CSIR IN MEDIA

सीएसआईआर
CSIR
भारत का नवाचार इंजन
The Innovation Engine of India

NEWS BULLETIN
01 TO 05 AUGUST 2024

Study shows accelerating groundwater depletion in north India

CSIR-NEIST, NGRI

05th August , 2024

Groundwater in north India remains a vital food and water security resource for more than one billion people. But, the summer monsoon drying, and winter warming pose considerable challenges for rapidly declining groundwater, says a new research study. The study in which scientists of the CSIR-National Geophysical Research Institute (NGRI) in Hyderabad/ Northeast Institute of Science and Technology (NEIST-Jorhat (Assam)) participated along with Indian Institute of Technology (IIT) Gandhinagar, Columbia University, New York (US) and King Abdullah University of Science and Technology, Thuwal, (Saudi Arabia) showed that groundwater depletion has been accelerating in this region for the past 70 years and will continue in the projected future .The study got published in the latest edition of 'Earth's Future', a leading journal of American Geophysical Union.

First-of-its-kind study

Scientists, including former NGRI director and now director of NEIST V.M. Tiwari, Vimal Mishra, Swarup Dangar, Upamanu Lall, Yoshihide Wada have made the first-of-its-kind study exploring the impact on irrigation water demands and groundwater storage using in situ observations, satellite data, and a hydrological model.

Rapid groundwater depletion in north India

Their study indicated that summer monsoon precipitation has reduced and winters have become warmer in north India during 1951–2021. Both satellite and hydrological model-based estimates show a rapid groundwater depletion (more than 1.5 cm/year) in north India with a

net loss of 450 km3 of groundwater during 2002–2021.

Reasons for further depletion of ground water

Reduced groundwater recharge and enhanced pumping to meet irrigation demands has depleted the groundwater further. For instance, the summer monsoon drying (10%–15% deficit for near far periods)followed by substantial winter warming (1–4°C rise in temperatures) in the future will further accelerate groundwater depletion by increasing (6%–20%) irrigation water demands and reducing groundwater recharge (6%–12%), said Dr. Tiwari, in an exclusive interaction. This phenomena has led to major drought conditions, resulting in a massive loss of groundwater between 2002 and 2021. Examining the response of India's groundwater to the warming climate is critical for climate adaptation and ensuring food and freshwater security as it leads to increased irrigation water demands in the monsoon (Kharif) and winter (Rabi) seasons, he said.

Current cropping intensity estimated to decline by 68%

A wetter and warmer climate is also projected in north India in the future. The summer monsoon precipitation is estimated to rise by about 9 per cent at a regional warming of 3°C. This will cause a 6% rise in annual irrigation water demands. It is also estimated that current cropping intensity could decline by 68% due to groundwater depletion, explained the top scientist.

Methods to reduce burden on groundwater for irrigation

Scientists suggest that burden on groundwater for irrigation can be reduced by shifting the geographies where crops are procured from and grown without compromising the procurement targets and farm income. Groundwater sustainability measures combined with technological advancements to improve irrigation water use efficiency, altered cropping patterns, and enhanced groundwater recharge would be required to reduce the adverse impacts of groundwater depletion in north India in the future, they added.

Published in:

The Hindu

Tirunelveli Campus Connect

CSIR

05th August , 2024

APAJ award given

Noorul Islam University, Kumarakoil, Kanniyakumari district, joining hands with Nim Medicity, hosted the Sixth APJ Award Ceremony to honour N. Kalaiselvi, Director General of CSIR and Secretary, DSIR, for her contributions to the field of electrochemical power systems over her 25-year career. Kerala Governor Arif

Mohammad Khan lauded her leadership and achievements, highlighting her role as an inspiration in the scientific community. Earlier, K.A. Saju, GM of Nim Medicity, welcomed the gathering. Neyyatinkarai MLA K. Anslan presided over the ceremony. Nim Medicity MD M.S. Faizal Khan delivered the foreword, while Noorul Islam University Vice Chancellor Tessy Thomas provided the keynote address. CSIR-Trivandrum Director C. Anandaramakrishnan proposed the vote of thanks.

Moot court contest

The School of Law of Joy University, Vadakkankulam, Tirunelveli district, organised the first edition of Sardar Dr. S.A. Raja Memorial national-level Moot Court Competition from July 29 to 31. The idea was to promote mooting culture and to demonstrate the advocacy skills and legal acumen of the students. As many as 18 teams from various States and institutions across the nation took part in preliminary rounds, quarter finals and semifinals. Eight teams were selected on basis of their score in the quarter finals and again four teams were selected for semifinals which were adjudged by practising advocates of Supreme Court, District and High Court. The competition was inaugurated by R.Yogeshkumar, Addl. DSP, Valliyoor. Prashanth Desai, Former Prof. NLSIU and Dean, Dayanand Sagar Law College, Bengaluru, was the chief guest for the valedictory function.

Published in:

Thehindu

CCMB researchers unravel 'SNCA' gene role in Parkinson's disease

CSIR-CCMB

04th August , 2024

In a ray of hope for the elderly suffering from Parkinson's disease, the progressive disorder that impacts the nervous system and parts of the body controlled by nerves, a group of researchers from Hyderabad have unraveled the intricate mechanism and the important role that a gene known as Alpha-synuclein (SNCA) plays in the disease.

It turns out that there are two-forms of alpha-synuclein (SNCA) structures including amyloid filaments and smaller aggresomes. And if, both of them are balanced, then the Parkinson's disease among individuals can be managed, the cutting-edge research by geneticists of Hyderabad-based Centre for Cellular and Molecular Biology (CCMB) led by Swasti Raychaudhari, published in Journal of Cell Sciences (April, 2024), indicated.

Out of the two forms of SNCA, the aggresomes are known to break proteins and they eventually degrade the SNCA gene itself. According to CCMB researchers, there is no safe balance between the aggresomes and amyloid filaments among patients with Parkinson's disease, which indicates that there is a need to find a treatment modality that strikes a balance between the two.

While geneticists from CCMB have managed to link the role of SNCA and its two forms including amyloid filaments and aggresomes in Parkinson's Diseases, at present, they are in the process of checking how to reduce to the load of SNCA.

There are multiple studies in the past that have linked the role of alpha-synuclein behind movement disorders including Parkinson's Disease, Multiple System Atrophy (MSA) and neurodegenerative diseases like dementia.

With the role of SNCA gene behind such diseases becoming important, the focus by

researchers worldwide is to develop therapies centered-around it. The CCMB researchers are now trying to figure out a way to activate aggresomes to reduce the load of SNCA gene that are apparently behind neurodegenerative disorders.

The CCMB research on SNCA gene paints a hopeful picture for an estimated 7 million individuals from India suffering from Parkinson's disease.

Published in:
Telanganatoday

Council Scientific and Industrial Research (CSIR)- National Physical Laboratory (NPL) organizes a three-day program on Aerospace, Electronics, Instrumentation & Strategic Sector (AEISS) theme under the One Week One Theme

CSIR-NPL, CSIO, CEERI, IIP, NAL

03rd August , 2024

Council Scientific and Industrial Research (CSIR)- National Physical Laboratory (NPL) hosted a three-day workshop on AEISS theme from 2nd to 4th August at the NPL campus, as part of its 'One Week One Theme' initiative with participating labs CSIR-CSIO, CSIR-CEERI, and CSIR-IIP. Prof. Venugopal Achanta, Director of CSIR-NPL, extended a warm welcome to attendees. Subsequently, Dr. Abhay Anant Pashilkar, Director of CSIR-NAL and AEISS Theme Director, delivered a keynote address. He elaborated on the AEISS theme, outlining its pivotal role in achieving Atmanirbhar Bharat, Swasth Bharat, and Make in India initiatives. He also discussed the projected targets associated with the AEISS theme.

Dr. P. C. Panchariya, Director of CSIR-CEERI, highlighted the crucial role of the AEISS theme in driving industrial growth. He also elaborated on the significance of a single window system for smooth and straightforward technology transfer.

Dr. S. K. Dubey, the workshop convenor, outlined the three-day agenda. This included a student-scientist interaction session, a Startup/MSME/Industry meet, and a focus on Women in AEISS. He concluded by proposing a vote of thanks. Over 60 students participated in the student-scientist interaction program. They explored the exhibition and engaged with scientists during the second session. A science quiz based on the exhibition concluded the first day of the event.

Brief event is scheduled as follows:

Day 1: Inaugural Function followed by an Exhibition showcasing the latest technologies and innovations in the field of science. As part of the Jigyasa program, school students are invited to visit the exhibition to increase their awareness of upcoming advancements and inspire their interest in science and technology. The product demonstrations of cutting-edge technologies are the focus of the exhibition at the NPL museum.

Day 2: Focus on Industry Collaborations, highlighting technologies developed and sold to industries by CSIR. Industries will have a platform for Panel Discussions where they can showcase their technologies and interact with leading experts. The day will also feature various Talks from Renowned Scientists, providing insights into their work's significance and enlightening us about new research and technologies. The Networking Sessions to foster collaboration and knowledge sharing.

Day 3: Celebrating Women in AEISS recognizing that women are equal contributors in every field. The final day will celebrate the achievements of women in science and technology, featuring Talks on New and Interesting Research by women scientists. These sessions aim to motivate and inspire young girls to pursue careers in technology development. These talks focus on critical topics and future trends.

Published in:

Pib

Strive to develop indigenous technology to make the country self-sufficient, students told

CSIR

03rd August , 2024

The importance of nurturing indigenous ideas to ensure that developmental projects is both locally relevant and globally competent, said N. Kalaiselvi, Director-General, Council of Scientific and Industrial Research (CSIR) and secretary, Department of Scientific and Industrial Research (DSIR). “Graduates should take it as a challenge to develop an indigenous technology in a key field as a tribute to their institute and their country,” she said speaking at the convocation ceremony of the National Institute of Technology – Tiruchi (NIT-T) on Saturday. “In the geopolitical conditions of our times, we cannot depend on any other country for any other technology or livelihood-related requirements,” Ms. Kalaiselvai said.

She urged young Indians to cultivate a start-up culture and critically assess the sustainability of such ventures. Although many start-ups faced the challenge of sustaining themselves, she asked graduates to keep up the pursuit of innovative ideas. Ms. Kalaiselvi said it was encouraging to see the growing number of students opting for postgraduate studies as also their higher rate of job placements. A total of 2,173 graduands received their degrees at the 20th convocation. The President’s Medal for the highest overall cumulative grade point average (CGPA) was awarded to Sneha Ann Reji of B. Tech, Computer Science and Engineering. Institute medals were presented to nine B.Tech., one B. Arch., 23 M. Tech., four M. Sc, and one each of M. Arch., MCA, MBA, and M.A. graduands. NIT-T director G. Aghila detailed the initiatives undertaken for implementing National Education Policy (NEP) 2020 in the institute.

Published in:

TheHindu

NBRI churns out 'Shiv bhabhut' from KV Temple's floral waste

CSIR-NBRI 03rd August , 2024

CSIR's National Botanical Research Institute (NBRI) has stepped in to help Kashi Vishwanath temple manage tons of floral waste generated daily by converting it into Shiv bhabhut (holy ash). The increase in the footfall of devotees after the construction of Kashi Vishwanath Dham in Varanasi had made it tough for temple authorities to manage 5-6 tons of floral waste generated daily.

To help the temple handle the disposal of the flowers offered to Lord Shiva at the temple, which is amongst 12 jyotirlingas in India, CSIR-NBRI has transformed the sacred floral waste into a Shiv bhabhut, as a special gift for devotees in the auspicious month of Shrawan.

Moreover, NBRI also conducted successful toxicology tests on mice so that devotees using the bhabhut as 'tilak' had 100% herbal holy ash with zero side effects on the skin. NBRI has transferred its technology to a private firm so that the product reaches the common man soon. "We have come up with a unique product 'Shiv bhabhut', a sacred ash developed from the temple-offered flowers of Shri Kashi Vishwanath temple in Varanasi," said CSIR-NBRI director Ajit Kumar Shasany.

Published in:
Times of India

One-Month Professional Training Program for Hindalco Industries Limited concluded successfully at CSIR IMMT Bhubaneswar

CSIR-IMMT, HRDC

02nd August , 2024

The Council of Scientific and Industrial Research-Institute of Minerals and Materials Technology (CSIR-IMMT) has successfully concluded a one-month professional training program on "Recent Trends in Mineral Characterization, Beneficiation, Metallurgy, and Materials Development" for Graduate Engineer Trainees (GETs) from Hindalco Industries Limited. The program, held from July 1-31, 2024, featured a series of theory, practical, and hands-on sessions focusing on the theme and objectives of the training.

The program was attended by 50 GETs from various Hindalco working stations. Dr. T S Rana, Head of CSIR-HRDC, Ghaziabad, was the chief guest and delivered the valedictory lecture on Human Resources Development activities at CSIR, which included a highly productive interaction with the participants.

Dr. Ramanuj Narayan, Director of CSIR-IMMT, addressed the gathering, detailing the various activities of CSIR-IMMT and the broader CSIR organization, while emphasizing the importance and impact of regular training.

Both Dr. Rana and Dr. Narayan appreciated the efforts of the entire organizing team for the smooth conduct of the program.

Dr. D S Rao, Former Chief Scientist and Mentor of the training program, presented his observations, and L D Besra, Head of MCD, provided special remarks on the conduct of the program. Dr. Kali Sanjay, the program coordinator, shared his views in absentia, which were conveyed to the participants by the Director.

Dr. T Pavan Kumar, Convener, and Mr. P K Dash, Co-coordinator, along with the entire organizing team, ensured the program's fruitful execution.

The feedback from the participants during the valedictory event reflected the overall success and grand conclusion of this first-of-its-kind professional training program at CSIR-IMMT. The collective efforts of the teams from all departments and sections of CSIR-IMMT were pivotal in the successful planning and conduct of the program.

Published in:
Indiaeducationdiary

CSIR develops durable battery for energy solutions in remote sub-zero conditions that would benefit defence forces

CSIR-CMERI

02nd August , 2024

Experts from the Council of Scientific and Industrial Research (CSIR) have developed a battery that functions efficiently in sub-zero temperature, which has immense benefits for the armed forces as well as the civilian populace located in high altitude areas.

A device that combines an efficient durable cathode catalyst and an anti-freezing electrolyte fabricated for zinc-air batteries can be used for energy solutions in remote areas where conventional batteries may struggle due to extreme cold conditions.

A team from CSIR-Central Mechanical Engineering Research Institute synthesised a cathode material by integrating it with cobalt and iron based alloy and nanoparticles. The resulting hybrid structure enhanced the durability and demonstrated remarkable efficacy in both liquid and solid-state zinc-air batteries, even under sub-zero temperatures, thereby showcasing its potential for practical electrochemical applications.

“The portable, flexible, and lightweight nature of our device makes it an excellent choice for a wide range of users. It can provide reliable energy solutions not only to everyday consumers but also to military and defence personnel operating in remote and challenging environments,” the researchers said in a paper published by them.

“By enabling energy independence in harsh climates and remote locations, the technology represents a promising advancement towards sustainable and resilient energy solutions accessible to all,” they added.

As the demand for power escalates, efficient energy storage systems are pivotal for harnessing clean and renewable sources. According to the Ministry of Science and Technology, researchers are trying to develop devices with heightened energy density and reduced weight.

Lithium-ion (Li-ion) batteries face constraints due to heavy cathode materials like lithium cobalt oxide and lithium iron phosphate with limiting energy density. Metal-air batteries are emerging as promising alternatives, substituting heavy cathode materials with metals such as sodium, potassium, magnesium, aluminium, zinc and iron.

Addressing the global demand for sustainable energy solutions, electro-catalytic techniques like overall water splitting, fuel cells and metal-air batteries offer low carbon footprint alternatives. However, challenges like low rate of energy generation and complex multi-phase interfaces, exist.

To overcome these challenges there is a need to develop high-efficiency heterogeneous catalysts that promise reduced material usage, simplified designs, enhanced energy utilisation and improved device integration, the ministry said.

Published in:
Tribuneindia

Dr N. Kalaiselvi: Empowering women in STEM

CSIR-CECRI

1st August , 2024

Dr Nallathamby Kalaiselvi made history when she became the first woman to be appointed Director General (DG) of one of India's premier scientific agencies, the Council of Scientific and Industrial Research (CSIR), in 2022. Over her career, she has authored over 125 research papers and holds six patents. In her role as DG of CSIR, she oversees the work of 38 laboratories and nearly 4,500 scientists.

Dr Kalaiselvi began as a teacher of science and engineering before joining CSIR's Central Electrochemical Research Institute (CECRI) in 1997. Over her career, she has significantly contributed to the development of Lithium-ion batteries (LIBs) and energy storage systems in general. Her work includes establishing India's first LIB production facility at CSIR-CECRI.

Hailing from Ambasamudram in Tamil Nadu, Dr Kalaiselvi's early education in a Tamil medium school fostered her love for science, leading her to earn a B.Sc. from the Government Arts College for Women, Tirunelveli, and an MSc from the Government Arts College, Coimbatore. She later pursued a PhD in synthetic organic chemistry, transitioning to electrochemistry during her time at CECRI. Dr Kalaiselvi is also an advocate for gender equality in STEM fields, and has emphasised the need for more women-centric initiatives and support systems to bridge the gender gap in scientific research and academia.

Below is an excerpt of a Q+A with Dr Kalaiselvi, lightly edited for clarity:

Q. What inspired you to pursue a career in science/ engineering? Were there any specific role models or influences that steered you in this direction?

Even as a child, I was intrigued by the wonders of nature. In my early years, my curiosity and interest in natural phenomena were encouraged by my parents. I was lucky to have encouraging teachers who helped me sustain my interest in science.

Q. Would you agree that women face unique gender-based challenges—such as biases or negative stereotypes—when it comes to academics or careers in STEM fields? If so, could you tell us some of the specific challenges you faced, and how you overcame them?

I agree that women face gender-based challenges, but the good news is that these days gender-based challenges and biases are on the wane. Today, there is far more awareness and discussions on gender issues, especially in STEM. The issues are being addressed through a systematic approach, such as the increasing availability of Government of India-driven women-focused or women-centric schemes. About a decade or two ago, the opportunities for women in STEM were far fewer than the ones available today. Also, support systems such as creches in the workplace are helpful.

Q. As the first woman to serve as Director General of the CSIR, your career has been ground-breaking and an inspiration for many young women. Did you face any hurdles in breaking the glass ceiling?

It would be unfair to say that I faced hurdles to break the glass ceiling. Of course, I faced challenges, as would anyone, and it is all about persevering, working hard and staying focused on what one is doing. All along, I committed myself to the science which I have been doing with some passion, and the enabling ecosystem that we have today has seen me get to where I am today.

Q. What would you say are the main challenges faced by women who choose to take up engineering? What advice would you offer to young female students or professionals in this field?

There used to be a time when boys outnumbered girls in engineering disciplines. Currently, in

some engineering disciplines, the gender ratio is much better, favouring girls and in research. Today, we are increasingly seeing girls outnumbering boys in pass percentages. The challenges of the past were a sum of multiple factors. Today, more female students and professionals excel, whether in education or their chosen profession. I advise female students to focus on their educational pursuits steadfastly.

Q. What recommendations would you offer educational institutions or professional organisations to better support women in STEM fields?

All institutions and organisations in the country need to be gender-conscious and gender-aware so that there are no avenues for gender biases to creep in. Also, there should be women-friendly policies, and more opportunities should be provided to females wherever possible.

Q. How do you approach leadership, and what strategies have you found effective in leading a diverse team of researchers and scientists?

In CSIR, we have some of the best S&T workforces who are high calibre and highly motivated. I try to empower the workforce to pursue their scientific interests and contribute to the institutional goals that are, in turn, aligned with the national vision of Viksit Bharat.

Q. How do you see the future of energy storage and electrocatalytic applications evolving, and what role do women engineers play in this field?

The future of energy storage is a dynamic landscape, shaped by the increasing demand for clean, efficient, and reliable energy solutions. Batteries, fuel cells, supercapacitors, flow batteries and hybrid capacitors each hold unique strengths and are likely to coexist and complement each other in various applications. Combining different energy storage technologies will be crucial for optimising performance and cost-effectiveness.

The field of electrocatalysis is poised for significant growth and innovation, with far-reaching implications across various sectors. The intersection of electrocatalysis and sensor technology

is likely to make sensors become smaller and more portable, enabling their integration into wearable devices, implantable systems, and environmental monitoring. Sensors must withstand harsh environments while maintaining performance, especially in cases like 'lab on a chip' and smart sensors. Advanced packaging materials and ATMP techniques will be essential, similar to those of LEDs and displays.

Women engineers are poised to play a pivotal role in shaping the future of energy storage and electrocatalytic applications. Their unique perspectives, skills, and dedication will be instrumental in addressing the pressing challenges and opportunities in these fields. They will have an important role to play in R&D, product design and development, leadership, fostering collaboration between academia, industry, and government.

Published in:
Bestcolleges

CSIR-NIIST Develops Long Shelf-life Foods for Wayanad Landslide Survivors

CSIR-NIIST 01st August , 2024

In response to the Wayanad landslides, a scientific research institute has been tirelessly working to prepare long-lasting food items for survivors. The Council of Scientific and Industrial Research (CSIR) - National Institute for Interdisciplinary Science and Technology (NIIST) has transformed its incubation cell for technology transfer into a food processing unit. Over 70 individuals, including research scholars, are participating in this endeavor to produce 1,000 packets of various food items.

CSIR-NIIST is employing exclusive technology to extend the shelf life of these food items by at least one month. 'We increased the protein content of upma by 10 percent,' said C Anandharamakrishnan, director of CSIR-NIIST. 'We use retort processing and pouches to keep the food fresh for up to a month. Additionally, we have poha mixed with ground nuts and millet puffs for kids.'

The goal is to send readily consumable food with a longer shelf life to the affected areas by Thursday evening. The Thiruvananthapuram district collector will receive the first batch of food packets. The institution, which typically does not house a full-fledged production line, has adapted its existing infrastructure for continuous production.

Published in:
Devdiscourse

NIIST joins relief effort in Wayanad, prepares food for landslide victims

CSIR-NIIST

01st August , 2024

Joining the relief effort in landslide-hit Wayanad, the CSIR-National Institute for Interdisciplinary Science and Technology (NIIST) here has prepared a consignment containing 3,000 servings of food items. The staff and students of the NIIST contributed to disaster relief by preparing food products in the in-house food plant facility. "The consignment consists of nutritious food products and healthy snacks such as upma, poha, millet-based extruded snacks and rusks in ready-to-eat food pouches, specially formulated using high-quality ingredients without additives except for the rusk," the NIIST said on Thursday.

Products' shelf life

Prepared using state-of-the-art food processing equipment, the products are shelf-stable with a shelf life of two to four weeks and can be stored at room temperature without sophisticated storage equipment.

The NIIST is coordinating with State government agencies, disaster management and search and rescue teams to supply the food products to the affected people. The institute said it plans to ramp up the food production based on requirements on the ground.

Published in:

Thehindu

Rashtriya Hindi Vigyan Sammelan 2024: Promoting Scientific research in Hindi Language

CSIR-AMPRI, NIScPR

1st August , 2024

The Council of Scientific and industrial Research-Advanced Materials and Processes Research Institute (CSIR-AMPRI), Bhopal, in collaboration with Vijnana Bharati Madhya Bharat Province, the Madhya Pradesh Council of Science and Technology, Bhopal, Madhya Pradesh Bhoj (Open) University, Bhopal; CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR), New Delhi, and Atal Bihari Vajpayee Hindi University, Bhopal, organized the "Rashtriya Hindi Vigyan Sammelan 2024," continuing the tradition of previous years. This was the fourth edition of the conference, held on July 30-31.

The conference's primary aim was to offer a platform for researchers to present and discuss their work in Hindi, fostering the popularisation of science and technology through this language. The event was inaugurated by Dr. Mohan Yadav, Chief Minister of Madhya Pradesh, who emphasised the importance of advancing knowledge and science in our own language. "We can become a VishwaGuru only through knowledge and science in our own language," stated Dr. Yadav, expressing his hope for the conference to evolve into an international event.

Avanish Kumar Srivastava, Director of CSIR-AMPRI, in his welcome address highlighted the importance of promoting S&T research in Hindi through this conference and urged the scientific community to contribute actively. Prof. Venugopal Achanta, Director, CSIR-National Physical Laboratory and Acting Director of CSIR-National Institute of Science

Communication and Policy Research (CSIR-NIScPR), underscored the significance of using Hindi as a medium for science communication

The Vigyan Kavi Goshti, a special event organised by CSIR-NIScPR in collaboration with other co-organisers of the conference, took place on July 30, 2024. Inaugurated by Shri Dharmendra Bhav Singh Lodhi, Minister of State (Independent Charge), Department of Culture, Tourism, Religious Trusts, and Endowments, Government of Madhya Pradesh, this science poetry seminar provided a platform for poets, science communicators, and writers to promote science through Hindi. The event featured 12 distinguished science poets who delivered captivating poetry.

On July 31, the valedictory session was graced by Shri Rajendra Shukla, Deputy Chief Minister of Madhya Pradesh. During the session, a Memorandum of Understanding (MoU) was signed between various universities and CSIR-AMPRI. The conference featured six sessions on diverse topics of Science, Technology, Engineering, Ayurveda, and Science Communication.

The Rashtriya Hindi Vigyan Sammelan 2024 has been a significant step toward enriching science and technology-based research in Hindi and fostering greater engagement with scientific discourse in the language.

Published in:
Pib

सीएसआईआर
CSIR
भारत का नवाचार इंजन
The Innovation Engine of India

Please Follow/Subscribe CSIR Social Media Handles

CSIR INDIA

CSIR_IND

CSIR India

CSIR India

csirindia

CSIR India