-NAL, NCL, IICT





India and Israel will enhance partnership in areas like innovation and StartUps and usher in a new phase of deeper bilateral collaboration.

This was stated here today by Union Minister of State (Independent Charge) Science & Technology; Minister of State (Independent Charge) Earth Sciences; MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space, Dr Jitendra Singh when a high-level Israel delegation led by Dr. Daniel Gold, Head of DDR&D, Israeli Ministry of Defence, called on him here today.

On the occasion, India and Israel signed a Memorandum of Understanding on Industrial Research and Development Cooperation with focus on several key technology areas, like Aerospace, Electronics Instrumentation, Civil, Infrastructure & Engineering, Ecology, Environment, Earth & Ocean Sciences and Water, Mining, Minerals, Metals & Materials, Chemicals and Petrochemicals, Energy (Conventional & Non-Conventional) and Energy Devices, Agri, Nutrition & Biotech and Healthcare.





The Multi-Sectoral Agreement was signed between CSIR and Directorate of Defense Research and Development (DDR&D), Ministry of Defense of the State of Israel, in the August Presence of Union Minister for Science & Technology, Dr Jitendra Singh at the CSIR-Science Centre, New Delhi.

Welcoming the signing of the agreement, Dr Jitendra Singh said that 2023 is a very important year for the country as India is holding the G20 presidency under the leadership of Prime Minister Shri Narendra Modi. It is also the year when India and Israel are celebrating 30 years of successful diplomatic relations.

The Minister said he is optimistic that this agreement will open a new phase in India-Israel partnership in areas like Innovation, Technology and StartUps.

The Minister said that India-Israel are not only bilateral partners, but play a larger role to address some of the greatest challenges confronting our world, through joint investments and new initiatives in Water, Energy, Transportation, space, health and food security sectors, through the grouping of India, Israel, the United Arab Emirates, and the United States of America – "I2U2" Group.

Dr Jitendra Singh said that the Government headed by Hon'ble Prime Minister Shri Narendra Modi, has been promoting S&T developments and handholding start-up innovations in our country by providing necessary policy and budgetary support enabling action at the ground

level. Science and Technology have always been an integral part of Indian culture. Indian Science has come to be regarded as one of the most powerful instruments of growth and development, especially in the emerging scenario and competitive economy, he said.

The Minister said that Space, Health, Food, Agriculture, Energy, Aerospace, Smart Cities, Environment, Infrastructure, Materials etc. and Sustainable Growth are key pillars and focused areas of our present government.





The Minister was happy to note that India and Israel have bilateral consultation mechanisms in all cooperation fields, including water, agriculture, counter-terrorism, and defence. He said that Defense has particularly been the cooperation priority with Israel and in November 2021, Defense R&D Organization (DRDO) and DDR&D have inked a Bilateral Innovation Agreement (BIA) to promote innovation and accelerated R&D in startups and MSMEs of both countries for the development of dual use technologies.

Dr Jitendra Singh said that it is essential to strengthen bilateral ties particularly for technology development and implementation. CSIR with its strong focus on Industrial research and development, could work with its Israeli peers for strengthening each other's domestic industrial sector as also taking their joint developments to other countries.

The Minister expressed happiness in knowing that the joint activities have already begun in Healthcare, and a way ahead has been made for other important areas likeAerospace, Quantum technologies, Lasers, Green Hydrogen, Instrumentation and water.

Dr Jitendra Singh concluded by congratulating DG, CSIR and Head DDR&D for their efforts to strengthen the relationship.







### **Scientists develop diagnostic test for Chytridiomycosis**





HYDERABAD: Researchers from the CSIR-Centre for Cellular and Molecular Biology (CCMB), in collaboration with researchers in Australia and Panama have established a new test for successful diagnosis of Chytridiomycosis.

Often referred to as the driver of the 'amphibian apocalypse', Chytridiomycosis is an infectious disease that has driven more than 90 amphibian species to extinction globally. It is caused by two fungal pathogens: Batrachochytrium dendrobatidis (Bd) and Batrachochytrium salamandrivorans (Bsal).

The researchers have developed and validated a new marker for the disease which has been published in 'Transboundary and Emerging Diseases'.The team, comprising research scholars, researchers and scientists from CCMB, Bangalore University, Padmaja Naidu Zoological Park, Ashoka University, University of New South Wales, James Cook University and the Smithsonian Tropical Research Institute in Panama, have tested the new marker on several amphibian species including frogs, toads, caecilians (limbless amphibians) and salamanders (tailed amphibians).

The study reported 70% of amphibians with Chytridiomycosis infection, almost eight times higher prevalence than earlier. "Our diagnostic test works well in India, Australia and Panama," said Dr Karthikeyan Vasudevan, lead scientist from CCMB.

#### Published in:







### **CSIR-IIIM conducts awareness for Startup Conclave at GDC** Udhampur





UDHAMPUR, May 4: As part of the Azadi Ka Amrit Mahotsav Kaal during the India G20 Presidency and a strong bid for the Start-up India Program, an entrepreneurship awareness program was organized by CSIR-IIIM, Jammu for the students and staff of Government Degree College (Boys) Udhampur.

The Programme was organized under the Patronage of Dr Zabeer Ahmed, Director, CSIR-IIIM, Jammu & Principal, Prof Dr Romesh Kumar Gupta, in coordination with Dr Pankaj Sharma. Dr Saurabh Saran, Principal Scientist, CSIR-IIIM& PI, IIIM-TBI and Er Ankush Varma, Coordinator IIIM-TBI, CSIR-IIIM, Jammu were the expert speakers on the occasion.

Dr Saran & Er Varma, sensitized students & faculty about the developing startup's ecosystem, and informed them about the idea pitching "Hackathon 2.0" which is proposed in the upcoming week and also about the "Startup Conclave" wherein more than 100 startups will be showcasing their innovation in the conclave. The event is proposed at GDC (Boys) Udhampur College ground. The patron hoped that this conclave would indeed give a new leap and life to the Startups at Udhampur.

Prior to this, the program started with welcoming of the guests by Dr Pankaj Sharma, Convener Start-Conclave Facilitation Committee of the College. After this there were two technical sessions conducted by Dr Saurabh Saran and Er Ankush Varma regarding the Hackathon 2.0, and the Startup Conclave to be held in the College. They both shared the success stories of start-ups of Jammu & how CSIR-IIIM did the hand holding in the initial days of their entrepreneurial journey.

Large number of students from various departments of the college participated in the awareness cum interactive session and also shared their ideas about start-ups. The programme was attended by Prof Babu Lal Thakur, Dr Bandana Mazal and assisted by Dr





### Richa Sharma, Dr Jasmeet Kour, Dr Devi Das, Dr Asha Sohil, Dr Rajesh Manhas, Prof Rakesh Singh along with Dr Jang Bahadur Singh and many other staff members of the college.

At the end, the vote of thanks was presented by Prof Shaji Khan, Co-Convener of the Start-

#### up Conclave facilitation committee of the college.











### CSIR-NIScPR organized a "Science-Society Connect: Inculcating Scientific Temper in Young Mind" Program at Government Girls Secondary School (Sarvodaya Vidyalaya), Burari, New Delhi.





CSIR-NIScPR organized a "Science-Society Connect: Inculcating Scientific Temper in Young Mind" Program at Government Girls Secondary School (Sarvodaya Vidyalaya), Burari, New Delhi.

The primary objective of this program was to foster a scientific temper among young minds and promote science education.

Shri C B Singh (Head, Jigyasa, Training and HR Division) welcomed the students and gave an introduction of CSIR & CSIR-NIScPR. This was followed by a talk on "Achievements of

CSIR" with Quiz by by Dr. Suman Ray (Jigyasa Nodal PI). Furthermore, herbal health awareness was done through a talk on "Medicinal Plants" with interactive session through Quiz by Dr. Suman Ray.

The students were motived towards Science through Animated movie shows on "Life below water" and "Indian Astronauts who made it to space". Distribution of NIScPR publications "Vigyan Pragati", Science reporter and "Ayur Vatika bulletin was also done.







### Leather product training with CSIR-CLRI-Chennai organised by **Industries Deptt. Ladakh**





In an ongoing endeavour to create an ecosystem of skilled women to become successful entrepreneurs, and enterprising Self-Help Groups, an awareness cum product demonstration training programme has been organised by the Department of Industries and Commerce, Ladakh with experts from CSIR -Central Leather Research Institute, Chennai at the Department of Handicrafts, from 2nd to



#### 4th May in Leh and on 5th and 6th May in Kargil.

Secretary, Industries & Commerce Department, Ladakh Saugat Biswas interacted with the participants and enquired about their aspirations and expectations from the Department.

Biswas discussed with Assistant Director, Handicraft Department Dr. Stanzin Rabgais developing a section at the Brand Ladakh showroom for selling essential items – tools and tapestry – required for the production of leather products, etc. He stated that quality tools are a prerequisite for producing good products and stated that this step will ease the availability of such items, not easily available in Ladakh, as flagged by the participants.

Further, Biswas directed Joint Director, Department of Industries and Commerce, Lakshya Singhal to organise a visit of the participants to the Brand Ladakh Showroom situated in Leh market and also organise a session on the Sustainable Industrial Policy for the participants' understanding.





Biswas stressed on the importance of producing refined and quality products and urged the participants to make the most of such workshops to learn and produce well-finished products, with emphasising on creating a Unique Selling Point for the product.

The Commissioner/Secretary also directed the concerned officials to install the recently procured machinery for leather product manufacturing at the Common Facility Centre at Chuchot, Thiksey and Matho for the leather product manufacturers of the surrounding villages to benefit from. He also informed that post the procurement of more machines, similar facilities shall be made available at other blocks.

Discussions were also held on organising a month-long hands-on training programme at CSIR Chennai in the coming months, specially designed for women entrepreneurs.

Executive Councillor Ghulam Mehdi, also present during the event commending the efforts of the Department, stated that the constant training and support have resulted in the change that can be seen in the quality of the products over the period of a year.

Around 45 women are participating in the ongoing training programme.







### Meet held on making Noida & Greater Noida quake resistant





The Architects Association of Greater Noida (AAGN) and the Indian Institute of Architects (IIA) Noida Centre organised an event on "Making Noida and Greater Noida Earthquake Resilient" at Greater Noida.

The event comprised a keynote address and a panel discussion by experts in the field of Architecture and Building Construction Technology.

Dr. Ajay Chaurasia Chief Scientist, CSIR—Central Building Research Institute (CBRI), Roorkee was the Keynote speaker. He brought out that there would be extensive damage in

case of occurrence of earthquakes due to the dense built environment and large population.

He highlighted relevant portions of the various building codes in order to enumerate the measures that should be taken to make the built environment earthquake resilient.

He briefed the professionals on measures to be taken for new construction as well as retrofitting techniques to make existing buildings earthquake resistant.

The talk was followed by a panel discussion and question and answer session. The panelists

said that keeping in mind the earthquake related challenges to the built environment, there is also a need for public awareness campaigns to construct buildings using good practices which are given in the various building codes and standards.

Professor Pradeep Kumar Ramancharla, Director CSIR-CBRI (Chief Guest) and Dr. D. P. Kanungo, Chief Scientist, CSIR-CBRI (Guest of Honor) also enlightened the gathering of over 100 architects from the area on the measures to be taken and other techno legal and regulatory issues to be addressed.





Prominent architects in the panel discussion included Balbir Verma, Chairman of the Advisory Committee of the National Information Centre of Earthquake Engineering (NICEE), IIT Kanpur, Col Anuj Srivastava, Chairman IIA Noida Centre and Dr. Harish Tripathi, Principal Architect, ARHTA, participated, discussed and suggested ways to make the

#### city resilient to earthquakes.

Bhavesh Trivedi from ACC Ambuja and Adani Cement who was the sponsor, also addressed the gathering.









### Dr R Narayan takes over as director, CSIR-IMMT, Bhubaneswar

CSIR-IMMT, NEIST



Dr Ramanuj Narayan, has taken over the charge as the Director of CSIR- IMMT Bhubaneswar.

Dr. Ramanuj took over the charge from Dr. G Narahari Sastry, who was in additional charge of the institute besides being the Director of CSIR-NEIST Jorhat.



Dr. Sastry said, It was my pleasure to be a part of this institute. This is indeed a great time for CSIR IMMT as it is celebrating its Diamond Jubilee and also hosted the prestigious G20 summit recently. I am happy to handover the responsibility to a young and energetic researcher like Dr. Ramanuj. He is a well accomplished scientist balancing both academic and transnational work. With his vast experience, he will take the name of CSIR – IMMT to a great high.

Dr Ramanuj Narayan said, I am very happy to take the charge from my Guru Dr. Sastry. More than 100 scientists along with technical, administration and support staff are putting their committed efforts towards serving the industrial and academic services for sustainable solutions.

#### **Published in:**

The Statesman





### Swachchhata Pakhwada at CSIR-NML Jamshedpur





In alignment to the Swachh Bharat mission of Government of India, a 15 day cleanliness drive Swachhata Pakhwada is being observed at CSIR-National Metallurgical Laboratory (CSIR-NML), Jamshedpur during 1 to 15 May 2023 under the guidance of Dr Avanish Srivastava, Director, CSIR-NML and coordinated by Dr Sarmistha Sagar, Chief Scientist and team. The team comprises of



#### Ajay Tirkey, RR Srivastava and Pankaj Kumar.

Swachhata Pakhwada commenced with with Swachhata Pledge taking ceremony by the entire staff of the laboratory on May 1. CSIR-NML staff took oath for keeping their surroundings neat, clean and organized.

A number of events have been planned during these 15 days. Cleanliness drive and Tree Plantation program started on May 2 at the Main Laboratory in Burmamines premises and surroundings.

Under the leadership of Dr Sandip Ghosh Chowdhury, Chief Scientist around 17 trees were planted in and around the main laboratory by the team. The purpose of the tree planation event was to spread general awareness and motivate people towards growing more trees for the benefit of future generations. On May 3, the team led by Dr MK Mohanta, Sr. Principal Scientist and Dr Manoj Kumar, Sr Principal Scientist, cleaned and planted 7 trees in the CSIR-NML Pilot Plant and Magnesium Plant area.





In order to spread the awareness of the importance of cleanliness amongst various age groups of people, various other events have also been planned, to be organized by CSIR-NML like Sit and Draw Competition for school children on the theme of cleanliness, Quiz and Essay Competition for youth Slogan Writing Competition, Water Purifier and dustbins installation at different places, Cleanest Division Competition etc. These programs will be organized in both office and residential premises of CSIR-NML. The entire staff of CSIR-NML have been actively participating in the various events.







#### CSIR-CDRI





एवं सोच के अनुसार तथा स्वच्छ भारत मिशन के तहत, हमारा कर्तव्य है कि हम देश को साफ और स्वच्छ रखकर भारत माता की सेवा करें, इसलिए इस संदर्भ में, सीएसआईआर-सीडीआरआई, लखनऊ में दिनांक 1 मई से 15 मई 2023 तक स्वच्छता पखवाडा 2023 आयोजित किया जा रहा है।

संस्थान में स्वच्छता शपथ ग्रहण की शुरुआत हुई। निदेशक डॉ. राधा अपनी आंतरिक एवं बाहरी स्वच्छता के रंगराजन सहित स्टाफ और वैज्ञानिकों तथा बारे में ध्यान अवश्य देना चाहिए। छात्रों ने संकल्प लिया कि वे स्वच्छता के इस मौके पर स्वच्छता पखवाड़ा प्रति प्रतिबद्ध रहेंगे और इसके लिए समय समारोह के संयोजक, इंजीनियर रणवीर



हमारे आसपास की स्वच्छता हमारे मन जानकारी दी। उन्होंने कहा, इस समारोह के साथ पन्द्रह दिवसीय समारोह की स्वच्छता को दर्शाती है इसलिए हमें आयोजन के लिए विभिन्न गतिविधियों लिए सीडीआरआई के परिसर के विभिन्न

बनाए रखना, इमारतों की सफाई, परिसर में पानी के जमाव की जाँच आदि कार्य करने होंगे। सभी प्रयोगशालाओं और कार्यालयों के लिए विभन्न रंग के अपशिष्ट बिन एवं स्वच्छता किट का वितरण भी किया जाएगा। अतिरिक्त एक जागरूकता इसक अभियान और रैली भी आयोजित की जाएगी तथा लोगों को जागरूक करने के की योजना बनाई गई है। वृक्षारोपण के स्थानों पर जागरूकता के लिए बैनर/पोस्टर साथ नए लॉन की सफाई एवं बेहतर भी लगाए जाएंगे। इस दौरान बनाना, सीडीआरआई निवासियों के सीएसआईआर-सीडीआरआई में विशेषज्ञों बीच जागरूकता अभियान चलाना, द्वारा जन जागरूकता पर एक समुहिक चर्चा

देंगे। इस अवसर पर उन्होंने स्वच्छता के सिंह ने समारोह के दौरान आयोजित स्वच्छ एवं हरित परिसर के लिए एवं कुछ व्याख्यान भी आयोजित किए महत्व के बारे में जानकारी देते हुए कहा कि होने वाले विभिन्न कार्यक्रमों के बारे में सीएसआईआर-सीडीआरआई परिवार जाएंगे।

#### **Published in:**

Vaicharik Tufan, Shaurya Kesri, Rashtriya Sahara, Desh Ki Upasana,





### Western Ghats is museum and cradle of evolutionary diversity, says CCMB study





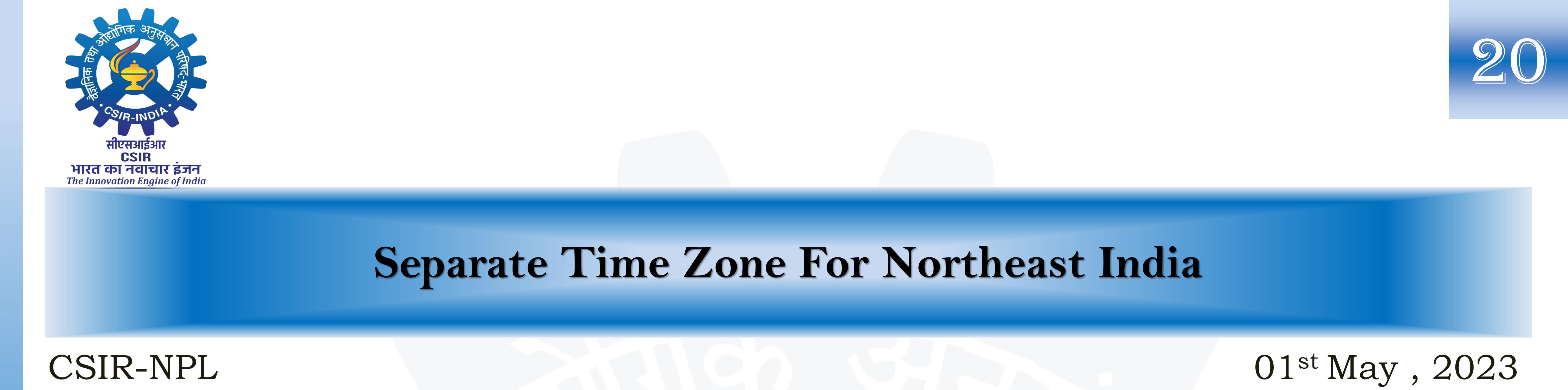
Western Ghats is a global biodiversity hotspot with many woody plants, birds, mammals, reptiles, fishes and insects, among other life forms. Many are endemic, meaning they occur only in this area and nowhere else. The evolutionary diversity is unevenly distributed across the Western Ghats, driven by past climatic and geographic processes and also by current climate, say scientists of the CSIR-Centre for Cellular and Molecular Biology (CCMB) here on Monday. A new study of CCMB's Jahnavi Joshi and her group, done in collaboration with other national and international institutions, sheds light on the evolution of plants in the Western Ghats where they have found effects of niche conservatism for wet sites and also evolution of a new species.

"Western Ghats have a high diversity of woody plants, with over 60% being endemic. They serve as a "museum" and "cradle" of evolutionary diversity, which means it has both old and young (on evolutionary timescales in millions of years) species. The southern Western Ghats has six times higher number of species than the northern Western Ghats," said Abhishek Gopal, first author of the study. Ms. Joshi said such studies spanning over a geographic area, looking at timescales in millions of years, and includes hundreds of species, are helpful as they help us understand if there are any generalities in how diversity is generated and maintained.

"We show that the Western Ghats hold tremendous evolutionary diversity. We highlight the global value and the importance of protecting the southern part - an engine of plant diversification and persistence. The results of this study can also be used to augment the existing protected areas in the landscape facing severe anthropogenic stress." she said. The study has been published in the Proceedings of the Royal Society of B, said a press release.

#### Published in:

The Hindu



While New Delhi brands the 'Act East Policy' as a diplomatic initiative to promote economic and strategic relations with the ASEAN region, the demand for a separate time zone for Northeast India still remains ignored.

The CSIR-National Physical Laboratory (CSIR-NPL) and the National Measurement Institute (NMI) of India explored the possibility of a different time zone for Northeast India and also had proposed an implementable solution. Still, the political masters in New Delhi are yet to decide on the proposal. It is still unexplained as to why there should not be a different time zone for Northeast India.

Or, is New Delhi trying to copy China on the issue of time zones? Despite being a huge country, China too has only one time zone, and people in the westernmost province of Xinjiang often complain about the midnight sunset during summer months. Having more than one-time zone is not new to the world, and it in no way weakens a country.

If New Delhi is trying to connect the time-zone issue with India's national integration, the policymakers can probably take lessons from Russia. And, if Russia can be divided into 11 time zones, it is difficult to understand why India can't have at least 2 time zones.

And, they also need not forget that China hasn't always had one time zone. In 1912, after the collapse of the Qing Dynasty, China established five different time zones, ranging from five and a half to eight and a half hours past the Greenwich Mean Time.

But in 1949, when the Communist Party took over, Mao Zedong decreed that the entire China would be on Beijing time for the purposes of national unity. Legendary Mao Zedong's decree may be the reason for China's single time-zone policy, but what exactly is India's problem?





# The demand from the northeast on the time zone issue is definitely genuine and has often been raised by some of the senior political leaders.

In March 2022, Assam Chief Minister Himanta Biswa Sarma demanded a different time zone for the Northeast India states. The issue was first raised in March 2002 in the Parliament and the then Minister of State for Science and Technology Bachi Singh Rawat had turned down the proposal.

In 2006, the Planning Commission also recommended two different time zones for the country. However, it was not implemented.

A high-level committee was set up by the Union Ministry of Science and Technology in 2009, and it also suggested advancing work timings by one hour in Northeast India.

In June 2017, Arunachal Pradesh Chief Minister Pema Khandu again raised the issue. Khandu's demand was based on the logic that due to early sunset in the region, several daylight hours are wasted every day.

Khandu had said far-east states like Arunachal Pradesh start getting sunlight as early as 4 am, and waiting for six hours to open government offices at 10 am is nothing but a waste of valuable time. He also said lights need to be turned on in offices in the evening, leading to excessive consumption of power.

The Arunachal Pradesh CM had said by advancing the clock by about one-and-half hours for his state, the wastage of both time and energy can be avoided.

Earlier, former Assam Chief Minister Tarun Gogoi in 2014 had raised the issue and demanded at least three time zones in India. Gogoi claimed that during British rule, India was divided into three time zones – Bombay time zone, Calcutta time zone, and Bagan (tea garden) time zone. Even today, tea gardens and the oil industry in Assam follow the timings of the





British era. How can Dong (in easternmost Arunachal Pradesh) and Sir Creek (in the Kutch district of Gujarat) be in the same time zone? Our policymakers should remember that India extends from 68°7'E to 97°25'E, with a spread of 29 degrees, which amounts to almost two hours from the geographical perspective.

The longitudinal extremes of India not only result in the loss of daylight hours but also create problems relating to the biological clock.

The CSIR-National Physical Laboratory (CSIR-NPL), which is the custodian of the Indian Standard Time has proposed two time zones IST-I and IST-II for the country – IST-I (UTC +5:30) would be the same as the current IST, and IST-II (UTC +6:30).

And, the borderline between the two time zones would be 89°52'E, the narrow border between

Assam and West Bengal. The NPL suggested that the states of Assam, Meghalaya, Nagaland, Arunachal Pradesh, Manipur, Mizoram, Tripura, Andaman & Nicobar Islands would follow IST-II (UTC +6:30).







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