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In the News

Hon'ble Union S&T Minister Dr Jitendra Singh Distributes Quality Planting Material at Kisan Sammelan

The CSIR-Indian Institute of Integrative Medicine (CSIR-IIIM), Jammu, on 28 January 2024, organised a Kisan Sammelan under CSIR Aroma Mission-III at Hiranagar, Kathua. Hon'ble Union Minister of State (MoS) Dr Jitendra Singh, holding independent charge of Science and Technology, MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space and Vice President, CSIR, was Chief Guest at the occasion. DDC Chairman Kathua, Mr Mahan Singh; Vice Chairman DDC Kathua, Mr Raghunandan Singh; DDC member, Mr Karan Attri; and Dr Zabeer Ahmed, Director, CSIR-IIIM, were among the prominent personalities.

Over 700 farmers from various villages of Hiranagar Tehsil of Kathua attended the day-long Kisan Sammelan. On the occasion, Dr Jitendra Singh distributed quality planting material for Aroma crops like lemon grass among the area's farmers. Addressing

the farmers, the Minister said that those who have entered aromatic crop cultivation have increased their livelihood income to many folds. "Need of the hour is to give wider publicity and awareness among all stakeholders about these new opportunities of livelihood rolled out in recent years," he said.

Dr Jitendra Singh also appreciated CSIR's efforts to enhance farmers' income through the CSIR-Aroma Mission, which also gave birth to the Purple Revolution in J&K. Dr Zabeer Ahmed expressed gratitude to the Union Minister for gracing the occasion in his address. He appealed to the farmers to take full benefits of the CSIR-Aroma Mission which created a strong connection between farmers and scientists. Dr Zabeer Ahmed highlighted the institute's significant contributions to scientific accomplishments through research and innovation.

"The societal work carried out by the Institute through the implementation of two major mission projects, 'CSIR Floriculture Mission' and 'CSIR Aroma Mission', have immensely benefited the farmers and other stakeholders," Dr Ahmed added.

The Kisan Sammelan was organised to generate awareness among farmers about the activities envisaged under the CSIR-Aroma Mission. Director, CSIR-IIIM, appreciated the successful conduct of the Kisan Sammelan where farmers from remote areas of Gujjar Chak, Sapalwan, Pansar, Haria Chak, Chanlaldin, Chabbay Chak, Khanpur, Parkhwal, Sitra Chak, Chhapaki, Chandatyal, Boiya, Mehsa Chak, devo Chak, Mandyal, Kotepunnu, Marheen, and Dhanni-Bera participated in large numbers. The distribution of quality planting materials aims to sensitise farmers of the region about the versatile and high-value aromatic crops. "The Lavender and Lemongrass varieties developed by the CSIR-IIIM offer immense potential for income generation and diversification of agricultural activities in the region," he said.

Dr Jitendra Singh said that those who have entered aromatic crop cultivation have increased their livelihood income to many folds.

CSIR Tableaux at Republic Day Parade 2024

"Proud to witness the Republic Day tableau of CSIR depicting the first ever e-Tractor and the beautiful Lavender Farms of Aroma Mission originated from Bhaderwah in district Doda of Jammu and Kashmir," Hon'ble Union S&T Minister Dr Jitendra Singh Tweeted.

The Council of Scientific and Industrial Research (CSIR), Ministry of Science & Technology, showcased its tableaux, aligning with the Viksit Bharat theme of the 75th Republic Day Parade (RDP) at Kartavyapath, New Delhi, on 26 January 2024.

The visually enchanting Tableaux of CSIR was based on the famed Purple Revolution ushered through scientific interventions of CSIR for bringing in the phenomenal increase in Lavender cultivation in several regions of Jammu & Kashmir.

CSIR developed an elite variety of lavender suitable for cultivation in the temperate regions of J&K, provided free quality planting materials and end-to-end agro-technologies to farmers, and installed distillation units for essential oil extraction. The success of Lavender cultivation in J&K earned it the sobriquet 'Purple Revolution'. The Tableaux narrated the story of lavender cultivation, harvesting, processing, and product development, taking lavender from lab to market and increasing the culture of agri-start-ups in India.

The front section of Tableaux represented ample cultivation of lavender and an empowered 21st century woman farmer figurine from J&K. The middle section showcased scientific interventions by artists as CSIR scientists and providing saplings to a farmer. The middle section featured artists as farmers working on the lavender farmland. Under agro-mechanical technology, the indigenously developed India's first women-friendly compact electric tractor of CSIR, PRIMA

ET11, was showcased. Highlighting agro-technical developments, the distillation unit for extracting essential oil from lavender flowers was also shown. The rear section featured the concept of Agri-start-ups in India and the export of lavender-based products (perfumes, oil, incense sticks).

The all-women CSIR Tableaux showcased achievements under the Government's initiatives of scientific developments enhancing farmers' incomes, Naari Shakti, Agri-start-ups and increased global business.

The success of Lavender cultivation in J&K earned it the sobriquet 'Purple Revolution'.

Hon'ble Union S&T Minister Presents the CSIR Young Scientist Awards and GN Ramachandran Medal

CSIR-HRDG (CSIR-Human Resource Development Group), New Delhi, organised a Presentation Ceremony to confer the CSIR Young Scientist Awards 2022 and GN Ramachandran Medal 2022 for Excellence in Biological Sciences & Technology 2022 on 27 December 2023 at CSIR-National Physical Laboratory (CSIR-NPL), New Delhi. The Chief Guest of the ceremony was the Hon'ble Union S&T Minister, Dr Jitendra Singh. The other dignitaries included Dr N Kalaiselvi, Director General, CSIR, and Secretary DSIR; Dr Venugopal Achanta, Director CSIR-NPL; Dr T Ramasami, Former Secretary, DST; and Dr Geethavani Rayasam, Head CSIR-HRDG.

Addressing the gathering, Hon'ble Minister Dr Jitendra Singh congratulated and motivated the awardees. Appreciating the efforts of CSIR, Dr Singh said that for over the last 80 years, CSIR has emerged as one of India's most glorious and gratifying organs since independence and has enabled India to acquire a frontline role in the commitment of world nations.

During his welcome address, Dr Venugopal Achanta congratulated and appreciated all the awardees and also briefed about the programme.

In her opening remarks, Dr N Kalaiselvi apprised the gathering that CSIR has been celebrating the encouraging Young Scientist Awards for the last 35 years. Now, this is the 36th year. Further explaining the need for these awards, Dr Kalaiselvi said that in a country like India, when we are getting geared up to position ourselves in the global arena, this is the right time to motivate, prepare and also make ready the next generation leaders in all areas for which science and technology are not an exception. She further added that these awards are the recognition and encouragement to young minds, letting them know that they have the potential to take the graph to greater heights and contribute to the growth of Indian science and technology on a

The Hon'ble Minister Dr Jitendra Singh said that for over the last 80 years, CSIR has emerged as one of India's most glorious and gratifying organs since independence.

During the launch of the CSIR Student Alumni Portal

During the Book release

global scale. "CSIR is extremely happy to conclude the year 2023 by way of making ready the next generation leader in S&T through this kind of motivation," added Dr Kalaiselvi.

Delivering the keynote lecture, Dr T Ramasami shared the story of what India would be in 2047, presenting a storyline of Indian growth since independence.

Earlier during the programme, Dr Jitendra Singh and other dignitaries launched the CSIR Student Alumni Portal, which will act as a pan-CSIR laboratory alumni engagement platform, providing networking opportunities for the alumni, thus adding value to the research ecosystem. Besides, the CSIR Young Scientist Awards 2022 in various categories covering the vast spectrum of scientific disciplines and the GN Ramachandran Medal 2022 were presented to the scientists. Later, dignitaries also released a book titled *"Profiles in Excellence: CSIR Young Scientist Award 1987-2022"*, comprising the achievements of 221 awardees, including 32 women scientists.

Concluding the ceremony, Dr Geethavani Rayasam presented the vote of thanks.

"CSIR is extremely happy to conclude the year 2023 by way of making ready the next generation leader in S&T through this kind of motivation," Dr Kalaiselvi.

CSIR Young Scientist Awards 2022

The CSIR introduced in 1987, a scheme of awards for Young Scientists in the CSIR system in order to promote excellence in various fields of science and technology. The awards are known as the 'CSIR Young Scientist Awards'. CSIR scientists below 35 years of age, as reckoned on 26 September (CSIR Foundation Day) of the preceding year, are eligible for the Award. These awards are given annually in the following fields:

- Biological Sciences
- Chemical Sciences
- Earth, Atmosphere, Ocean and Planetary Sciences
- Engineering Sciences
- Physical Sciences (including instrumentation)

Each award consists of a citation, a cash prize of rupees fifty thousand and a plaque. CSIR Young Scientist Awardees are also entitled to a research grant of rupees five lakh per annum for a period of five years and an honorarium of rupees seven thousand and five hundred per month till the age of 45 years. The following are the recipients:

Dr Andugulapati Sai Balagi

The CSIR Young Scientist Award for the year 2022 in Biological Sciences has been awarded to Dr Andugulapati Sai Balagi of CSIR-Indian Institute of Chemical Technology, Hyderabad, in recognition of his significant basic and translational research in the area of molecular pharmacology and cancer biology.

Dr Harsha Bajaj

The CSIR Young Scientist Award for the year 2022 in Biological Sciences has been awarded to Dr Harsha Bajaj of CSIR-National Institute for Interdisciplinary Science and Technology, Thiruvananthapuram, for her outstanding contributions in developing novel vesicle membrane models having applications in the field of membrane biology and nanotechnology.

Dr Nirmal Goswami

The CSIR Young Scientist Award for the year 2022 in Chemical Sciences has been awarded to Dr Nirmal Goswami of CSIR-Institute of Minerals and Materials Technology, Bhubaneswar, for his significant contributions to nanostructures and applications.

Dr Karnan Chinnadurai

The CSIR Young Scientist Award for the year 2022 in Earth, Atmosphere, Ocean and Planetary Sciences has been awarded to Dr Karnan Chinnadurai of CSIR-National Institute of Oceanography, Goa, for his outstanding contributions to the plankton ecology along the Indian coast, which has immense significance in identifying fishery population.

Dr Amit Kumar

The CSIR Young Scientist Award for the year 2022 in Engineering Sciences has been awarded to Dr Amit Kumar of CSIR-Central Mechanical Engineering Research Institute, Durgapur, for his outstanding contributions to the development of generalised formalism for the wave propagation in thin structures using piezoelectric transducers.

Dr A Mercy Latha

The CSIR Young Scientist Award for the year 2022 in Engineering Sciences has been awarded to Dr A Mercy Latha of CSIR-Central Electronics Engineering Research Institute, Pilani (Chennai Centre), for her outstanding contributions in the areas of high-power microwave devices and THz systems leading to applications in space technology.

Dr Naga Vara Aparna Akula

The CSIR Young Scientist Award for the year 2022 in Physical Sciences (Including instrumentation) has been awarded to Dr Naga Vara Aparna Akula of CSIR-Central Scientific Instruments Organisation, Chandigarh, for the development and advancement of intelligent sensing systems, which have significant strategic and socio-economic implications.

Dr Vishant

The CSIR Young Scientist Award for the year 2022 in Physical Sciences (Including instrumentation) has been awarded to Dr Vishant of CSIR-Central Electronics Engineering Research Institute, Pilani, for his outstanding contributions to the field of gyrotron and sub-Terahertz radiation source.

GN Ramachandran Gold Medal for Excellence in Biological Sciences & Technology 2022

CSIR instituted a Gold Medal in 2004 in the fond memory of Prof. GN Ramachandran, a pioneer of protein chemistry & the founding father of structural biology in India, for recognising excellence in the interdisciplinary subject /field of Biological Sciences & Technology.

Prof. Kaustuv Sanyal

The GN Ramachandran Gold Medal for Excellence in Biological Sciences and Technology for the year 2022 has been awarded to Prof. Kaustuv Sanyal of Jawaharlal Nehru Centre for Advanced Scientific Research, Bengaluru, for his seminal contributions in understanding chromosome segregation, centromere biology and evolution.

Prof. Stefan Mecking Delivers Dr RA Mashelkar Endowment Lecture

Prof. Stefan Mecking, while delivering the lecture

Dr Suresh Bhat, felicitating Prof. Mecking

Prof. Mecking delved into the current challenges facing polyethylene recycling, discussing the persistent nature of the material and the technological hurdles involved.

Prof. Stefan Mecking, Chair of Chemical Materials Science, University of Konstanz, delivered Dr RA Mashelkar Endowment Lecture on "Recyclable and Degradable Polyethylene-like Material Enabled by Catalytic Methods" on 14 December 2023 at CSIR-National Chemical Laboratory (CSIR-NCL), Pune. Organised by the NCL Research Foundation and CSIR-NCL, the Dr RA Mashelkar Endowment Lecture series marked its 78th edition with Prof. Mecking's fantastic oration. The series, named after the distinguished scientist Dr RA Mashelkar, aims to foster knowledge exchange and promote groundbreaking research in the field of chemical science.

In his address, Prof. Mecking shed light on the global significance of plastics, with over 400 million metric tons produced annually. He emphasised the growing role of polymers in diverse sectors, including energy, mobility, communication, and healthcare. He delved into the current challenges facing polyethylene recycling, discussing the persistent nature of the material and the technological hurdles involved.

Prof. Mecking presented innovative approaches to address these challenges. His discourse covered additive manufacturing with polyethylene-like polymers, closed-loop recycling of polyethylene-like polymers, production of polyesters from plastic waste, utilisation of waste polyethylene as feedstock, advancements in polyketones, etc. The lecture concluded with an exciting Q&A session.

Earlier, Dr Suresh Bhat, Chair, Polymer Science and Engineering, CSIR-NCL, set the stage with the welcome remarks. Dr Samir Chikkali, Senior Principal Scientist, introduced Prof. Mecking, highlighting the significance of his research in the pursuit of sustainable materials.

Events

S&T Media and Communicators Conclave at IISF 2023

Uniting Journalism & Science Communication

In an effort to bring together journalism and science communication at a single platform, CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR), National Innovation Foundation (NIF-India) and Vijnana Bharati (VIBHA), organised a two-day programme, "Science & Technology Media and Communicators Conclave", from 18 to 19 January 2024, as part of the mega-science event, the India International Science Festival 2023 (IISF 2023). With a focus on new trends, challenges, and the way forward, the conclave deliberated on the multifaceted relationship between science and media by organising various sessions, including master class, panel discussions, etc.

The conclave inaugurated by the distinguished guests and experts on 18 January 2024 aimed to achieve several objectives, including promoting effective science journalism, highlighting the media's role in science diplomacy, enhancing the representation of science in mainstream media, exploring science and cinema intersections, and facilitating networking and collaboration.

In the opening remarks, Prof. Ranjana Aggarwal, Director, CSIR-NIScPR, said, "India has a rich legacy of communicating science. Science journalism plays a big role in disseminating scientific knowledge to the general public. S&T Media and Communicators Conclave of the IISF is an active

"Science journalism plays a big role in disseminating scientific knowledge to the general public. S&T Media and Communicators Conclave of the IISF is an active platform to engage science journalists, media experts, students, and scientists together to explore a roadmap for spreading science to society," Prof. Ranjana Aggarwal.

Director of CSIR-NIScPR, Prof. Ranjana Aggarwal, welcoming the distinguished guests

Shri Praveen Ramdas, addressing the gathering

Dr William Selvamurthy, President of the Amity STI Foundation, expressed optimism about science meeting the rising aspirations of India, citing Prime Minister Modi's vision for a developed Bharat in the next 25 years (Amrit Kaal), where S&T will play a central role.

platform to engage science journalists, media experts, students and scientists to explore a roadmap for spreading science to society."

Welcoming the gathering, Dr Manish Mohan Gore, Coordinator of the conclave and Scientist, CSIR-NIScPR, provided a background of science journalism, its importance and the relevance of the conclave. Shri Kuldeep Dhatwalia, Senior Consultant at the Science Media Communication Cell (SMCC), CSIR-NIScPR, discussed the conclave theme, offering insights into the dynamic world of science dissemination to society.

In the inaugural session, Shri Praveen Ramdas, Chief Guest and National Joint Organising Secretary, VIBHA, highlighted the growing global recognition of Indian scientists. He further advocated for the extensive dissemination of scientific knowledge in Indian languages, aiming to bring science closer to the people.

During his keynote address, Dr William Selvamurthy, President of the Amity STI Foundation, underscored the pivotal role of science and technology in addressing societal needs. Dr Selvamurthy expressed optimism about science meeting the rising aspirations of India, citing Prime Minister Modi's vision for a developed Bharat in the next 25 years (Amrit Kaal), where S&T will play a central role. Shri Debobrat Ghosh, Editor, *Science India,* and VIBHA Coordinator of the conclave, shared his perspectives, adding depth to the discourse.

Following the inaugural ceremony, an illuminating Master Class was conducted on a focal theme — "Science & Social Media: Good Practices". The session's panellists included Dr Pawan Singh, Head of the Journalism Department at JC Bose University; Shri Pallav Bagla, Science Journalist; Dr Somdatta Karak, Public Outreach Officer at CSIR-CCMB; and Shri Deepak Sharma, a notable Science Communicator. The session was moderated by Ms Rakhee Bakshee, Communication Advisor, Indian Institute of Public Administration.

From left to right: Shri Pallava Bagla, Shri Vijay Joshi, Shri Raj Chengappa, Ms Rakhee Bakshee, Prof. KG Suresh, Dr Sapna Poti and Ms Archita Bhatta

The master class emphasised the importance of social media for science journalism. The panellists during the session suggested that scientists and journalists should adopt innovative and engaging practices for effective science communication. The interactive dialogue ignited a lively and inspiring discussion, reflecting the shared enthusiasm for effective science journalism. Receiving a good response from the audience, the journalism students and science communicators actively asked questions from the panellists. The event served as a platform for knowledge dissemination and emphasised the crucial role of social media in shaping contemporary science communication practices.

Next was the insightful panel discussion on "Significance of Media in India's Science Diplomacy," during which the experts were Mr Uday Kumar Varma (IAS), Former Secretary, Ministry of Information and Broadcasting; Dr Arabinda Mitra, Former Scientific Secretary in the Office of the Principal Scientific Adviser; and Dr Chaitanya Giri, Associate Professor & Chair, FLAME Centre for South & Southeast Asia Studies, FLAME University. While moderating the session, Shri Debobrat Ghose delved into the critical role of media in shaping India's scientific diplomacy landscape. The gathering served as a platform for exchanging ideas and fostered a sense of camaraderie, strengthening the collaborative spirit integral to science communication and diplomacy.

The morning session started with an engaging panel discussion on "Ways to Enhance the Representation of S&T in Media". Prof. KG Suresh, Vice Chancellor, Makhanlal University, presided over the session which included the distinguished guests – Shri Pallav Bagla, Science Journalist; Shri Raj Chengappa, Group Editorial Director, India Today; Shri Vijay Joshi, Editor-in-Chief, Press Trust of India (PTI); Ms Sapna Poti,

The panellists during the session suggested that scientists and journalists should adopt innovative and engaging practices for effective science communication.

From left to right: Shri Sanjay Puran Singh Chauhan, Shri Abhijeet Satam, Dr Chaitanya Giri, Mr Marc Prensky, Shri Nandan Kudhyadi and Shri Abhijit Mulye

"In this digital age, everyone is a filmmaker with gadgets in their hands. We need to train them for better science cinema in the future," Mr Marc Prensky.

Director Strategic Alliances, Office of Principal Scientific Adviser; and Dr Archita Bhatta, Editor, DST Media Cell. Ms Rakhee Bakshee moderated the session.

The session discussed strategies for improving science and technology coverage in the media. The discussion urged the journalists to go beyond entertainment and politics, encouraging them to write, tweet and talk about science. The deliberation addressed science journalists and communicators' challenges and emphasised the need for a more nuanced and diverse representation of scientific endeavours in the media. As the panellists shared their experiences and insights, the audience gained a deeper understanding of the role journalists play in shaping public perceptions of science.

After a pleasant break, participants reconvened for an engaging session on "Science through Cinema". The Guest of Honour was Mr Marc Prensky, an acclaimed award-winning American author and speaker. Mr Marc praised the portrayal of science in Indian cinema and shared his valuable insights, stating, "In this digital age, everyone is a filmmaker with gadgets in their hands. We need to train them for better science cinema in the future." Marc highlighted the transformative potential of technology and emphasised the importance of equipping individuals with the skills to contribute to the evolution of science cinema.

Dr Chaitanya Giri chaired the session, exploring the potential of cinema in effectively communicating complex scientific concepts to a broader audience. The esteemed panel included Shri Abhijeet Satam, Director, Producer and Actor in the Marathi & Hindi Film industry; Shri Nandan Kudhyadi, National Award-winning Science Filmmaker; Shri Sanjay Puran Singh Chauhan, Film Director; and Shri Abhijit Mulye, Senior Journalist.

The discussion explored the challenges and triumphs of portraying science in cinema, highlighting critically acclaimed movies bridging the gap between scientific accuracy and cinematic appeal. From discussing the intricacies of storytelling to the importance of accurate representation, the panellists provided valuable information about the world of science through the lens of cinema.

The conclave concluded with a valedictory session encapsulating vital takeaways from the enriching discussions over two days. The session served as a moment of reflection and celebration, marking the successful culmination of the S&T Media and Communicators Conclave at IISF 2023. The participants received certificates for their valuable contributions.

The S&T Media and Communicators Conclave provided a platform for networking and collaboration among science communicators, media professionals, and scientists and encouraged future collaborative initiatives in science communication. As the curtains fell off on the conclave at IISF 2023, it left behind a legacy of knowledge, inspiration, and a renewed commitment to bridging the gap between science and society through effective communication.

Syed Hasan Zia Rizvi, Reporter/Content Developer, Science Media Communication Cell (SMCC), CSIR-NIScPR

Dr Manish Mohan Gore, Scientist, CSIR-NIScPR & PI, Science Media Communication Cell (SMCC), CSIR-NIScPR.

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Vigyanika

Science Literature Festival, IISF 2023

The 2023 edition of Vigyanika — Science Literature Festival was organised at DBT Translational Health Science and Technology Institute (THSTI)-Regional Centre for Biotechnology (RCB) Campus Faridabad on 18 and 19 January 2024 as a part of the India International Science Festival (IISF) 2023. The two-day Science Literature Festival witnessed insightful discussions, workshops, scientific sessions, and student engagement activities, successfully accomplishing its primary objective to facilitate in-depth discussions and dialogues for effective science communication.

Around 350 delegates, including students, science communicators, and science enthusiasts from India and abroad, attended the event. CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR), National Innovation Foundation-India (NIF), and Vijnana Bharati (VIBHA) were the coordinating organisations for Vigyanika 2023.

The inaugural ceremony on 18 January 2024 began with the welcome address by Prof. Ranjana Aggarwal, Director, CSIR-NIScPR, New Delhi. Prof. Aggarwal highlighted the importance of scientific temper

Prof. Ranjana Aggarwal highlighted the importance of scientific temper and CSIR-NIScPR's commitment to fostering scientific awareness.

and CSIR-NIScPR's commitment to fostering scientific awareness. Emphasising the importance of science communication in Indian languages through diverse mediums like puppetry and poems, she highlighted Vigyanikas's role as a networking platform among scientists and science enthusiasts. Dr Dinakar M Salunke, Former Director, International Centre for Genetic Engineering and Biotechnology, New Delhi; Dr Subhra Chakraborty, Director, National Institute for Plant Genome Research, New Delhi; and Shri A Jayakumar, Vijnana Bharati, were the distinguished guests of the inaugural ceremony.

The first scientific session on "Science and Technology Public Outreach in India" was chaired by Prof. BN Jagatap, Senior Professor at IIT Bombay. During the session, the experts emphasised the need to extend scientific research from labs to the general populace, emphasising the historical contributions of Indian scientists. They also discussed the importance of handling the communication of emerging technologies like artificial intelligence or vaccinations, highlighting the significance of providing science communication trainings.

Prof. Dinakar M Salunke delivered the keynote address, whereas Prof. Uma Kumar, Professor, AIIMS, New Delhi; Prof. KC Bansal, Former Director, ICAR-National Bureau of Plant Genetic Resources, New Delhi; and Prof. Gobardhan Das, Director, IISER Bhopal, were the other experts in the session.

Panellists, during the first-panel discussion representing various Indian languages, participated in the discussion titled "Apni Bhasha Apna Vigyan: Strengthening Science Communication in Indian

During the release

Languages." This stimulating session was chaired by Shri Chamu Krishna Shastry, Padma Shri, and Chairman Bharatiya Bhasha Samiti.

During the session, experts stressed the importance of scientific communication in Indian languages in order to cross language barriers and strengthen communication. The panellists for the session were Prof. VPN Nampoori, Cochin University of Science and Technology, for Malayalam; Dr Neelima Jerath, Former DG, Pushpa Gujral Science City, for Punjabi; Dr HB Singh, CSIR-NEIST, Jorhat for Manipuri; Dr Uthra Dorairajan, Dwaraka Doss Goverdhan Doss Vaishnav College, Chennai for Tamil; Dr Mantu Bhuyan, CSIR-NEIST, Jorhat for Assamese; and Prof. Saroj Kanta Barik, Former Director, CSIR-NBRI, Lucknow for Odiya.

The panel discussion was followed by the release of an Assamese magazine, *Bigyan Lahar,* a collaborative initiative by CSIR-NIScPR and CSIR-NEIST, and then the release of a flip book, *"Treasures of Indian Tradition: A Journey through Scientifically Validated Indian Traditional Knowledge"* in Tamil as a part of CSIR-NIScPR's SVASTIK initiative.

There was also a parallel session on "Workshop on Popular Science Writing" by Shri Hasan Jawaid Khan, Former Chief Scientist, CSIR-NIScPR, and Dr HS Sudhira, Director, Gubbi Labs, Bengaluru.

The second scientific session was chaired by Dr Paresh K Joshi, Reader from the Tata Institute of Fundamental Research-Homi Bhabha Centre for Science Education (TIFR-HBCSE), Mumbai. Selected delegates from across the country presented their insights on "Science Communication in India: Current Trends, Opportunities and Challenges".

Along with the scientific sessions, there was an exhibition where CSIR-NIScPR, the National Book Trust, India and the Commission for Scientific & Technical Terminology showcased their publications. CSIR-NIScPR's flagship programme, #SVASTIK, also participated. The event concluded with a cultural programme on the confluence of arts and science.

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On day two, Dr G Mahesh, Head, DG's Executive Directorate (DGED) and Science Communication and Dissemination Directorate (SCDD), CSIR HQ, chaired the second panel discussion on "Creative Science Communication through Films, Podcasts & Social Media". The panellists discussed how adopting creative ideas can excite the audience's mind while ensuring scientific accuracy and how using different Indian languages for science communication can help amplify the reach to a broader audience. Shri Pallava Bagla, science journalist; Prof. BS Balaji, Professor, Jawaharlal Nehru University, New Delhi; Dr Maan Bardhan Kanth, Associate Professor, DY Patil International University, Pune; Shri Kollegala Sharma, Former Chief Scientist, CSIR-CFTRI; and Ms Neha Tripathi, science journalist; were the panellists.

A drawing and quiz competition was also held in a parallel session in which about 140 students and 12 teachers from four different schools of Delhi/NCR — RPS Public School, SD Secondary Public School, Universal Public School, and Jain Bharati Mrigavati Vidyalaya participated.

The subsequent panel discussion on "Challenges in Traditional Knowledge Research & Communication" had speakers discussing the rich Indian traditional knowledge systems across various disciplines and the complexities in researching and communicating such knowledge to a wider audience. Chaired by Prof. Vasant Shinde, CSIR Bhatnagar Fellow, CSIR-Centre for Cellular and Molecular Biology, and Former Vice-Chancellor, Deccan College, Pune, the panellists of this extremely engaging discussion included Prof. Ganti S Murthy, National Coordinator, Indian Knowledge Systems (IKS) Division and Professor, IIT Indore; Dr Rashmi Sharma, Scientist F and Head, SHRI, DST; and Prof. Virendra K Paul, Professor, School of Planning and Architecture, New Delhi.

"Vigyan Kavi Sammelan," among the significant attractions of Vigyanika, included distinguished poets and shortlisted participants of the "Vigyanika: Science Poem Writing Competition," who

Besides the scientific sessions, there was an exhibition where CSIR-NIScPR, the National Book Trust, India and the Commission for Scientific & Technical Terminology showcased their publications.

recited fascinating science poems in English, Hindi and Telugu languages. The distinguished poets were Ms Shubhrata Mishra, Dr Rajesh Kumar, Dr Anu Singh, Ms Swati Amol Yadwdakar, Ms Radha Gupta, and Shri T SRS Sandeep. Dr Madhu Pant, Former Director, National Bal Bhawan, New Delhi, chaired the session. This was followed by the release of the *Vigyanika theme book.*

A Special Session on "Science Communication for Vasudhaiva Kutumbakam" chaired by Prof. Ramesh V Sonti, Director, International Centre for Genetic Engineering and Biotechnology, New Delhi, was also conducted under Vigyanika. The panellists included Shri Sanjeev K Varshney, Head, International Cooperation, DST; Mr Marc Prensky, Internationally-acclaimed author from USA; and Dr Sharmila Binti Md Salleh, Chief Executive Officer at Yayasan Inovasi Malaysia (YIM), Malaysia. The panellists discussed global challenges of science communication and how they can be managed by cooperation and knowledge exchange among different nations.

The session was followed by valedictory and summing up the two-day programme where Dr Arvind C Ranade, Director, NIF and Chief Coordinator, IISF 2023, graced the occasion. Dr Paramananda Barman, CSIR-NIScPR, Coordinator Vigyanika, presented a brief report on the sessions to conclude the two-day event.

Ms S Preeti Lakshmi, Mr Raghul MR, Dr Charu Lata & Dr Paramananda Barman, CSIR-NIScPR.

CSIR-NCL Celebrates 74th Foundation Day

CSIR-National Chemical Laboratory (CSIR-NCL), Pune, celebrated its 74th Foundation Day on 03 January 2024. On the occasion, Dr Naushad Forbes, Co-Chairman, Forbes Marshall, delivers the Foundation Day lecture. He also presided over

Dr Naushad Forbes, Co-Chairman, Forbes Marshall

the event as the Chief Guest and delivered a stimulating oration on the role of R&D in the Indian Innovation Ecosystem. The event also served as a curtain-raiser for the Platinum Jubilee celebrations of CSIR-NCL. Dr Ashish Lele, Director, CSIR-NCL, in his address provided a comprehensive overview of the laboratory's achievements in 2023, highlighting breakthroughs in scientific contributions and the various thematic technology development programmes of the lab.

In his keynote address, Dr Naushad Forbes highlighted the pivotal role of innovation in India's future and the centrality of research and development in the innovation process. He emphasised three crucial elements for fostering innovation in the country: increased overall investment in R&D in the public and private sectors, a five-fold increase in in-house R&D in the industry, and an eightfold increase in public research funding within the higher education system.

Dr Forbes also highlighted the essential connection between industry and research institutions, urging CSIR-NCL to prioritise collaborative efforts with industry and educational institutions. He stated that industrial innovation typically begins with market needs and culminates bringing products or services to the market. This effort is mainly based on 'known scientific knowledge'. Although cutting-edge scientific research may appear to have a limited role in supporting such innovation, it must be realised that research done sometime in the past has created that 'known knowledge', which is therefore invaluable.

Inculcating scientific temper in industrial R&D is critical to ensure that the knowledge existing in research and academic institutions can be utilised by industry to stay competitive. Discussing the role of education, Dr Forbes emphasised that research universities exist to search for knowledge, and their true impact lies in the knowledge that students carry beyond the university's doors.

As part of the celebration, the NCL Research Foundation Awards for Scientists and Staff for the

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year 2022-23 were presented by Dr Naushad Forbes. The Foundation Day event concluded with a sense of pride and accomplishment, setting the tone for a year-long celebration of CSIR-NCL's remarkable scientific research and innovation journey.

CSIR-NPL Marks its 78th Foundation Day

CSIR-National Physical Laboratory (CSIR-NPL), New Delhi, commemorated its 78th Foundation Day with a grand celebration held on 4 January 2024. The event was graced by esteemed dignitaries and luminaries from the scientific community and witnessed a series of impactful sessions and significant announcements. The occasion was graced by Prof. Ashutosh Sharma, President, INSA and Former Secretary, DST, GoI, as Chief Guest. The distinguished guests included Dr Ranjana Aggarwal, Director, CSIR-NIScPR, New Delhi and Dr Viswajanani J Sattigeri, Head, CSIR-TKDL, New Delhi.

The celebration kicked off with the ceremonial lamp lighting, symbolising the illumination of knowledge and innovation. Prof. Venu Gopal Achanta, Director, CSIR-NPL, extended a warm welcome, setting the tone for an insightful day. Prof. Achanta also shed light on the recent developments and activities of CSIR-NPL.

Dr Ranjana Aggarwal congratulated CSIR-NPL for its glorious 77 years of service to the nation and the lab's contribution in various facets of science and technology for Atmanirbhar Bharat. Further, Dr Aggarwal informed about the most recent initiatives of national interest taken by CSIR-NIScPR, like the compendium of CSIR technologies based on their assessment of Technology Readiness Level (TRL) scale; Livelihood creation for rural India through deployment of CSIR technologies by collaborating with the UNNAT Bharat Abhiyan and Vijnana Bharati (VIBHA). Dr Viswajanani J Sattigeri emphasised the importance of Traditional Knowledge and its relevance in the present time.

Dr Viswajanani J Sattigeri, Head, CSIR-TKDL, emphasised the importance of Traditional Knowledge and its relevance in the present time.

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The highlight of the Foundation Day celebration was the keynote address by Prof. Ashutosh Sharma, who spoke on Science and its various facets and interfaces like Invention, Innovation, Culture, and Society. His talk was a beacon of inspiration, emphasising the significance of scientific advancements in shaping the nation's progress.

The day also witnessed pivotal moments with the release of Bharatiya Nirdeshak Dravya (BND) BND® 1041 — Conductivity Standard Solution for Drinking Water with RMP Aashvi Technology LLP (ATL), Ahmedabad and BND® 5061 — Pet Coke Standard (Chemical Parameters) with RMP National Council for Cement & Building Materials (NCCBM), Ballabgarh. A Technology Agreement Tool for Partnerships, TATPAR (तत्पर), was also launched.

The occasion served as a platform to honour the rich legacy of CSIR-NPL while embracing the future with groundbreaking initiatives and collaborative endeavours. The programme concluded with a vote of thanks by Dr Govind, Chief Scientist, CSIR-NPL and Coordinator of the programme, followed by the National anthem.

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