

## In the News

### Union Minister Dr Jitendra Singh Receives the prestigious “Lifetime Achievement Award”

*The award was presented in recognition of his exemplary dedication and contribution to diabetology, diabetes care and diabetes research.*



Dr Jitendra Singh, Hon'ble Minister of State for S&T and Earth Sciences and Vice President of CSIR, received the prestigious “Lifetime Achievement Award”

during an international meet of leading medical celebrities, professionals and medicos from across the country and abroad. The award was presented in

*Dr Jitendra Singh said that he will continue his endeavour to live up to the high expectations of his colleagues and prove worthy of the honour conferred on him.*

acknowledgement of his exemplary dedication and contribution to diabetology, diabetes care and diabetes research. The event was held in Chennai on 27 July 2024.

In his “acceptance speech”, Dr Jitendra Singh said that the award was too big for him and he could accept it only with utmost modesty and humility at his command. He further said in a journey of nearly four decades,

it was a divine blessing to grow under the shadow of some of the tallest medical professionals in the country and to rub shoulders with some of the most illustrious seniors and colleagues.

Dr Jitendra Singh said that he will continue his endeavour to live up to the high expectations of his colleagues and prove worthy of the honour conferred on him.

## DG, CSIR, Dr N Kalaiselvi Receives 6<sup>th</sup> APJ Abdul Kalam Award



Dr N Kalaiselvi, DG, CSIR & Secretary DSIR, was honoured to receive the prestigious 6<sup>th</sup> APJ Abdul Kalam Award from the Hon'ble Governor of Kerala, Shri Arif Muhammed Khan, during the esteemed 6<sup>th</sup> APJ Award

2024 ceremony. The award was presented during an event in Thiruvananthapuram organised by Noorul Islam Centre for Higher Education (NICHE), Kumarakoil, with NIMS Medicity, Neyyattinkara, on 27 July 2024.

# ISTIC-UNESCO and CSIR Jointly Organises First STI Conclave on “Traditional Knowledge for Sustainable Livelihoods”

The International Science, Technology, and Innovation Centre for South-South Cooperation (ISTIC) under the auspices of UNESCO together with CSIR constituents, Traditional Knowledge Digital Library Unit (CSIR-TKDL Unit), New Delhi, and CSIR-Indian Institute of Chemical Technology (CSIR-IICT), Hyderabad, organised an STI Conclave on “Traditional Knowledge for Sustainable Livelihoods” from 29 to 31 July 2024 at New Delhi, India.

Dr N Kalaiselvi, DG, CSIR and Secretary, DSIR, inaugurated the first STI Conclave. The Guests of Honour were Dr D Srinivasa Reddy, Director, CSIR-IICT, and Dr Benno Boer, UNESCO Natural Science Specialist in New Delhi. The Plenary Talk was delivered by Prof. Anant Darshan Shankar, Founder and Vice Chancellor of the Trans-Disciplinary University (TDU), Bengaluru.

The three-day Conclave had internationally acclaimed speakers from India on varied subjects such as biodiversity, traditional cultural expressions, integrative health and research, national and international policies on TK, IPR and associated matters, and South-South Cooperation. The ISTIC-UNESCO team was led by Prof. Mohd Basyaruddin Abdul



Rahman, Chairperson of Governing Council and Dr Sharizad Dahlan, Director of the organisation. From the CSIR, Dr Viswajanani J Sattigeri, Head, CSIR-TKDL Unit and Dr D Shailaja, Chief Scientist, CSIR-IICT, led the efforts on organising the Conclave in India.

Speaking on the occasion, Dr Kalaiselvi remarked that the STI Conclave targets a topic that is the need of the hour, considering that the sustainability of lives is a growing concern worldwide. She said that the conclave provides a platform to bring awareness among the next-gen youth about the importance and value of the knowledge and practices inherited from our ancestors. Stating that modernity is always connected to the fundamentals of our traditional knowledge, she acknowledged that

*The Conclave emphasises the importance of engaging in collaborative learning models and expanding the partnership and networks through engagement and cooperation to address the region's development challenges.*

this conclave rightly spreads the importance of bringing traditions and modern S&T together.

Dr Srinivasa Reddy, Director, CSIR-IICT, highlighted the CSIR activities related to validation, innovation and integration of traditional medicines and modern S&T interventions as effective tools to address healthcare for all.

Dr Benno Boer elaborated on the three important aspects of sustainability through education, science and culture and how UNESCO brings together collaboration and cooperation to empower people and the planet. He stated respecting and living harmoniously with nature is important for sustainable living. He also spoke about UNESCO's platforms related to biodiversity spheres and the LINKS programmes, reiterating the need to explore and understand the meaning of local knowledge systems to conserve and preserve nature and livelihoods.

The Conclave envisaged promoting understanding and enhancing academic and

professional capabilities under the theme of "Strengthening Competencies in Digitisation, Preservation and Protection of Traditional Knowledge (TK) – Intellectual Property (IP) and People's Rights" among the participants to provide a platform for the exchange of information on challenges related to TK in their countries and learn the best practices being adopted by India and others in safeguarding TK. The participants were from Indonesia, the Philippines, Nepal, the Democratic Republic of Congo, Kenya, Malaysia and India. The conclave aimed at emphasising the importance of engaging in collaborative learning models and expanding the partnership and networks through engagement and cooperation to address the development challenges of the region, specifically through sustainable living through local knowledge systems.

*For more information, please visit:*

<https://www.istic-unesco.org/web/about-istic>

*Dr N Kalaiselvi, DG, CSIR, said that the conclave provides a platform to bring awareness among the next-gen youth about the importance and value of the knowledge and practices inherited from our ancestors.*



## CSIR Participates in Government Achievements & Scheme Expo

CSIR participated in the Government Achievements & Scheme Expo (20-22 July 2024) at 12A, Pragati Maidan, New Delhi. CSIR-IIIM, CSIR-CFTRI, CSIR-NEIST and CSIR-NBRI actively participated, showcasing technologies and products on food, millets, microbial fermentation process for the production of Metal Gluconates, essential oil, novel membranes with controlled MW Cut off for racemic resolution of drug molecules, herbal products, BGR-34, health care products, bioinoculants, biofertilizers, banana fibres, etc. CSIR-NIScPR showcased Journals & publications.

The CSIR booth attracted many students, farmers, and the general public, who showed curiosity about the technologies used to develop these products. CSIR's participation was centrally coordinated by the Science Communication and Dissemination



Directorate (SCDD) of CSIR. This exhibition was organised to bring various ministries, Government departments, autonomous bodies, institutions, agencies, PSUs, etc., on one platform and provide them with the opportunity to showcase their achievements, innovations, technologies, schemes, welfare programmes, products/services.

*The 3-day exhibition focused on various welfare & development schemes of central and state governments and PSUs.*

## CSIR and MS Swaminathan Research Foundation (MSSRF) Signs MoU

CSIR and the MSS Research Foundation (MSSRF) entered an MoU to work together for livelihood generation among rural, tribal, and farming communities. The MoU was signed by Dr N Kalaiselvi, DG, CSIR and

Dr Soumya Swaminathan, Chairperson, MSSRF. Senior officials from CSIR and MSSRF representatives witnessed the MoU signing on 9 July 2024.

Speaking on occasion, Dr N Kalaiselvi expressed that

although CSIR labs disseminate technologies developed in the labs to potential users, the outreach, especially in the societal sector, would be enhanced through joining hands with organisations such as MSSRF, which works at the grassroots level.

Dr Soumya Swaminathan stated that the foundation is making efforts to reach out to the tribal and vulnerable communities. The foundation is seeking for low-cost, affordable and potential technologies and technical support from CSIR laboratories as a technology facilitating partner under this umbrella MoU. This partnership is important because tribals or various other such groups are not able to directly approach CSIR labs due to many inherent reasons such as geographical location, language of communication and lack of required resources.

The MoU entails creating a framework and meaningful association for the transfer of affordable, proven and selected technologies with societal relevance available across the CSIR laboratories/institutes and mentoring the SHGs/NGOs/FPOs and other voluntary organisations selected by MSSRF for livelihood generation and empowerment of women, tribal population.

CSIR, with a vision to pursue science which strives for global impact, enabling innovation-driven industry and nurtures transdisciplinary leadership, thereby catalysing inclusive economic development for the



people of India, undertakes R&D in outcome-driven mode in diverse areas such as: i) Healthcare; ii) Agri, Nutrition & Biotechnology; iii) Energy and Energy devices; iv) Chemicals, Leather and Petrochemicals; v) Mining, Minerals, Metals and Materials; vi) Civil infrastructure & Engineering; and vii) Aerospace, Electronics and Instrumentation & Strategic Sector; viii) Ecology, Environment, Earth Sciences and Water.

MSSRF, a non-profit trust registered under the Indian Trusts Act 1882 and recognised by the Department of Scientific and Industrial Research, Government of India, as a Scientific and Industrial Research Organisation, focuses specifically on tribal and rural communities with a pro-poor, pro-women and pro-nature approach. The foundation applies appropriate science and technology options to address practical problems rural populations face in agriculture, food and nutrition through its Sub-Centres and Field Stations across the country.

*Dr Soumya Swaminathan, Chairperson, MSSRF, said that this partnership is important because tribals or various other such groups are not able to approach CSIR labs due to many inherent reasons directly.*

## CSIR participates in the Global Conclave on Plastic Recycling and Sustainability exhibition



*During the conclave, the CSIR booth attracted many industries that were curious to learn more about the technologies in detail.*

CSIR participated in the Global Conclave on Plastic Recycling and Sustainability exhibition from 4 to 7 July 2024, at Hall 14, Pragati Maidan, New Delhi. Participating in the event, CSIR-IIP, CSIR-NCL, and CSIR-CEERI showcased technologies such as converting waste plastic to diesel, plastic products made from used and disinfected PPE suits, and a mechanical prototype of a tabletop plastic sorter.

During the conclave, the CSIR booth attracted many industries that were curious to learn more about the technologies in detail. CSIR scientists working on the

plastic recycling theme project under the name “DePolyUp” showcased real-life events in plastics recycling and picked up new ideas and interfaces from other giant industries like Reliance, SPL, IDVB, etc.

The CSIR’s participation was centrally coordinated by the Science Communication and Dissemination Directorate (SCDD) of CSIR. This exhibition was organised by AIPMA (All India Plastic Manufacturers Association), Mumbai, to bring recycling machinery, products, and bio-polymers manufacturers together on one platform to showcase their developments.

## Genetic Study Reveals Language Shift of Austroasiatic Tribes



*The researchers studied four major tribal populations (Bathudi, Bhumij, Ho and Mahali) from Odisha. They examined the genetic affinities of these populations and a few Indo-European speakers from nearby areas.*

About 5% of Indians speak Austroasiatic languages, largely by the ancient tribal populations of Odisha, Chattisgarh and Jharkhand. Overall, the Austroasiatic speakers have retained their languages firmly for the last 4000 years. However, recently some of these populations have started adopting Indo-European languages. A recent study led by Dr Kumarasamy Thangaraj at CSIR-Centre for Cellular and Molecular Biology (CSIR-CCMB), Hyderabad, and Dr Niraj Rai at DST-Birbal Sahni Institute of Paleosciences, Lucknow, shed light on understanding these changes in the ancient tribes of East India. The findings are published in an international journal, *Heliyon*, by Cell Press.

This is the first high-throughput genetic study on the

East Indian tribal populations. The researchers studied four major tribal populations (Bathudi, Bhumij, Ho and Mahali) from Odisha. They examined the genetic affinities of these populations and a few Indo-European speakers from nearby areas. Their findings suggest that the two groups do not mix genetically.

The researchers suggest that the linguistic mixing between the Austroasiatic and Indo-European speakers happened likely due to industrialisation (movement of Indo-European speakers may be from neighbouring states) and modernisation (cultural exchange, may be due to marriage/trade/education) that brought them into close cultural contact with the Austroasiatic speakers, and some of them have adapted Indo-

European as a primary language. The study did not find any Indo-European speaking population who have adopted Austroasiatic language.

“Using genetic and linguistic data, for the first time, we established that the language of Austroasiatic speaking tribal groups are altered by the recent demographic changes. These linguistic shifts largely have sociocultural effects and threaten the Austroasiatic languages, if this trend continues given a small number of people speak these languages”, said Dr Thangaraj.

However, the risk is still rather small. “Our study strongly suggests that most ancient tribal groups of Eastern India still maintain their cultural heritage very firmly despite the high level of

industrialisation and demographic changes” told Dr Rai.

“This study is crucial and also an important add-on to the existing genetic database of Austroasiatic speakers. Considering the fact that India is one of the most diverse assemblage of people in the world, this research work is significant in demonstrating the origin of Austroasiatic speakers and demographic changes happened in deep past and those ongoing, explained Dr Vinay Kumar Nandicoori, Director, CCMB.

The other institutes and agencies involved in this study are Academy of Scientific and Innovative Research (AcSIR), Ghaziabad; Shreyanshi Health Care Private Limited, Raipur, Chattisgarh and Panjab University, Chandigarh.

*“This study is crucial and an important add-on to the existing genetic database of Austroasiatic speakers,”*  
*Dr Vinay Kumar*  
*Nandicoori, Director,*  
*CCMB.*

## Natural Science News: Chemical Profile and Health Benefits of Compounds from Ashwagandha Fungi

The search for new therapeutic agents continues to be crucial in medical research. One promising area of study is the exploration of medicinal plants, which have long been recognised for their therapeutic potential. A recent study conducted by the CSIR-Indian Institute of Integrative Medicine (CSIR-IIIM), Jammu, has shed light on the potential of *Withania somnifera* (L.) Dunal, a plant known for its medicinal properties in Ayurveda, provides new drug scaffolds. The study

focused on isolating and analysing microorganisms associated with *Withania somnifera*, specifically epiphytic fungi, from the plant's leaves, stem, and fruits. Among the five filamentous fungi identified, *Aspergillus aculeatus* S20 was found to produce an indole alkaloid known as okaramine H. This compound was isolated using advanced chromatographic techniques, including High-Performance Thin-Layer Chromatography (HPTLC) and High-Performance



Liquid Chromatography (HPLC). The structure of okaramine H was confirmed through Nuclear Magnetic Resonance (NMR) and Mass Spectrometry (MS), revealing a high purity of over 90%.

Okaramine H is well-known for its insecticidal properties, but this study is the first to explore its potential against the *Leishmania donovani* parasite, which causes leishmaniasis. The compound demonstrated inhibitory effects on *Leishmania donovani* promastigotes under *in vitro* conditions, with an IC<sub>50</sub> value of 147 µg mL<sup>-1</sup>, indicating its potential as an antileishmanial agent.

The findings of this study are significant in the context of previous research on natural products. Historically, natural products have been a rich source of novel drug structures, particularly in the fields of oncology and anti-infective therapies. Earlier reviews have highlighted the continued relevance of natural products in drug discovery despite the rise of synthetic chemistry and combinatorial techniques. These reviews have also pointed out the critical role of microorganisms in producing natural product drugs, suggesting that microbial interactions with their host plants

can yield valuable therapeutic compounds.

The current study builds on these insights by demonstrating that endophytic and epiphytic microorganisms associated with medicinal plants like *Withania somnifera* can produce novel bioactive compounds. This aligns with earlier findings that microbes are prolific producers of secondary metabolites, which can serve as key scaffolds for drug development. The discovery of okaramine H's antileishmanial activity underscores the untapped potential of natural products in addressing unmet medical needs.

In summary, the research conducted by the CSIR-Indian Institute of Integrative Medicine highlights the importance of exploring medicinal plants and their associated microorganisms for new drug discovery. The study adds to the growing body of evidence supporting the value of natural products and opens new avenues for developing treatments for diseases like leishmaniasis. By leveraging advanced analytical techniques and building on previous research, scientists can continue to uncover the therapeutic potential hidden within nature's vast chemical diversity.

*The findings of this study are significant in the context of previous research on natural products.*

## CSIR-CSMCRI Transfers Know-how for Membrane Rejuvenation

CSIR-Central Salt & Marine Chemicals Research Institute (CSIR-CSMCRI), Bhavnagar, transferred the “Process Know-how for End-of-life Reverse Osmosis Membrane Rejuvenation (MEPL)” to a Delhi and Gurugram based company named the “Membrane Engineering Private Limited” on 06 June 2024.

CSIR-CSMCRI has long worked on water desalination through indigenously developed advanced membrane systems. With growing demand for Reverse Osmosis membranes, there is an equivalent growth in end-of-life discarded Reverse Osmosis membrane elements. Reverse Osmosis membrane waste is a potentially hazardous polymeric waste. CSIR-CSMCRI has developed the technology to reuse the membrane

element after its useful life is over.

Dr Hiren Raval, the principal investigator of the technology, mentioned that the process technology could transform the discarded end-of-life Reverse Osmosis membrane elements into the membranes for different applications, e.g. partial substitution for new membrane in the same application, brackish water Reverse Osmosis, wastewater reuse, zero liquid discharge applications, etc. It will create significant value from waste and transform the membranes for different applications. During the event, Mr MM Narang, Chairman of MEPL, with his team and Dr Kamalesh Prasad, Head BDIM, Dr Hiren Raval, Dr Shibaji Ghosh, Dr Kanti Bhooshan Pandey and Dr Kandeegan were present.



## CSIR-NEERI holds Dr Ashok S Juwarkar Memorial Lecture

CSIR-National Environmental Engineering Research Institute (CSIR-NEERI), Nagpur, organised Dr Ashok S Juwarkar Memorial Lecture on 15 July 2024 in the NEERI Auditorium. Dr ML Khan, Senior Professor (HAG Grade), Department of Botany and Dr Harisingh Gour Vishwavidyalaya,

Sagar (MP) were the Chief Guests on this occasion. Dr Atul Vaidya, Director, CSIR-NEERI, was also present on the dais.

Delivering the Dr Ashok S Juwarkar Memorial Lecture, Dr Khan expressed concern over degraded ecosystems, emphasising the need for long-term solutions through science and policy involving everyone. Citing personal observations on climate change, Dr Khan mentioned that species at lower altitudes are migrating to higher altitudes in Arunachal Pradesh, and there has been a change in the flowering season and overall snowfall pattern. He presented several management options for mitigating climate change and its impacts on biodiversity in Arunachal Pradesh. He stated that there has never been a more urgent need to revive damaged ecosystems than now. He briefed the audience about mapping bioresources in the Eastern Himalayas and Indo-Burma, as well as conservation strategies for rare and endangered tree species. Dr Khan further discussed the inventory and mapping of biodiversity attributes in the sacred groves of Manipur, Arunachal Pradesh, and Central India. He also spoke about the strategies adopted for restoring Rudraksha plants.

In his welcome address, Dr Atul Vaidya, Director, CSIR-NEERI outlined the significant contributions of late Dr Ashok S Juwarkar. He said that the research



Dr Atul Vaidya, Director, CSIR-NEERI delivering the welcome address



The Chief Guest Dr ML Khan delivering the Dr Ashok S Juwarkar Memorial Lecture



The dignitaries releasing the book 'Trees and Tree Microhabitats of CSIR-NEERI Nagpur,' dedicated to the late Dr Ashok S Juwarkar



work done by Dr Juwarkar laid a new foundation in the area of agriculture and environment, and CSIR-NEERI is continuously progressing in this field.

The book '*Trees and Tree Microhabitats of CSIR-NEERI Nagpur*,' dedicated to the late Dr Ashok S Juwarkar, was released, and his significant contributions were screened for the audience. The editor of the book is Dr Shalini Dhyani, Principal Scientist, CSIR-NEERI.

Dr Debishree Khan, Sr Scientist, CSIR-NEERI, conducted the proceedings. Mr Prakash Kumbhare, Sr Principal Scientist,



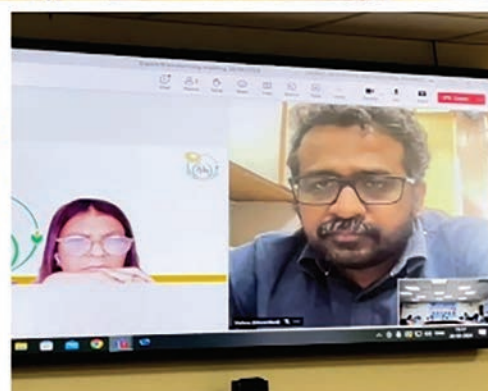
CSIR-NEERI, proposed the vote of thanks.

Fifty BSc and MSc (Environmental Science and Biotechnology) students from Kamla Nehru Mahavidyalaya, Nagpur visited the laboratories of CSIR-NEERI and interacted with scientists on this occasion.

## CSIR-NIScPR Hosts Brainstorming Meeting on Stroke Prevention and Treatment

CSIR-NIScPR (CSIR-National Institute of Science Communication and Policy Research), New Delhi, organised a brainstorming meeting on "Prevalence, risks, challenges, contributing factors and socio-economic impact of stroke: The case of India" on 28 June 2024. The event brought together

leading experts, researchers, and healthcare professionals from around the nation to discuss critical issues related to stroke management. Dr Rohit Bhatia, Professor, Department of Neurology, Neurosciences Centre, AIIMS, New Delhi, emphasised the urgent need for stroke system audits and highlighted



**Brainstorming Meeting on “Prevalence, risks, challenges, contributing factors and socioeconomic impact of stroke: The case of India” on 28th June, 2024**

*Dr Rajni Kant Srivastava, Former and Founder Director of ICMR-Regional Medical Research Centre, Gorakhpur, said, “This meeting is a critical step toward addressing the global burden of stroke. Collaboration and data sharing are essential.”*

the importance of creating a global data model that collects information from various hotspots worldwide. The lack of stroke units in hospitals remains a significant challenge, and raising awareness about stroke prevention is crucial.

Deepti Vibha, Additional Professor, Clinical Epidemiology, Department of Neurology, AIIMS, New Delhi, stressed the relevance of capturing patient views. Talking about the importance of data, she informed that this valuable data, which has not been systematically collected before, can inform better stroke prevention strategies.

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meeting is a critical step toward addressing the global burden of stroke. Collaboration and data sharing are essential.”

Addressing the meeting, Dr Naresh Kumar, Chief Scientist at CSIR-NIScPR, said, “Our commitment to stroke research drives us to create meaningful dialogues and actionable solutions.”

Shifalika Goenka, Professor, Public Health Foundation of India, Delhi, and Vishnu VY, Associate Professor at the Department of Neurology, AIIMS, New Delhi, joined the interactive session virtually, contributing diverse perspectives.

Dr Suman Ray, Project leader and Principal Scientist at CSIR-NIScPR, presented the project overview and vote of thanks.

# CSIR-NIScPR Organises a workshop on Science & Technology Communication in collaboration with Global Health Strategies (GHS)



*Prof. Ranjana Aggarwal, Director, CSIR-NIScPR, emphasised the need for collaborative efforts to promote scientific understanding.*

CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR), New Delhi, organised a Science & Technology Communication workshop in collaboration with Global Health Strategies (GHS) on 11 June 2024 at Pusa campus, Delhi. This one-of-a-kind initiative brought together science communicators, scientists and educators from various backgrounds to discuss how scientists and researchers can interact with the media and

use social media platforms to communicate technical evidence and research in simpler terms for the layperson.

The workshop commenced with a welcome address by Prof. Ranjana Aggarwal, Director, CSIR-NIScPR, who emphasised the need for such collaborative efforts to promote scientific understanding. She described CSIR-NIScPR's initiatives to cater to the needs of various sections of society through research, capacity building, and communication in

multiple Indian languages. She also highlighted the need to continue such initiatives in the future to ensure continued growth. This was followed by opening remarks by Dr Rajni Kant Srivastava, Senior Advisor, Global Health Strategies & Former Head, Policy and Communications Division, ICMR HQ and Director, ICMR-RMRC Gorakhpur, who spoke about CSIR-NIScPR and ICMR's collaborative efforts in training scientists in science communication.

The workshop's first session was "Mapping our Communications Needs", moderated by Kaushik Bose, Vice President and Mirza Shadan, Director, GHS. This interactive session included an exercise by the participants on communicating in different ways based on specific target audiences. The next sessions were Understanding the Media Landscape in India,

Understanding Messaging for Journalists and Mastering Media Interactions, conducted by Sanjana Chowhan, Senior Communications Consultant, GHS. She described how scientists can communicate with the media. This included pitching stories using various storytelling formats and approaches. It also addressed the various nuances of interacting with the media through a Simulation Exercise: Interacting with Media.

Tamseel Hussain, Founder and CEO, PLUC TV, conducted the session "Making S&T Go Viral: Communications for Social Media and Mastering Social Media Content: An Exercise". He discussed how various social media platforms can be leveraged to engage diverse audiences.

The workshop concluded with Dr Paramananda Barman, Scientist at CSIR-NIScPR, delivering the vote of thanks.

## Events

# CSIR-HRDC Organises Various Programmes

## *Training Programme on Vigilance Matters for Inquiry Officers (IOs) and Presenting Officers (POs)*

The training programme was organised at CSIR-Central Road Research Institute (CSIR-CRRI), New Delhi, from 4 to 5 April 2024. The programme was exclusively for inquiry officers, presenting officers and administrative officers who perform the vigilance/disciplinary functions like examination of the

inquiry report, and imposition and financial implications of penalties in CSIR. All aspects related to the rules and regulations governing the disciplinary proceedings were discussed in detail.

The programme broadly covered CCS (CCA) Rules, Role of CVO, CSIR and Vigilance Officers

at Lab and capacity building of IOs & POs. Dr TS Rana, Head, CSIR-HRDC welcomed the dignitaries. Shri Roop Kishore, Chief Vigilance Officer, CSIR, was the Chief Guest and

Prof. Manoranjan Parida, Director, CSIR-CRRI, was the Guest of Honour during the programme. Forty-seven participants from different CSIR institutes participated in this programme.



### *Programme on Planning of Life after Retirement*

This three days training programme from 10 to 12 June was designed for the CSIR personnel about to retire from their professional life. The purpose of this training programme was to provide financial, health and motivational stability to the people working in CSIR. While being financially prepared for retirement is important, addressing the emotional, physical and psychological realities and integrating them into a balanced plan is ultimately the key to a successful and meaningful retirement.

It also enabled them to get deep insights into timely and proper retirement planning to boost confidence and



productivity at work and promote successful and effective living. Twenty-three participants, senior level scientists, technical officers, and common cadre officers, participated in this programme.

### *Training Programme on Record-management, Administration and Preservation*

This programme, organised on 20 and 21 June 2024, aimed to sensitise the participants about the importance of effective record management for enhancing operational efficiency, ensuring compliance, mitigating risks, supporting decision-making, and preserving organisational space, knowledge and integrity. The programme emphasised on using records management and archiving as a tool for supporting office work. It covered various aspects like Records Lifecycle Management, Classification and

Indexing, Retention and Disposal Policies, Auditing and Compliance Monitoring, Physical and Electronic Records Management, Record Management Technologies. The goal of records management was to help an organisation keep the necessary documentation accessible for both CSIR operations and compliance audits.

Shri Mahendra Kumar Gupta, Joint Secretary, CSIR, inaugurated the programme. Seventy-seven participants from various CSIR Institutes participated in this certification programme.



### Awards & Honour

## **IICT Scientist Dr S Sridhar, Inducted as a Fellow of the Royal Society of Chemistry, London**

**D**r Sundergopal Sridhar, a Chemical Engineer and Chief Scientist at CSIR-Indian Institute of

Chemical Technology, Hyderabad, has been admitted as a Fellow of the prestigious Royal Society of



Chemistry (FRSC), London, UK, with a Member ID: 771115.

During his 26 years as a research scientist, Dr Sridhar has developed and transferred several technologies for chemical & allied industries, besides contributing immensely to societal welfare. Major highlights of his career include the commissioning of several membrane pilot plants based on Electrodialysis, Nanofiltration, Gas Permeation, and Reverse osmosis of capacities varying from 500–5000 L/h for solvent recovery, effluent treatment and gas purification in pharmaceutical, steel, textile, aroma chemicals, and petrochemical industries.

Dr Sridhar has designed and installed more than 75 water purification plants based on Nanofiltration, Ultrafiltration, and Reverse osmosis of 600–4000 L/h capacity for purification of groundwater, surface water, and flood water for 5 Million population affected by fluorosis, typhoid, and other water-borne diseases in 10 States of India. Other innovations include a novel and affordable system for medical-grade ultrapure water for dialysis

of more than 2 lakh chronic kidney disease patients in government and private hospitals. He has designed an Atmospheric Water Generator of 60 to 1000 Lit/day capacities to produce remineralised drinking water from relative humidity in the air in water-scarce regions, hospitals, and railway stations.

To mitigate COVID-19, Dr Sridhar designed low-cost novel multilayer washable masks that were provided to more than 6 lakh people, including school children and frontline workers. These masks generated ₹ 2 Cr revenue for NGOs and employed 500 senior citizens and Women's Self-Help Groups.

Dr Sridhar has published 181 research papers in reputed international journals with an h-index of 53. He is ranked among the Top 2% of Scientists worldwide by Stanford University, USA, and Elsevier Science Publishers in 2021, 2022 & 2023. He has 15 patents, 4 Books, and 50 Book Chapters to his credit.

Dr Sridhar is a recipient of 70 Prestigious Science Awards, including CSIR Young Scientist Award 2007, Scopus Young Scientist Award 2011, NASI Reliance Industries Platinum Jubilee Award 2013, VNMM award from IIT-Roorkee 2015, five CIPET national awards from 2016-20, Nina Saxena Excellence in Technology Award from IIT-Kharagpur in 2017, three HPCL NGIC Awards for 2019-21, seven IChE awards, and ASSOCHAM Award 2023.

## Indo-German WISER Award 2024 to Ms Sadaf Ansari



**M**s Sadaf Ansari, Senior Scientist at the Marine Instrumentation Division (MID), CSIR-NIO, Goa, has been awarded the prestigious Indo-German WISER Award 2024 by the Indo-German Science & Technology Centre – a joint collaboration between the Department of Science & Technology (DST), India, and the Federal Ministry of Education and Research (BMBF), Germany.

The award funds ten research projects each year, carefully evaluated by the Indian and German scientific committees. Ms Ansari will undertake her project titled “AI-Driven Advanced Plankton Image Analysis for Ocean Monitoring” with Prof. Dr Rainer Kiko, Heisenberg Professor and Group Leader of the Plankton Biogeochemistry and Dynamics Group at the GEOMAR Helmholtz Centre for Ocean Research in Kiel, Germany. Her project will span three years and include research stays at GEOMAR, Germany.

At GEOMAR, Ms Ansari will contribute to ongoing German projects funded by the German Science Foundation (GSF) and the European Research Council (ERC) in the areas of AI/ML, where she will be collaborating with Prof. Dr Rainer Kiko, Dr Jan Taucher and Dr Simon-Martin Schröder as a part of the project team.

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