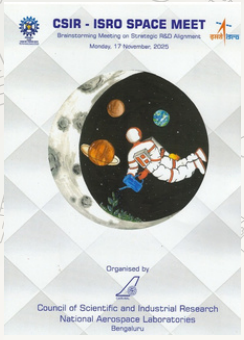
Monthly E-Publication

November 2025

CSIR Jigyasa Newsletter

Lab Spotlight: CSIR-IIIM



Special Highlight CSIR–ISRO Space Meet 2025

137	25064	1942	35
Programmes Conducted	Students Benefitted	Teachers Benefitted	Labs Covered

Hon'ble Prime Minister's Vision: Student – Scientist Interaction

A Vision that became a reality

CSIR Society Meeting (6 April 2016)

"CSIR to create a **vibrant student- scientist interaction**"

Shri Narendra Modi
(President, CSIR and Hon'ble Prime Minister of India)

"**Laboratories to become Centre of attraction for children** and maximum opportunity to students to perform research at CSIR laboratories."

Shri Narendra Modi
(President, CSIR and Hon'ble Prime Minister of India)

CSIR Foundation day (26 Sept 2016)

104th Indian Science Congress (03.01.2017)

"**Scientific Social Responsibility** needs to be inculcated to connect our leading institutions to all stakeholders, including schools.

Shri Narendra Modi
(President, CSIR and Hon'ble Prime Minister of India)

"Our **Scientists** have been asked to develop programmes on **science teachings** in our schools across the country. This will also involve training teachers"

Shri Narendra Modi
(President, CSIR and Hon'ble Prime Minister of India)

Nobel Prize Series Exhibition at Gandhinagar on 9th January 2017

CSIR Society Meeting (14th February 2020)

"**Develop virtual labs** so that science can further be taken to all segments of the students in each and every corner of the country"

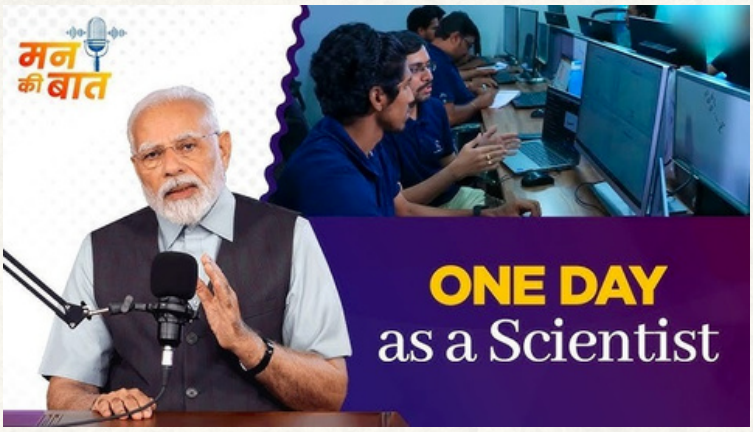
Shri Narendra Modi
(President, CSIR and Hon'ble Prime Minister of India)

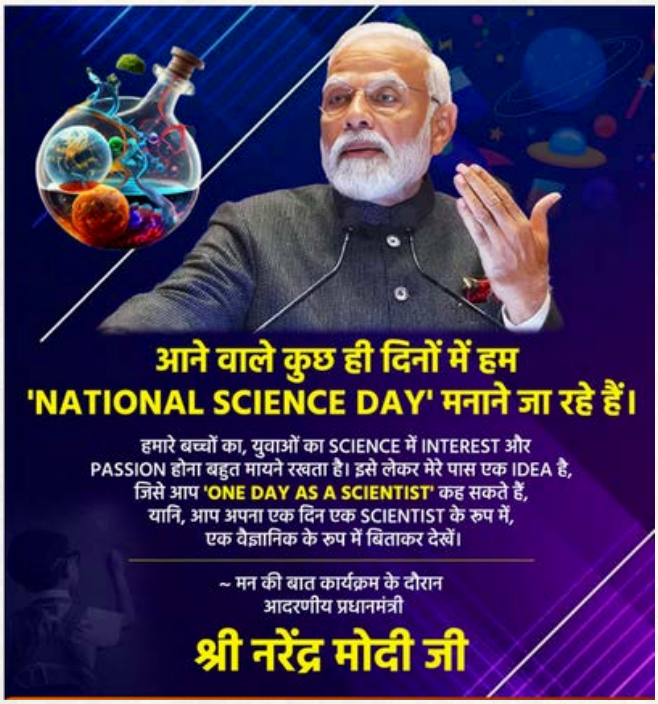
Shri Narendra Modi

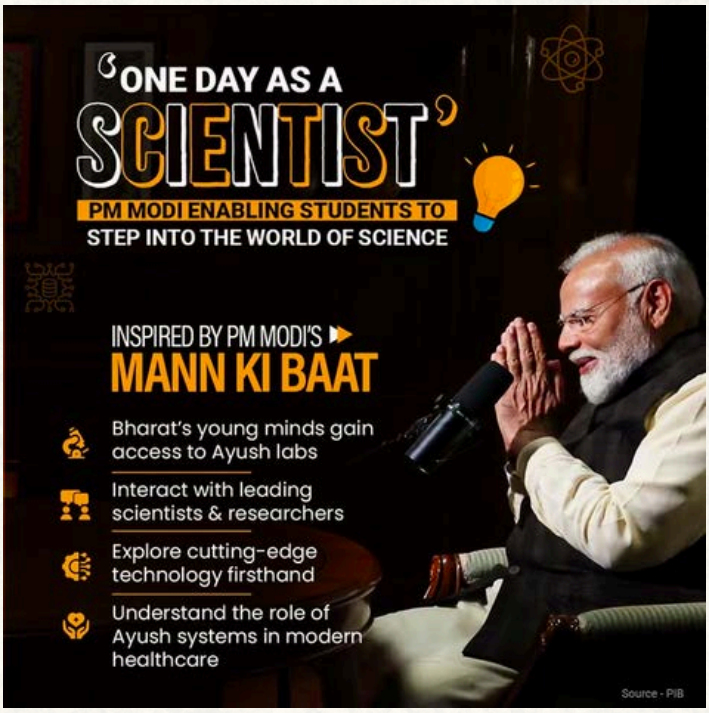
Hon'ble Prime Minister of India and President, CSIR

"…. I have an idea for this, which you can call **'One Day as a Scientist'**. That is, you should try to spend one day as a scientist. You can choose any day as per your convenience and choice….."

119th #MannKiBaat







ODAS Celebratory event

Dr Jitendra Singh
@DrJitendraSingh

Takeaways from my Address at the #CSIR #Jigyasa programme for school children:

"There is a visible aspirational surge in India's new young generation and this energy charged urge deserves to be met with 3 "A"s—Awareness, Aptitude, Avenue.

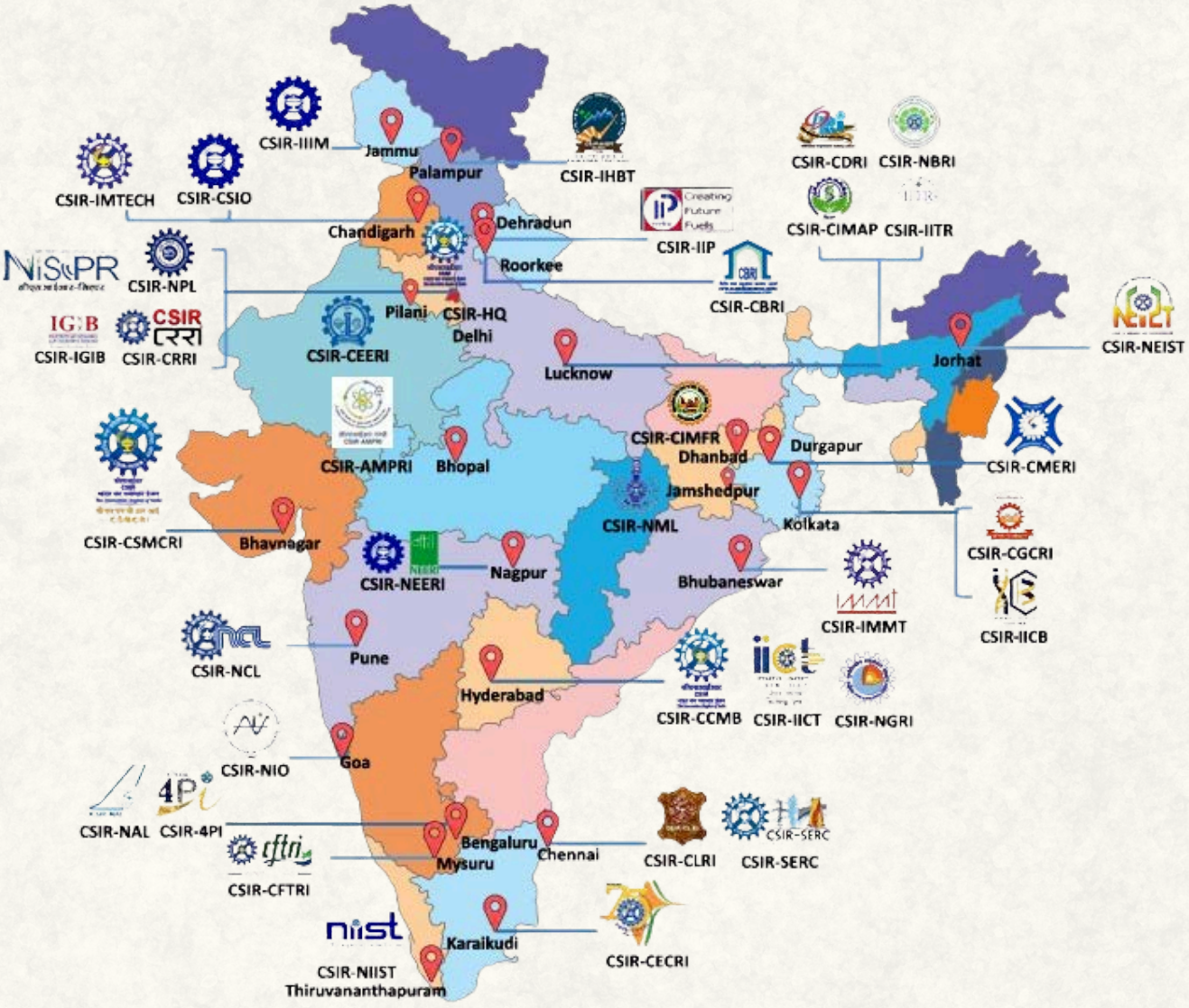
From the experience of this successful student experiment of "One Day as a Scientist", can we try a reciprocal model “One Day as a Teacher”, wherein a Scientist may visit a school as a Teacher for one day...especially a school in a small town or a rural area.

In such innovation driven programmes by children, can we invite at least one parent per participant so that they could better appreciate the value of their child's aptitudinal skills".

Message from DG CSIR

Jigyasa is one of India's largest and most impactful science outreach programmes, nurturing scientific temper, curiosity, and innovation among students nationwide. Here, the students are encouraged to ask questions, explore fearlessly, and engage with science beyond textbooks, reaffirming that the future of Indian science rests in inquisitive young minds. - N. Kalaiselvi

CSIR Jigyasa Outreach



Summary of CSIR–JIGYASA Outreach Initiatives

(2017–Present)

14,80,000+ Students benefitted

93,000+ teachers benefited

4,000+ Programmes conducted

Table of Contents

Jigyasa Lab Spotlight

CSIR–Indian Institute of Integrative Medicine (CSIR–IIIM), Jammu

CSIR-IIIM Jammu's Leadership: Dr. Zabeer Ahmed, Director of CSIR-IIIM Jammu, stands among India's leading scientific innovators, pioneering breakthroughs in natural product–driven drug discovery. Backed by his impactful research, with several patents, he continues to push scientific boundaries. His visionary leadership is propelling CSIR-IIIM into a premier hub of world-class biomedical research and innovation.

CSIR–Indian Institute of Integrative Medicine (CSIR–IIIM), Jammu, is one of the oldest and most renowned laboratories of the Council of Scientific and Industrial Research (CSIR). Established in 1941 as Drug Research Laboratory, it was then taken over by CSIR of Govt. of India in December 1957 as Regional Research Laboratory (RRL), Jammu. The institute was renamed CSIR–Indian Institute of Integrative Medicine in 2007 to reflect its broadened vision of integrating modern scientific approaches with India's traditional knowledge systems.

Vision, Mission and Key objectives:-

Vision: The vision of the Institute is to position IIIM as an International center of excellence for natural products chemistry, chemical biology, pharmacology and biotechnology to discover new chemical entities (NCEs) as drugs for unmet medical needs and provide scientific rationale and validity to various Indian systems of medicine. The institute aspires to achieve leadership position as a research Institute for creating a broad knowledge base, a work force of dedicated and trained scientists and a technology development center through scientific exploration of secondary metabolites from plants and microbial biodiversity, at the same time generating awareness for their conservation and protection.

Mission: To become a Centre of Excellence in Natural Products chemistry and biotechnology driven drug discovery, integrating modern biology with chemistry.

...continued on next page

Jigyasa Lab Spotlight

CSIR–Indian Institute of Integrative Medicine (CSIR–IIIM), Jammu

CSIR–IIIM is equipped with state-of-the-art facilities, including advanced laboratories for chemistry, plant and microbial sciences, molecular biology, and pharmacology; a GLP-compliant animal house; pilot plants for extraction and formulation development; fermentation and greenhouse facilities; and a Central Instrumentation Facility (CIF) for high-end analytical and structural studies. CSIR-IIIM also houses a dedicated Quality Control and Quality Assurance (QCQA) Division, which is an NABL-accredited facility equipped with advanced analytical instruments for quality evaluation, standardisation, and certification of natural products, herbal formulations, and industrial samples. With its legacy of innovation and societal impact, CSIR–IIIM continues to be a torchbearer of scientific excellence in India.

In addition to its main campus in Jammu, the institute also has a branch laboratory at Srinagar, which strengthens its research and outreach in diverse scientific areas. The institute also maintains well-developed experimental farms, namely Chatta Farm in the Jammu region, Bonera Farm (Pulwama), Verinag Farm (Anantnag), and Yarikhah Farm (Tanmarg) in the Srinagar region, as well as a farm at Palam in the Leh region.

***

Eminent Scientist Column

Turning Molecules into Medicines: The Journey of Dr. Parvinder Pal Singh

Every medicine begins as a mystery — a molecule waiting to reveal its potential. For Dr. Parvinder Pal Singh, each compound is a story, each experiment a step closer to healing. Over the past seventeen years at CSIR–IIIM Jammu, Dr. Singh has been at the forefront of research that transforms chemical ideas into therapeutic realities.

Dr. Parvinder Pal Singh
Sr. Principal Scientist, CSIR-Indian Institute Of Integrative Medicine (IIIM)
ppsingh@iiim.res.in

From Curiosity to Cure

Dr. Singh's fascination with chemistry began not in a big laboratory, but with the simple curiosity of how nature designs its own chemicals. That early wonder led him from the classrooms of Jammu to the corridors of CSIR, where he completed his Ph.D. on design and synthesis of novel immune adjuvants and small molecule immunomodulators.

Today, his research stands at the intersection of organic synthesis, medicinal chemistry, and natural product research, creating molecules that could combat some of humanity's most persistent diseases — tuberculosis, cancer, and inflammation.

Designing New Paths in Drug Discovery

Dr. Singh and his team have developed innovative ways to build molecular bonds — the essential links that give life to medicines. His work on forming C–C, C–N, and C–S bonds through C–H activation has opened new routes in synthetic chemistry.

Among his major achievements are the development of IIIM-019, IIIM-017, and IIIM-AF-01, promising leads against tuberculosis, and IIIM-368 and IIIM-284, potent anti-cancer candidates. These molecules have advanced through pre-clinical stages and are covered by multiple international patents, reflecting the lab's high scientific and translational impact.

Nature's Blueprint: From Plants to Phytopharmaceuticals

Dr. Singh's curiosity often leads him back to nature — the original chemist. His work on plant-based formulations combines traditional wisdom with rigorous scientific validation.

- A **CBD: THC-based fraction (IIIM-CSEF-01)**, developed under a CSIR-DBT-ICMR collaboration, offers a safer, standardized alternative for cancer pain management.
- Another project has led to **Boswellia-based fractions (IIIM-BSEF-01)** for osteoarthritis treatment, now advancing towards clinical testing with industry collaboration.

These achievements reflect his belief that India's biodiversity holds untapped potential for next-generation medicines.

Science in Action – Responding to Real-World Needs

When the world faced the COVID-19 pandemic, Dr. Singh's laboratory along with other

...continued on next page

Eminent Scientist Column

Turning Molecules into Medicines: The Journey of Dr. Parvinder Pal Singh

colleagues responded swiftly. His team designed non-infringing synthetic processes and know-how for potential COVID drugs like nafamostat, camostat and fluvoxamine ensuring that industries could access essential compounds without delay. The technology of fluvoxamine has been transferred to pharmaceutical partners — a true example of how Indian science can rise to meet global needs.

Beyond Chemistry: Building Bridges with Biology

In collaboration with scientists at institutions like NCBS Bengaluru, Dr. Singh has contributed to the development of unique fluorescent chemical probes that allow researchers to visualize molecular processes within living cells. Tools like GPI anchors and LG-186 have enabled discoveries published in prestigious journals such as Cell and Nature Communications — demonstrating how chemistry can illuminate the mysteries of life itself.

Dr. Parvinder Pal Singh is presently leading several innovative research projects that bridge modern medicinal chemistry with traditional and translational science. His team is advancing the clinical development of IIIM-290, a Rohitukine-based CDK9 inhibitor for the treatment of metastatic pancreatic cancer, supported by ICMR funding. In collaboration with French scientists under the Indo–French CEFIPRA program, he is also engaged in designing and synthesising hybrid molecules aimed at tackling drug-resistant and latent tuberculosis. Complementing these cutting-edge projects, Dr. Singh is exploring the therapeutic potential of traditional medicine through an AYUSH-funded study on Amalaki (Phyllanthus emblica) to evaluate its role in reducing anti-tubercular drug-induced liver toxicity. Additionally, his group is developing a collard green–based nutraceutical product focused on enhancing energy and providing anti-inflammatory benefits, particularly for sports and wellness applications. Together, these endeavours reflect his vision of integrating synthetic chemistry, natural products, and clinical research to address contemporary healthcare challenges.

Words of Wisdom for Young Minds

"Every experiment teaches you something — even the ones that fail. Science rewards persistence more than perfection."

Dr. Singh encourages young students to view chemistry not as a subject to memorize, but as a language of creation. His journey shows that the path from molecules to medicines is not just about innovation — it's about **imagination, integrity, and impact.**

Looking to the Future

Dr. Singh envisions an India where laboratories and industries work hand-in-hand as a team to discover drugs that are affordable, natural, and globally relevant. By uniting traditional knowledge and modern research tools, his work exemplifies **"Science for Self-Reliance"** — a vision that inspires the next generation of innovators.

For young readers, his story is a reminder that the next breakthrough might begin with a single question — and a curious mind brave enough to pursue it.

***

Jigyasa Mentor / Nodal Column

From Textbooks to Test Tubes: Making Science Meaningful for Young Minds

Dr. Asha Chaubey
Chief Scientist, CSIR-IIIM, Jammu
achaubey@iiim.res.in

Over the years, I've often heard students say that biology is about memorization and chemistry is full of confusing formulas. These misconceptions come from how these subjects are often introduced — as isolated streams of knowledge rather than as interconnected tools that help us understand and solve real-world problems. Through the CSIR-Jigyasa initiative at CSIR–IIIM Jammu, we have been working to change that narrative by creating opportunities for school students and teachers to engage directly with the science that happens inside research labs.

As someone deeply involved in both biological sciences and chemical processes, my work focuses on enzyme engineering, microbial biotransformation, and fermentation technologies — fields that beautifully integrate biology and chemistry. Through Jigyasa, we aim to bring these interdisciplinary connections to life for students. Our programs are not about passive learning, but about active exploration — where students see how a microbe can produce a useful compound, how an enzyme catalyzes a chemical reaction, and how these findings are scaled up in a lab.

Under Jigyasa, we've hosted numerous initiatives: "One Day as a Scientist", summer science camps, model demonstrations, interactive lectures, and hands-on workshops for both students and teachers. These programs are carefully designed to introduce basic concepts of microbiology, organic chemistry, and bioprocessing in ways that are engaging, practical, and aligned with what students learn in school. We simplify complex laboratory methods into activities that students can perform safely, often using low-cost materials — helping them appreciate the role of chemistry in biology and vice versa.

What has been particularly heartening is the response from students in rural areas, who often have limited access to laboratory infrastructure. Through outreach efforts, we've been able to take real science to their classrooms, and their enthusiasm has been remarkable. Teachers, too, are excited to take back new ideas and experiments to their schools.

Jigyasa has taught me that science education is most impactful when it's immersive, interdisciplinary, and inclusive. As a scientist and educator, my goal is to ensure that students don't just study biology or chemistry — they experience how these sciences work together to solve the world's biggest challenges. Whether it's the microbes that ferment our food, purify wastewater, or produce life-saving drugs, the role of microorganisms is deeply woven into our daily lives — a reminder that science is not confined to laboratories, but is an active part of how we live, heal, and sustain our world.

***

Student Column

A unique Participation Experience in the "Jigyasa Programme"






Japteg Singh Bamrah (Class XII)
Dalhousie Public School, Jammu

I never imagined that experimenting with balloons and steel cans in my room would lead me to develop a Solar Mechanical Engine now recognised on global platforms. What began as a simple curiosity — Can air itself create motion using only heat? — evolved into a functional system that generates mechanical force and electricity through the cyclic expansion and contraction of air. Under the mentorship of CSIR-IIIM Jammu, I refined the idea into a reversible heat pump-based model designed for rural and off-grid applications.

This journey has been incredibly rewarding. I was honoured to win the CSIR Jigyasa EPIC Hackathon 2024, showcase my prototype at the National Startup Festival 2025 in front of Union Minister Dr. Jitendra Singh, and become the first Indian student to win the HonorsGradu “Build a Better Future” Scholarship 2025, receiving USD 10,000 for education and USD 5,000 for prototype development. I have also received offers and scholarships from over ten universities across the USA, Canada, and Australia.

For me, this journey is proof that innovation doesn’t depend on age or resources — it depends on persistence, imagination, and mentorship. If a school student like me can turn a homemade model into a real-world solution, others can too.

***

Student Column

A unique Participation Experience in the "Jigyasa Programme"

Burhaan Manzoor Mir (Class XII)
Government Higher Secondary School, Doda

Attending the Science workshop for ATL schools organized by CSIR-IIIM was a wonderful experience for me. I enjoyed the biology and chemistry experiments, which were fun and easy to understand. The activities helped me learn new things and made me more interested in science.

Pavni Sharma(Class X)
Happy Model Hr. Sec. School, Udhampur

Taking part in National Science Day at CSIR-IIIM was a great experience for me. I enjoyed different events like science exhibition, talks, and a visit to various labs at CSIR-IIIM. I learned many new things and felt inspired after meeting the scientists. It was both fun and educational.

Bindia Bhagat (Class X)
RRL High School, Jammu

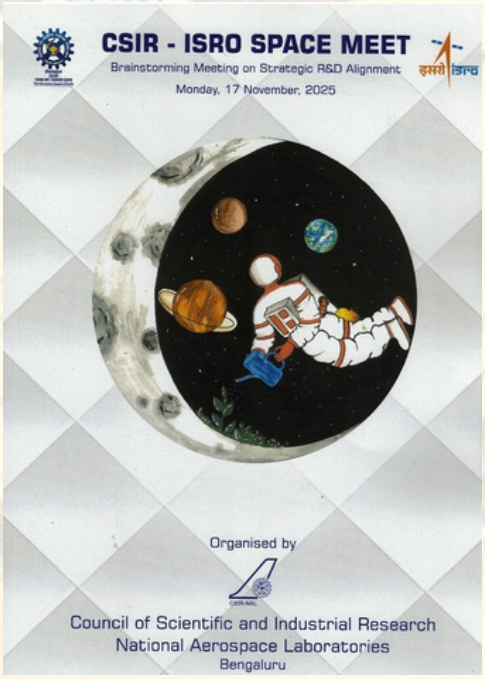
I enjoyed the science activities as they were fun and educational. The DIY experiments were very interesting—testing milk for adulteration taught me about food quality, and extracting DNA from saliva made biology exciting and real. Both activities made learning science easy and exciting.

Tanishk Jaglan (Class VII)
Heritage School, Jammu

I had a great time participating in the ODAS 2025 event at CSIR-IIIM. The hands-on experiments and demonstrations were fascinating and helped me better understand science. The event motivated me to explore more scientific ideas and enjoy learning through experiments.

CSIR–ISRO Space Meet 2025
(Special Highlight)

Strengthening India's Collaborative Path to Human Spaceflight and Space Research



The Council of Scientific and Industrial Research (CSIR) organised the CSIR–ISRO Space Meet 2025 on 17th November 2025 in Bengaluru. The event aimed to strengthen cooperation between India's premier scientific and space institutions in advancing human spaceflight research, microgravity studies, and space technology innovations aligned with the nation's vision for self-reliance in space exploration.

Organised under the leadership of Dr. N. Kalaiselvi, Secretary, Department of Scientific and Industrial Research (DSIR) & Director General, CSIR, the meet was hosted by CSIR–National Aerospace Laboratories (CSIR-NAL). The event saw the participation of around 170 delegates, including scientists, technologists, astronauts, and representatives from national and international organisations. Distinguished attendees included the Consul General of France in Bengaluru, and officials from DRDO, ISRO, IISc, IITs, CSIR laboratories, National Laboratories, Universities, IAM, IAF, along with experts

...continued on next page

CSIR–ISRO Space Meet 2025
(Special Highlight)

Strengthening India's Collaborative Path to Human Spaceflight and Space Research

from the European Space Agency (ESA), Japan Aerospace Exploration Agency (JAXA), French Space Agency (CNES), Medetia Paris, and the Space Flight Institute.

The meet focused on integrating CSIR's multidisciplinary research strengths with ISRO's mission-driven technological requirements. Key areas of collaboration included human spaceflight physiology, biomedical instrumentation, materials science, life sciences in microgravity, and advanced systems for spacecraft maintenance and operations. Discussions also highlighted innovations in plant growth in space, development of space food, microfluidics, ceramic metamaterials, and microbial corrosion prevention.

Experience-sharing sessions by Wg. Cdr. Rakesh Sharma (Retd.), India's first astronaut, and ISRO astronaut Gp. Capt. Prasanth B. Nair provided important insights from their human spaceflight experiences. A special video message by Mr. Jean-François Clervoy, ESA astronaut and veteran of NASA's Space Shuttle missions, added international perspective to the deliberations. Experts from ESA, JAXA, and French research institutions contributed to thematic discussions on space physiology, bioengineering, and humanitarian applications of space-based technologies. A souvenir containing CSIR's research proposals for the Human Space Mission was released.

...continued on next page

CSIR–ISRO Space Meet 2025
(Special Highlight)

Strengthening India's Collaborative Path to Human Spaceflight and Space Research

Dr. V. Narayanan, Secretary, Department of Space (DoS) & Chairman, ISRO, presented an overview of ISRO's accomplishments and ongoing collaborations with CSIR, and outlined potential areas for future partnership. Dr. N. Kalaiselvi delivered a comprehensive presentation on the expertise available across various CSIR laboratories in support of ISRO's Human Space Mission.

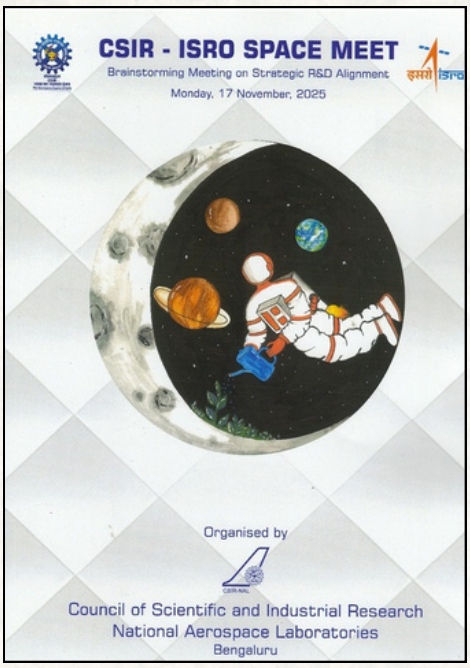
A high-level panel discussion featuring representatives from DRDO, CNES, CBR, IIT, IAM, SFI France, ISTAD-CSIR and CSIR-NAL deliberated on the future of human space research in India, covering advancements in aerospace medicine, human physiology, and space technology.

Through this initiative, CSIR and ISRO reinforced their commitment to building stronger research linkages and fostering an ecosystem that promotes innovation in space medicine, human factors engineering, and translational technologies for societal benefit. The deliberations helped chart a collaborative roadmap for future human spaceflight missions and identified new avenues for joint R&D in space science and technology.

The CSIR–ISRO Space Meet 2025 marked a significant step towards advancing India's scientific capability, technological self-reliance, and international collaboration in space research. It also underscored the nation's collective commitment to realise the vision of the Bharatiya Antariksh Station by 2035.

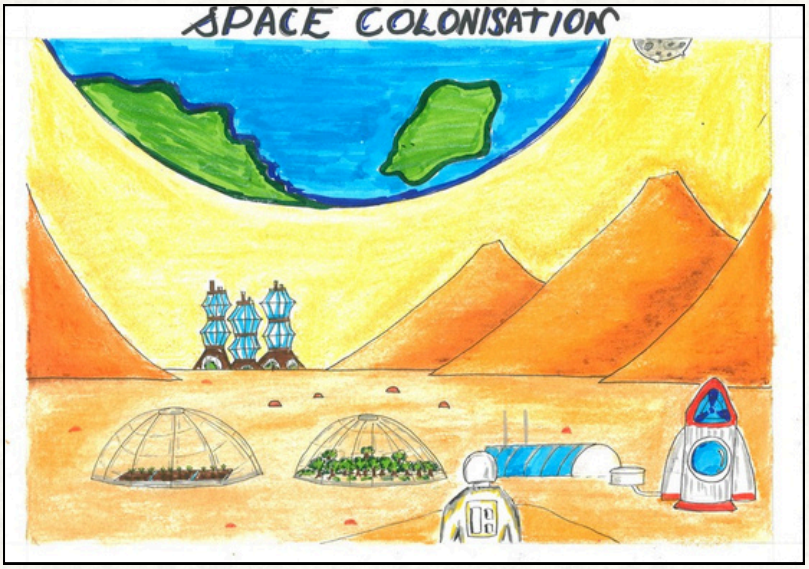
***

Visuals Crafted by Our Young Artists



EVA OJHA
Air Force School AST

A.S Tanushree
Kendriya Vidyalaya DRDO



Anamithra Saha
Kendriya Vidyalaya NAL

RAVISHA
Kendriya Vidyalaya NAL

Jigyasa Monthly Highlights

Lab Name	No. of events	Total no. of Students benefitted	Total number of Teachers benefitted	Engagement Activities
CSIR-CCMB	03	1000	350	School Visit by Scientists, School Visit, Popular Lecture, Demonstration, ATL Activity, Teacher Training/workshop.
CSIR-CDRI	09	2424	153	School Visit by Scientists, School Visit, Popular Lecture, Students Visiting Lab, Lab Visit, Popular Lecture, Demonstration, Competition, Quiz, etc.
CSIR-CFTRI	04	267	16	School Visit by Scientists, School Visit, Popular Lecture, Demonstration, Quiz, Students Visiting Lab, Lab Visit,
CSIR-CIMAP	02	82	08	Students visiting lab, Lab Visit, Popular Lecture, Demonstration, Workshop, DIY kit demonstration, Field Visit, etc
CSIR-IGIB	02	75	07	Students Visiting Lab, Lab Visit, Demonstration, DIY kit demonstration, Popular Lecture.
CSIR-IHBT	16	1692	159	Students Visiting Lab, Field Visits for students, Demonstration, ATL Activity, Day of Importance, Popular Lecture,
CSIR-IICB	01	128	02	School Visit by Scientist, School Visit, Popular Lecture
CSIR-IIIM	02	342	20	Day of Importance, Lab Visit, Competition, Quiz, workshop
CSIR-IMTECH	01	00	19	Teacher Training/workshop, Demonstration, DIY kit demonstration, Teacher Training, ATL Activity,
CSIR-IITR	07	5400	120	Students Visiting Lab, Lab Visit, Popular Lecture, Demonstration, DIY kit demonstration, Quiz,
CSIR-NBRI	06	555	32	Students Visiting Lab, Lab Visit, etc, School Visit by Scientists, School Visit, Popular Lecture, Demonstration, DIY kit demonstration
CSIR-CLRI	01	400	20	Students Visiting Lab, IISF Curtain Raiser, Lab Visit, School Visit, Popular Lecture, Demonstration, Field Visit, etc.
CSIR-CECRI	04	2022	170	School Visit by Scientists, School Visit, Popular Lecture, Demonstration, Quiz, DIY kit demonstration, ATL activity, Lab Visit, etc
CSIR-CSMCRI	01	150	09	School Visit by Scientists, Popular Lecture, etc.
CSIR-CIMFR	01	225	17	Students Visiting Lab
CSIR-IIP	02	150	20	Students Visiting Lab, Popular Lecture, School Visit, Demonstration
CSIR-NCL	001	320	15	IISF Curtain Raiser Event, Popular Lecture, Demonstration, Quiz.
CSIR-NEIST	11	624	58	School Visit by Scientists, Teacher Training/workshop, School Visit, Demonstration, DIY kit demonstration,
CSIR-NIIST	01	80	05	Students Visiting Lab, Popular Lecture,
CSIR-AMPRI	03	1166	178	Open Day, Demonstration, Students Visiting Lab, Lab Visit, School Visit by Scientists, Popular Lecture, etc.

Jigyasa Monthly Highlights

Lab Name	No. of events	Total no. of Students benefitted	Total number of Teachers benefitted	Engagement Activities
CSIR-CBRI	04	469	26	Students Visiting Lab, Popular Lecture, Field Visit, Demonstration.
CSIR-CGCRI	02	696	60	School Visit by Scientists, School Visit, Popular Lecture, Demonstration, Competition, Quiz.
CSIR-CMERI	06	875	33	Students Visiting Lab, Lab Visit, Popular Lecture, School Visit by Scientists, School Visit, Popular Lecture, DIY kit demonstration, Demonstration, etc
CSIR-CRRI	01	110	05	Students Visiting Lab, Day of Importance, Popular Lecture.
CSIR-IMMT	10	2140	102	Students Visiting Lab, Lab Visit, School Visit by Scientists, School Visit, ATL Activity, etc.
CSIR-NAL	03	186	14	Students Visiting Lab, Day of Importance, Popular Lecture, Competition, Quiz.
CSIR-NML	04	199	09	Students Visiting Lab, Demonstration, Foundation Day, Open Day.
CSIR-NEERI	05	580	103	Students Visiting Lab, Field Visits for students, Open Day, Day of Importance, Lab Visit, School Visit, Popular Lecture, Demonstration Field Visit, Competition, Open Day, Teacher Training/workshop,
CSIR-SERC	03	444	21	School Visit by scientists, Popular Lecture, Demonstration, ATL Activity, Teacher Training/workshop, Demonstration, Day of Importance.
CSIR-NIScPR	02	57	06	Students Visiting Lab, Popular Lecture, Demonstration, Quiz.
CSIR-4PI	02	73	06	Students Visiting Lab, Popular Lecture, Demonstration, Day of Importance, Lab Visit, Popular Lecture.
CSIR-CSIO	07	822	94	Students Visiting Lab, Popular Lecture, Webinar, Jan Jatiya Diwas celebration, Demonstration, Competition, DIY kit demonstration, Curtain Raiser of the India International Science Festival (IISF-2025), Climate Clock assembling, Workshop.
CSIR-CEERI	06	750	50	Students Visiting Lab, Field Visits for students, Lab visit, DIY Kit Demonstration, Popular Lecture, School Visit by Scientists,
CSIR-NGRI	06	496	40	Students Visiting Lab, Open Day, Quiz, DIY kit demonstration, Webinar, Quiz, Demonstration, Oral & Poster presentation.
CSIR-NPL	01	65	03	Students Visiting Lab, Lab Visit, Popular Lecture
Total	137	25064	1942	

Jigyasa Monthly Highlights

CSIR-IIIM, Jammu

November 06, 2025

- 4th Children's Science Festival witnessed the participation of 131 students and 7 teachers from 4 schools in Jammu.

November 14, 2025

- 211 students and 13 teachers from 7 schools across Jammu participated in the Conference-cum-Workshop on AI-Driven Innovations in Drug Discovery and Agriculture (AI-D2A 2025) held at the BIRAC-BioNEST Incubator.

CSIR-IICB, Kolkata

November 17, 2025

- 128 students and 2 teachers from Amulya Bidyabhaban (H.S.), Purba Medinipur participated in the Jigyasa Programme.

CSIR-NAL, Bengaluru

November 21, 2025

- Lab visit arranged for 68 students and 7 teachers representing 9 different schools.

November 24, 2025

- Quiz Competition organized for 55 students and 3 teachers.

November 28, 2025

- Popular Lecture conducted for 63 students and 4 teachers.

Jigyasa Monthly Highlights

CSIR-IITR, Lucknow

November 06, 2025

- Educational lab visit engaged 1,433 students and 31 teachers from Sangam International School and Rajkiye High School.

November 07, 2025

- Lab visit conducted for 703 students and 14 teachers of Rajkiye Government High School.

November 10, 2025

- 547 students and 15 teachers from Rajkiye Government High School actively took part in the interactive Jigyasa programme.

November 11, 2025

- Laboratory visit conducted for 689 students and 27 teachers of Rajkiye Government High School.

November 17, 2025

- Outreach session organised for 734 students and 14 teachers from Rajkiye Government High School.

November 19, 2025

- Science interaction programme engaged 526 students and 13 teachers of Rajkiye Government High School.

November 21, 2025

- 768 students and 16 teachers from Rajkiye Government High School.

Jigyasa Monthly Highlights

CSIR-NBRI, Lucknow

November 04, 2025

- Lab visit was organized for 55 students and 6 teachers from PM Shri Kendriya Vidyalaya, Gonda.

November 06, 2025

- Outreach programme was conducted for 230 students and 12 teachers from PM Shri Kendriya Vidyalaya, Kamla Nehru Nagar, Ghaziabad.

November 06, 2025

- Scientists visited and connected with 48 students and 3 teachers from PM Shri Kendriya Vidyalaya, Babugarh, Hapur.

November 13, 2025

- Capacity building programme was organized for 17 students and 2 teachers from Rashtriya Raksha Vishwavidyalaya.

November 14, 2025

- On the occassion of children's day, outreach programme was conducted for 65 students and 3 teachers from Govt. High School Thari.

November 15, 2025

- 61 students and 2 teachers from PM Shri Kendriya Vidyalaya, 39 GTC participated in an outreach programme.

November 21, 2025

- 82 students and 4 teachers from Govt. High School Saspan Lucknow visited the lab.

Jigyasa Monthly Highlights

CSIR-IMMT, Bhubaneswar

November 03, 2025

- Scientists interacted with 52 students and 5 teachers from Guru Nanak E. M. Public School Godiapokhari.

November 07, 2025

- Lab visit was organized for 114 students and 17 teachers from Jawahar Navodaya Vidyalaya (JNV) and SAI International School students.

November 12, 2025

- Interactive session with scientists was held for 24 students and 2 teachers of Sainik School.

November 19, 2025

- 38 students and 1 teacher from Sainik School, engaged in an interactive session with scientists

November 21, 2025

- District-Level Science Exhibition hosted by PTC Nodal High School, scientists engaged with 500 students and 15 teachers.

November 23, 2025

- 500 students and 16 teachers of PM Shri Jawahar Navodaya Vidyalaya, Konark interacted with scientists during a school visit.

November 26, 2025

- Scientists visited SAI International School and interacted with 60 students and 2 teachers.

November 26, 2025

- Lab visit was conducted for 352 students and 15 teachers from 6 different schools.

Jigyasa Monthly Highlights

CSIR-IMMT, Bhubaneswar

November 28, 2025

- Scientists visited Kendriya Vidyalaya No. 3 and interacted with 200 students and 10 teachers

November 29, 2025

- 300 students and 10 teachers interacted with scientists during a school visit at Kendriya Vidyalaya 3.

CSIR-NGRI, Hyderabad

November 17, 2025

- Lab visit conducted for 164 students and 11 teachers from SLATE - The School.

November 18, 2025

- Webinar programme organized for 40 students and 3 teachers from Sri Chaitanya School.

November 21, 2025

- 39 students and 5 teachers from Vidyaranya High School participated in a Demonstration Programme.

November 28, 2025

- Oral & Poster Presentation organized for 125 students and 10 teachers from S.R School, Bolarum,Telangana.

Jigyasa Monthly Highlights

CSIR-NEIST, Jorhat

November 07, 2025

- Outreach Programme conducted for 80 students and 5 teachers from Charigaon Girls's high School, Bahona.

November 08, 2025

- 120 students and 7 teachers of Bahona Girls' High School attended a Popular Lecture.

November 12, 2025

- Lab demonstration organized for 57 students and 5 teachers from Navaroop Jatiyo Bidyapith, Nagaon.

November 13, 2025

- 50 students and 9 teachers from Dikhowmukh Adarsha High School, Sivsagar participated in a Jigyasa programme.

November 17, 2025

- Lab Visit arranged for 35 students and 4 teachers from New Look Academy, Sivasagar

November 17, 2025

- Lab Visit arranged for 35 students and 2 teachers from Biswanath College, Biswanath Chariali.

.

November 19, 2025

- Lab visit organized for 32 students and 6 teachers from 3 schools.

November 20, 2025

- Quiz and Essay competition conducted for 15 students and 6 teachers.

November 27, 2025

- Jigyasa programme organized for 60 students and 1 teacher from Carmel School, Jorhat.

Jigyasa Monthly Highlights

CSIR-CIMFR, Dhanbad

November 26, 2025

- 225 students and 17 teachers from 10 different schools took part in Lab Visit.

CSIR-NIIST, Trivandrum

November 19, 2025

- Under the IISF 2025 Curtain Raiser Programme, 80 students and 5 teachers from five different schools attended a laboratory visit.

CSIR-CLRI, Chennai

November 20, 2025

- 400 students and 20 teachers attended the 11th India International Science Festival (IISF-2025).

Jigyasa Monthly Highlights

CSIR-CSIO, Chandigarh

November 03, 2025

- 124 Students and 4 teachers from Air Force School 3BRD visited the lab for an educational tour.

November 12, 2025

- Lab visit arranged for 230 students and 10 teachers from PM SRI Kendriya Vidyalaya, Karnal.

November 13, 2025

- 50 students and 2 teachers from GMSSS23 participated in a lab visit and poster painting competition in connection to the Jan Jatiya Diwas.

November 21, 2025

- 139 students and 69 teachers from 13 schools attended the Curtain Raiser of the India International Science Festival (IISF-2025)

November 26, 2025

- Lab visit with hands-on experiments was conducted for 66 students and 3 teachers from Angel Valley, Rajpura.

November 28, 2025

- Educational visit was conducted for 165 students and 11 teachers from GSSS, school of eminence.

Jigyasa Monthly Highlights

CSIR–CBRI, Roorkee

November 14, 2025

- On the occasion of Children's Day, a hands-on learning session was conducted for 120 students and 6 teachers from Rajkiye Inter College.

November 17, 2025

- 100 students and 6 teachers from 3 schools attended the Curtain Raiser of the 11th India International Science Festival (IISF), at Panjab University, Chandigarh.

November 27, 2025

- 101 students and 6 teachers of PM Shree Kendriya Vidyalaya, IMA took part in the student-scientist connect programme.

November 28, 2025

- Outreach Programme conducted for 148 students and 8 teachers from PM Shree Kendriya Vidyalaya, IMA.

CSIR-NPL, New Delhi

November 28, 2025

- Outreach programme was conducted for 65 students and 3 teacher from Pacific World School.

Jigyasa Monthly Highlights

CSIR-CGCRI, Kolkata

November 20, 2025

- One Day Vigyan Sobha programme organized for 618 students and 49 teachers from 18 different schools.

November 25, 2025

- 78 Students and 11 teachers from 5 different school benefited through a lab visit.

CSIR-CSMCRI, Bhavnagar

November 28, 2025

- 150 students and 9 teachers participated in a popular talk and laboratory visit.

CSIR-CIMAP, Lucknow

November 06, 2025

- Exposure cum awareness programme was organised for 30 students and 6 teachers from five schools, followed by the felicitation of winners of the “Vigyaan Vimarsh” virtual quiz.

November 20, 2025

- Educational visit was organized for 52 students and 02 teachers from City Montessori School, Gomtinagar 2, Lucknow.

Jigyasa Monthly Highlights

CSIR-IGIB, New Delhi

November 07, 2025

- Lab Visit and DIY kit demonstration programme was conducted for 45 students and 2 teachers from Doon Public School.

CSIR-NML, Jamshedpur

November 14, 2025

- 59 students and 3 teachers from Holy Cross School took part in a lab visit.

November 26, 2025

- Foundation day was celebrated with 50 students and 2 teachers from BPM+2 High School.

CSIR-IMTECH, Chandigarh

November 18-20, 2025

- Teacher Traning Programme was conducted for 19 teachers from 18 different schools.

Jigyasa Monthly Highlights

CSIR-CMERI, Durgapur

November 14, 2025

- On the occasion of Janjatiya Gaurav Diwas, lab visit for 30 students and 2 teachers from Pt. Raghunath Murmu Abasik School, Durgapur.

November 17, 2025

- 210 students and 6 teachers from PM SHRI Kendriya Vidyalaya, CRPF participated in Jigyasa Outreach Programme.

November 18, 2025

- Student Scientist Connect Programme was organized for 190 students and 7 teachers from Kendriya Vidyalaya, ONGC.

November 20, 2025

- Lab visit was arranged for 250 students and 7 teachers from PM SHRI Kendriya Vidyalaya, Kunjaban.

November 21, 2025

- Outreach programme was organized for 90 students and 6 teachers from Kendriya Vidyalaya, NIT.

November 28, 2025

- 95 students and 5 teachers from PM SHRI JNV, Bankura, and Jemua Bhadubala Bidyapith (HS) participated in the Curtain Raiser programme for the 11th India International Science Festival (IISF).

Jigyasa Monthly Highlights

CSIR-CECRI, Karaikudi

November 03, 2025

- Scientists visited 8 different schools and interacted with 1560 students and 112 teachers.

November 04, 2025

- On the occasion of Janjatiya Gaurav Divas 2025, 286 students and 24 teachers from 4 different schools participated in the Jigyasa Outreach Programme.

November 06, 2025

- Lab visit was organized for 86 students and 18 teachers from 37 schools.

November 28, 2025

- 90 students and 5 teachers from 5 schools participated in the India International Science Festival - 2025.

CSIR-NEERI, Nagpur

November 20, 2025

- 332 students and 10 teachers from 7 different schools across Nagpur and Vidarbha participated in the IISF 2025 Curtain Raiser.

November 30, 2025

- Teacher training workshop was organized for 77 teachers from the Providence Junior College of Education, Nagpur.

November 30, 2025

- Lab visit was organized for 40 students and 4 teachers from Silver Oak International School.

Jigyasa Monthly Highlights

CSIR-IHBT, Palampur

November 03, 2025

- Field Visit was organized for 35 students and 6 teachers from PM Shri GSSS saldla, Distt Chamba (HP).

November 04, 2025

- 233 students and 16 teachers from PM SHRI GSSS Samloti and PM SHRI GSSS Bhawarna took part in Outreach Programme.

November 07, 2025

- Lab visit was arranged for 244 students and 22 teachers from 3 different Distt of (HP)

November 11, 2025

- 152 students and 9 teachers from PM SHRI GSSS Dhundla attended an educational visit.

November 12, 2025

- Educational visit arranged for 35 students and 4 teachers from Kendriya Vidyalaya Bangana.

November 13, 2025

- Outreach Programme conducted for 102 students and 5 teachers from G.A.V School, Kangra and Viveka Foundations School.

Jigyasa Monthly Highlights

CSIR-IHBT, Palampur

November 14, 2025

- Janjatiya Gaurav Varsh Celebrated with 43 students and 5 teachers from PM Shri Government sr.sec school.

November 14, 2025

- Curtain Raiser Event for India International Science Festival (IISF) 2025 celebrated with 220 students and 21 teachers from 4 different school.

November 18, 2025

- Field visit conducted for 55 students and 8 teachers from Government Senior Secondary School, Talwandi Sabo, Bathinda.

November 19, 2025

- 40 students and 1 teacher from PM SHRI Kendriya Vidyalaya visited the lab.

CSIR-CCMB, Hyderabad

November 06, 2025

- 150 students and 50 teachers from Vidyaranya school participated in the Jigyasa programme.

November 21, 2025

- Outreach activity conducted for 800 students and 300 teachers from St Andrew's School.

Jigyasa Monthly Highlights

CSIR-CFTRI, Mysore

November 05, 2025

- Student Scientist programme conducted for 87 tribal students and 6 teachers in Govt High School, Bylore.

November 06, 2025

- 73 meritorious students and 11 teachers from 73 JNV Schools were invited for an educational visit.

November 17, 2025

- Lab visit was arranged for 32 students and 2 teachers from 6 different schools in Mysore.

CSIR-CRRI, New Delhi

November 11, 2025

- The Curtain Raiser IISF 2025 along Janjatiya Gaurav Divas Expert Talk Conduct for 114 students and 5 teachers from KV Masjid Moth, Tagore International School.

CSIR-NCL, Pune

November 25, 2025

- Popular Lecture programme was conducted during IISF 2025 Curtain Raiser Event for 320 students and 15 teachers form 6 different schools across pune and nearby regions.

Jigyasa Monthly Highlights

CSIR-IIP, Dehradun

November 27, 2025

- Scientists visited PM Shri-KV OLF and interacted with 75 students and 10 teachers.

November 28, 2025

- Curtain Raiser Event for India International Science Festival (IISF) 2025 celebrated with 75 students and 10 teachers from PM Shri-KV-IIP.

CSIR-AMPRI, Bhopal

November 01, 2025

- An open day visit was organized for 612 students and 63 teachers from 16 different schools from Bhopal.

November 07, 2025

- Lab visit was conducted for 54 students and 15 teachers from 54 different NVS schools from Bhopal.

November 08, 2025

- Scientists attended the Regional Science Congress organized by JNV Ratibad and interacted with 500 students and 100 teachers from 54 schools.

November 25, 2025

- Dr. Parthasarathi Ramakrishnan, Head, CSIR-HRDG, New Delhi, delivered a talk on “Bridging Research and Innovation: Pathways to Translation and Transformation”.

Jigyasa Monthly Highlights

CSIR-4PI, Bengaluru

November 12, 2025

- Lab Visit was organized for 40 students and 5 teachers form karnataka Publice School.

November 25, 2025

- 150th birth anniversary of Bhagwan Birsa Munda was commemorated with the participation of 33 female students from Kittur Rani Chennamma Residential School.

CSIR-CEERI, Pilani

November 04, 2025

- Student scientist programme conducted for 40 students and 2 teachers from RPSCET Balhana, Haryana.

November 11-12, 2025

- Lab visit organized for 270 students and 25 teachers from SNBL Govt. Sr. Secondary School, Kulhariyon ka Baas, and GSSS, Sankha Taal.

November 19, 2025

- 150 students and 20 teachers from Govt. ITI Jhunjhunu, BKBIET, BITS-Pilani and BRCM Behal participated in a lab visit.

Jigyasa Monthly Highlights

CSIR-SERC, Chennai

November 06-07, 2025

- 7 scientists from CSIR-SERC and CSIR-CMC visited 4 different schools and interacted with 336 students and 14 teachers.

November 19, 2025

- Teachers Training workshop was organized for 45 teachers from Kendriya Vidyalaya, Jawahar Navodaya Vidyalaya, and AECS schools.

November 20, 2025

- 66 students and 5 teachers are participate form KV meenambakkam attended the Curtain Raiser for the 11th India International Science Festival (IISF).

CSIR-NIScPR, New Delhi

November 07, 2025

- 57 students and 6 teachers from Rajkiya Sarvodaya Bal Vidyalaya, Shakurpur and Ryan International School, Mayur Vihar participatd in a Student- Scientist Connect Program

November 25, 2025

- CSIR-NIScPR and CSIR-NPL jointly organized Curtain Raiser for India International Science Festival (IISF 2025) and inetracted with 25 students and 2 teachers from Kendriya Vidyalaya Masjid Moth, Sadiq Nagar.

Jigyasa Monthly Highlights

CSIR-CDRI, Lucknow

November 01, 2025

- Science outreach programme was conducted for 210 students and 15 teachers from Amity International School, Vrindavan Yojna.

November 03, 2025

- 210 students and 10 teachers from Primary & Upper Primary School, Rasoolpur Sadat, Guramba were invited for a lab demonstration.

November 07, 2025

- Field visit was organized for 320 students and 10 teachers from Pt. Deen Dayal Upadhyay Government Model College, Khasraul, Bharawan, Hardoi (U.P).

November 13, 2025

- On the first day of the Curtain Raiser Programme of the India International Science Festival (IISF), 490 students and 38 teachers from 3 schools participated.

November 14, 2025

- 530 students and 25 teachers from two schools took part on Day 2 of the IISF Curtain Raiser Programme.

November 14, 2024

- 530 students and 25 teachers from two schools took part on Day 2 of the IISF Curtain Raiser Programme.

November 19, 2025

- Student scientist connect programme was conducted for 50 students and 10 teachers from 2 different schools.

Contact your nearest CSIR lab for Student / Teacher Outreach Activities

S.no	Lab	Jigyasa Nodal	Designation	Email
1	CSIR-CCMB	Dr. Somdatta Karak	Science Communication and Outreach Officer	somdattakarak@ccmb.res.in
2	CSIR-CDRI	Dr. Sanjeev Yadav	Principal Scientist	sanjeev_yadav@cdri.res.in
3	CSIR-CFTRI	Dr. Uma V Manjappara	Senior Principal Scientist	jigyasa.cftri@csir.res.in
4	CSIR-CIMAP	Dr. Bhaskar Shukla	Principal Scientist	bhaskarshukla.cimap@csir.res.in
5	CSIR-IGIB	Dr. Beena Pillai	Chief Scientist	Outreach.igib@csir.res.in
6	CSIR-IHBT	Dr. Gireesh Nadda	Senior Principal Scientist	training.ihbt@csir.res.in
7	CSIR-IICB	Dr. Sarita Ghosh	Senior Principal Scientist	s_ghosh@iicb.res.in
8	CSIR-IIIM	Dr. Asha Chaubey	Chief Scientist	achaubey.iiim@csir.res.in
9	CSIR-IMTECH	Mr. Chander Shekhar Sharma	Senior Scientist	shekhar.sharma@csir.res.in
10	CSIR-IITR	Dr. Kausar Mahmood Ansari	Principal Scientist	kausar.mahmood@csir.res.in
11	CSIR-NBRI	Dr. Vivek Srivastava	Chief Scientist	vivek.nbri@csir.res.in
12	CSIR-CLRI	Dr. S. Easwaramoorthi	Senior Principal Scientist	moorthi.clri@csir.res.in
13	CSIR-CECRI	Dr S. Angappan	Senior Principal Scientist	coordinator@cecrijjigyasa.in

Contact your nearest CSIR lab for Student / Teacher Outreach Activities

S.no	Lab	Jigyasa Nodal	Designation	Email
14	CSIR-CSMCRI	Dr. Doongar R. Chaudhary	Senior Principal Scientist	drchaudhary@csmcri.res.in
15	CSIR-CIMFR	Dr. Pallabi Das	Principal Scientist	cimfrjigyasa.123@gmail.com
16	CSIR-IICT	Dr. J. Vatsala rani	Senior Principal Scientist	vatsala.iict@csir.res.in
17	CSIR-IIP	Dr. Aarti	Senior Principal Scientist	jigyasa.iip@csir.res.in
18	CSIR-NCL	Dr. Wafia Masih	Chief Scientist	oss.ncl@csir.res.in
19	CSIR-NEIST	Dr. Dipankar Neog	Senior Principal Scientist	dipankarneog.neist@csir.res.in
20	CSIR-NIIST	Dr. Joshy Joseph	Senior Principal Scientist	hradniist.niist@csir.res.in
21	CSIR-AMPRI	Dr. Satanand Mishra	Principal Scientist	snmishra.ampri@csir.res.in
22	CSIR-CBRI	Dr. Neeraj Jain	Senior Principal Scientist	ods_head.cbri@csir.res.in
23	CSIR-CGCRI	Dr. Debdulal Saha	Senior Principal Scientist	debdulal.cgcri@csir.res.in
24	CSIR-CMERI	Dr. Man Singh Azad	Principal Scientist	mazad.cmeri@csir.res.in
25	CSIR-CRRI	Dr. Ravinder K	Chief Scientist	headilt.crri@csir.res.in

Contact your nearest CSIR lab for Student / Teacher Outreach Activities

S.no	Lab	Jigyasa Nodal	Designation	Email
26	CSIR-IMMT	Dr. Debi Prasad Das	Chief Scientist	dpdas@immt.res.in
27	CSIR-NAL	Dr. VPS Naidu	Chief Scientist	jigyasanal@gmail.com
28	CSIR-NML	Dr. Animesh Jana	Senior Scientist	animeshjana.nml@csir.res.in
29	CSIR-NEERI	Mr. P. S. KUMBHARE	Senior Principal Scientist	prakash.kumbhare@csir.res.in
30	CSIR-SERC	Dr. S. MAHESWARAN	Chief Scientist	maheswaran.serc@csir.res.in
31	CSIR-NIScPR	Dr. Suman Ray	Senior Principal Scientist	suman.niscpr@csir.res.in
32	CSIR-4PI	Ms. Pavithra N R	Senior Scientist	pavithra.4pi@csir.res.in
33	CSIR-CSIO	Dr Neerja Mittal	Principal Scientist	jigyasacsio@gmail.com
34	CSIR-CEERI	Mr. Pramod Tanwar	Senior Principal Scientist	pramod.ceeri@csir.res.in
35	CSIR-NGRI	Dr Sandeep Gupta	Senior Principal Scientist	outreach.ngri@csir.res.in
36	CSIR-NIO	Mr. Pramod Maurya	Senior Principal Scientist	maurya.nio@csir.res.in
37	CSIR-NPL	Dr. Shibu Saha	Senior Scientist	jigyasa.nplindia@csir.res.in

The Curious Corner

What is the primary research focus of CSIR–IIIM?

A) Space science
B) Drug discovery and natural product research
C) Renewable energy
D) Robotics

What type of accreditation does the QCQA Division at CSIR–IIIM hold?

A) ISO 9001
B) NABL
C) WHO
D) FDA

Which of the following crops is linked with CSIR–IIIM's Purple Revolution?

A) Mint
B) Lavender
C) Turmeric
D) Neem

What kind of environment does the greenhouse facility provide?

A) Controlled conditions for plant growth
B) Animal rearing
C) Chemical manufacturing
D) Water treatment

Why is it important to complete a full course of antibiotics?

A) To ensure all bacteria are killed and prevent resistance
B) To save water
C) To grow more plants
D) To produce more enzymes

Answers will be shared in the next months Newsletter

The Curious Corner

Plant tissue culture is used to:

A) Make fertilisers B) Build robots
C) Grow and propagate medicinal plants in controlled conditions
D) Manufacture plastics

Microbial biotechnology can help produce:

A) Biofuels, antibiotics, enzymes, and vaccines
B) Vitamins, amino acids, and plant hormones
C) Fermented foods like yogurt, cheese, and alcohol
D) All of the above

Which of the following is least likely to be involved in antibiotic production?

A) Fermentation by microorganisms B) Chemical synthesis in laboratories
C) Genetic modification techniques D) Conventional crop farming

Which of the following best explains how drug resistance develops in bacteria?

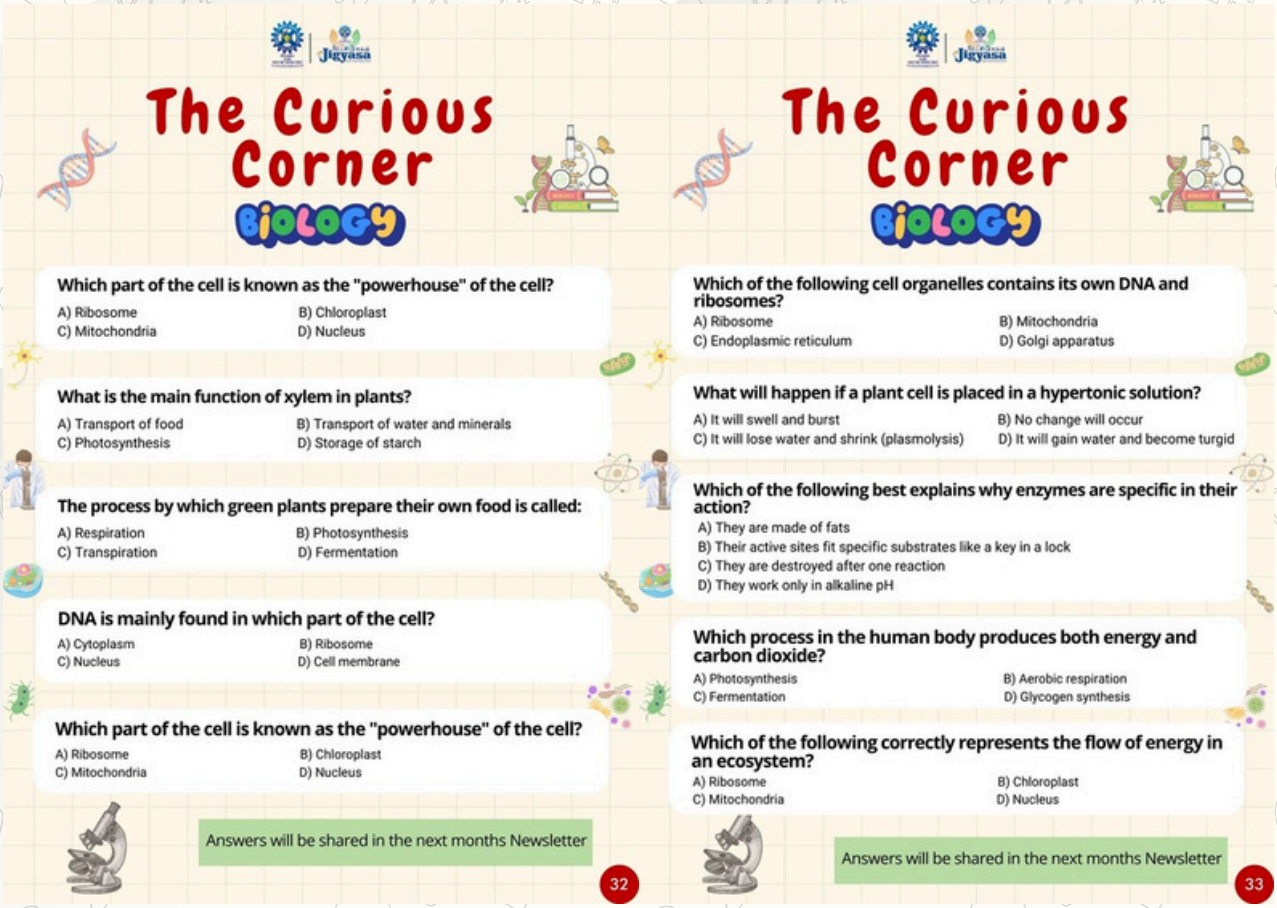
A) Bacteria start producing more energy
B) Bacteria change genetically to survive antibiotics
C) Antibiotics become weaker over time D) Bacteria stop reproducing

Which term is used for bacteria that are resistant to several antibiotics?

A) Superbugs B) Probiotics
C) Pathogens D) Antigens

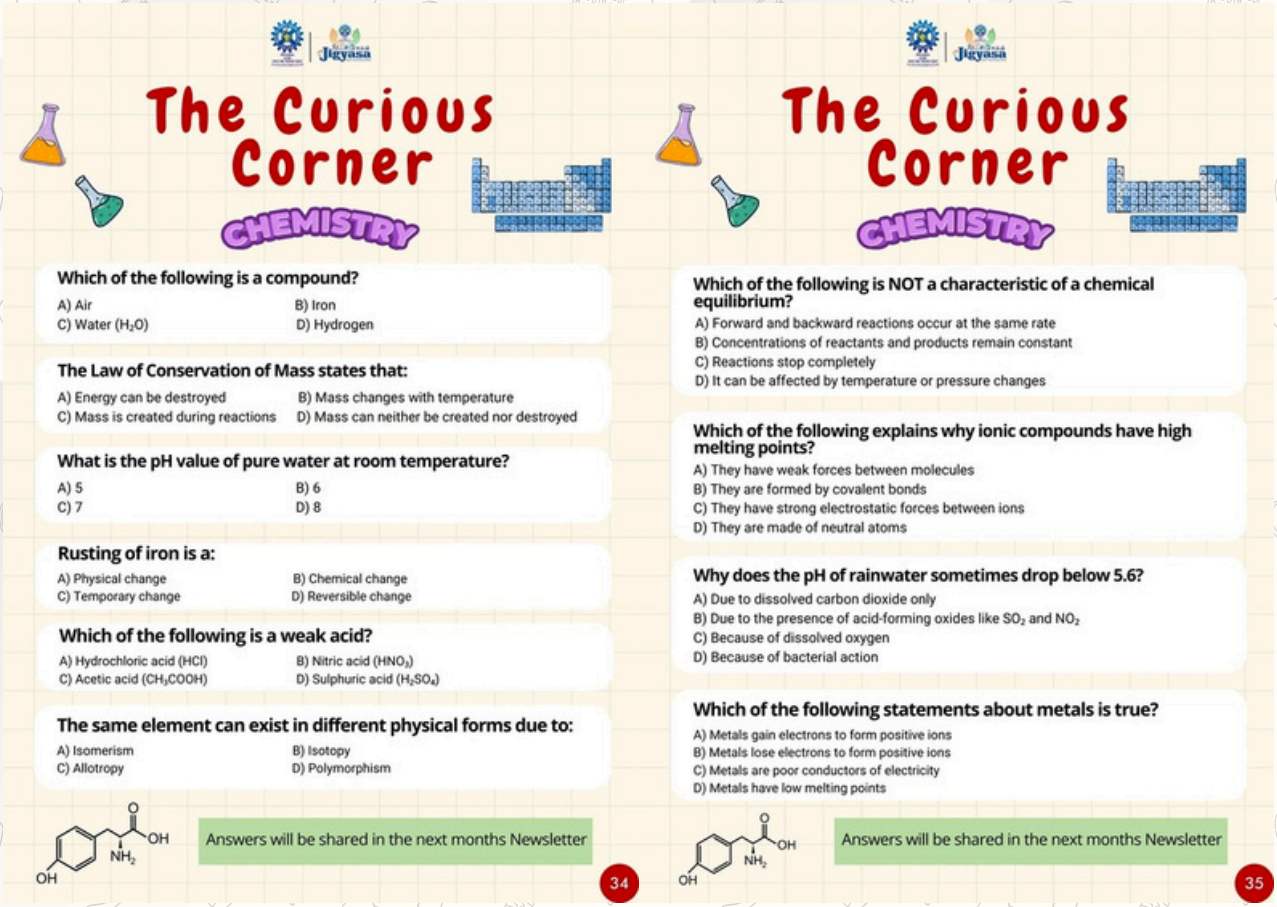
Answers will be shared in the next months Newsletter

Answer to previous month's quiz (Biology)



1. C. Mitochondria
2. B. Transport of water and minerals
3. B. Photosynthesis
4. C. Nucleus
5. C. Insulin
6. B. Mitochondria
7. C. It will lose water and shrink (plasmolysis)
8. B. Their active sites fit specific substrates like a key in a lock
9. B. Aerobic respiration
10. B. Producers → Consumers → Decomposers

Answer to previous month's quiz (Chemistry)

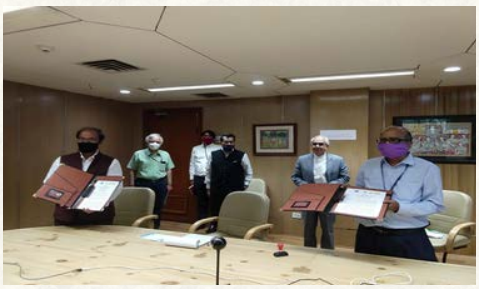


1. C. Water (H_2O)
2. D. Mass can neither be created nor destroyed
3. C. 7
4. B. Chemical change
5. C. Acetic acid (CH_3COOH)
6. C. Allotropy
7. C. Reactions stop completely
8. C. They have strong electrostatic forces between ions
9. B. Due to the presence of acid-forming oxides like SO_2 and NO_2
10. B. Metals lose electrons to form positive ions

CSIR's Jigyasa in Media

Jigyasa programme Launched in Collaboration with HRD Ministry on 6th July, 2017

CSIR signed MoU with Navodaya Vidyalaya Samiti (NVS) for under Jigyasa programme on 11th March, 2020



Statement of Intent signed between CSIR and AIM NITI Aayog on 05th June, 2020

MoU was signed between CSIR and National Council of Science Museum, Ministry of Culture on 29th September, 2021

CSIR Jigyasa collaborates with IITB on 22nd November, 2021

CSIR's MoU with the Karnataka Science & Technology Academy to enable a richer, inclusive Virtual Lab ecosystem on 10th June, 2022

CSIR- CDO Bulandshahr signed MoA in the august presence of Hon'Ble CM Shri Yogi Adityanath ji on 27th August, 2022

CSIR Mou with The Royal Society of Chemistry signed on 22nd September, 2022

CSIR-IICT hosted an MoU exchange event with the Cipla Foundation on 27th August, 2024

CSIR Jigyasa's Highlights

Jigyasa programme Launched in Collaboration with HRD Ministry on 6th July, 2017


Union Minister Dr Jitendra Singh Appeals for Innovation Driven Ecosystem for Startups

The Minister announces the winners of CSIR organised National Level Scientific Creativity Competition "CSIR Jigyasa Vigyan Mahotsav 2022." CSIR Jigyasa programme being implemented from 2017 have benefitted more than 4 lakh students across the country: Dr Jitendra Singh

SMEStreet Edit Desk

25th February 2022 – Announcement of Jigyasa Vigyan Mahotsav 2022 winners by the Hon'ble Minister of S&T, Dr. Jitendra Singh


Union Minister Dr.Jitendra Singh launches India's first Virtual Science Lab for children under CSIR Jigyasa programme, which will also connect students with scientists across the country

Says, target audience for the VL platform is students of the standard VI to XII (11-18 years) for exploring science using different activities, experienced researchers and faculties on the subjects of Science, Mathematics, Biology and IT

Main aim of the Virtual Lab is to provide quality research exposure and innovative pedagogy for school students based on an online interactive medium: Dr Jitendra Singh

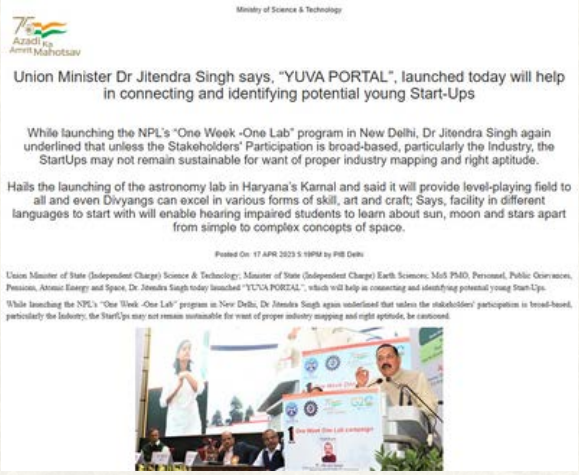
CSIR Jigyasa's Virtual Lab Launched by the Hon'ble Minister of S&T, Dr. Jitendra Singh on 22nd November 2021


The Indian EXPRESS
JOURNALISM OF COURAGE

First lab opens today at Karnal for the hearing impaired

Hon'ble Minister for S&T virtually launched First of its kind Indian Sign Language (ISL) enabled Astronomy Lab on 17th April 2023 located at Karnal

Hon'ble Prime Minister's vision of One Day As A Scientist for students as mentioned in the 119th episode of MannKiBaat


Union Minister Dr Jitendra Singh says, "YUVA PORTAL", launched today will help in connecting and identifying potential young Start-Ups

While launching the NPL's "One Week -One Lab" program in New Delhi, Dr Jitendra Singh again underlined that unless the Stakeholders' Participation is broad-based, particularly the Industry, the StartUps may not remain sustainable for want of proper industry mapping and right aptitude.

Hails the launching of the astronomy lab in Haryana's Karnal and said it will provide level-playing field to all and even Divyangs can excel in various forms of skill, art and craft; Says, facility in different languages to start with will enable hearing impaired students to learn about sun, moon and stars apart from simple to complex concepts of space.

Hon'ble Ministry for S&T launched Jigyasa Mobile App on 17th April, 2023


Hans India

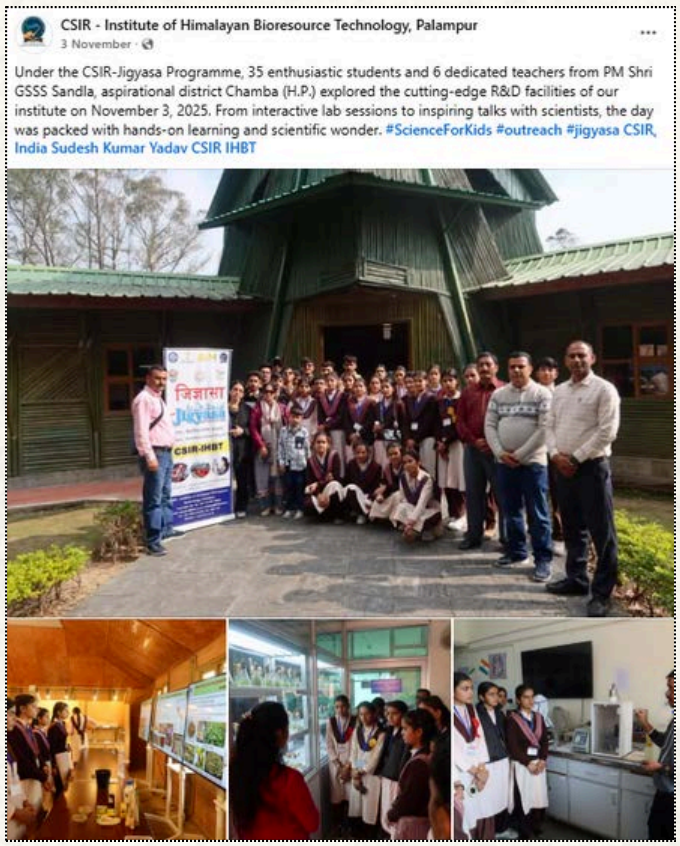
Hyderabad: Gene-Health Connect, a mobile science exhibition launched

- This exhibition explains, genetic diseases
- Bus with 20 exhibits will go round science, medical, and pharmacy colleges and high schools in Telangana and AP in the next seven months.
- The Telangana Social Welfare Residential Educational Institutions Society is one of the vital venue partners in the State for hosting the exhibition across all districts

DG CSIR launched the Science Mobile Lab on 08.05.2023 an exhibit-rich bus developed by CCMB and the Vishvesvaraya Museum

Student Engagement

CSIR Jigyasa in Media (November 2025)



CSIR Jigyasa in Media (November 2025)

CSIR-Institute of Himalayan Bioresource Technology
@CSIR_IHBT

On 04.11.2025, a group of 233 enthusiastic students and 16 dedicated teachers from PM SHRI GSSS Samloti and PM SHRI GSSS Bhawarna, Kangra (H.P.), embarked on an exciting journey through the world of research and innovation under the CSIR Jigyasa Program. @CSIR_IND @CsirJigyasa

CSIR-CIMAP
@CSIRCIMAP

In this activity students got an opportunity to explore the science of medicinal and aromatic plants and their applications in daily life. A total of 30 students from 5 schools namely Amity International School Viraj Khand, KV CRPF, Radiant Public School, Lucknow Public College Block A Rajajipuram, CMS Station Road have participated in this session from class 8 to 12th

CSIR-CECRI
@CSIR_CECRI

@CSIR_IND
@CsirJigyasa
@EduMinOfIndia
86 students of class IX & XII and 18 teachers from 37 government schools in Sivagangai Dist., Tamil Nadu visited CSIR-CECRI, Karaikudi under Rashtriya Avishkar Abhiyan (RAA) STEM scheme today (06 Nov. 2025).

CSIR Jigyasa in Media (November 2025)

CSIR-CIMAP @CSIRCIMAP · Nov 6

Today @CSIRCIMAP JIGYASA organized an exposure cum awareness program name Understanding of Aromas as well as felicitation program of winners of Vigyaan Vimarsh a virtual quiz competition series. Dr. A S Negi, Dr. C S Chanotiya, Dr. Bhaskar Shukla were the dignitaries for

Show more

CSIR-Institute of Himalayan Bioresource Technology
@CSIR_IHBT

On 07.11.2025, 244 students and 22 faculty members from PM SHRI Govt Girls Sr Secondary School, Dharamshala, Kangra, PM SHRI Govt Sr Secondary School, Bhawarna, and Vibgyor World School Kullu visited different R&D facilities of the Institute under the CSIR-Jigyasa Program

CSIR-CEERI @CSIRCEERI · Nov 11

CSIR-CEERI JIGYASA Team visited two schools today, as a part of the JIGYASA program. The students enjoyed Virtual World, experimented with the Tesla Coil, understood the Climate Clock for environmental awareness, and launched Hydro Rockets. @CSIR_IND, @CsirJigyasa

CSIR-IIIM @csiriim · Nov 6

CSIR–IIIM Jammu organised the Children's Science Festival today on 6th November, where young minds explored various experimental labs, interacted with scientists, and showcased their innovation through quiz, debate, slogan competition, igniting young startup, one day as a scientist and model competitions.

Director Dr. Zabeer Ahmed encouraged the students, calling them the "guiding lights of India's future."
A day filled with learning, discovery, and inspiration!

#CSIRIIIMJammu #NationalScienceDay #ChildrensScienceFestival #ViksitBharat #ScienceForAll #InspiringYoungMinds #STEMEducation #CSIRIndia

Special Service and Features

Azadi Ka Amrit Mahotsav

CSIR-SERC Undertakes Instrumentation and Load Testing of MRTS Bridge Structures Between Velachery and St. Thomas Mount

प्रेस रिलीज़: 07 NOV 2025 7:54PM by PIB Chennai

The CSIR-Structural Engineering Research Centre (CSIR-SERC), Chennai — a premier national laboratory under the Council of Scientific and Industrial Research (CSIR) — is a leading institution in the field of structural engineering research and development. The laboratory is dedicated to advancing indigenous technologies through cutting-edge R&D in analysis, design, and testing of structures and structural components. Over the years, CSIR-SERC has developed numerous innovations, patents, and processes that have contributed significantly to industrial growth and societal benefit across India.

As part of its continuing efforts toward ensuring the safety and performance of India's vital infrastructure, the Structural Health Monitoring (SHM) Laboratory of CSIR-SERC is carrying out several projects for the Indian Railways, focusing on the condition assessment and performance evaluation of both new and existing bridges.

One of the recent assignments is the Instrumentation and Load Testing of selected spans of the Mass Rapid Transit System (MRTS) between Velachery Railway Station and St. Thomas Mount Railway Station in Chennai. This elevated corridor, constructed by Southern Railway, Chennai, represents an important link in the city's suburban network. With construction nearing completion and the section scheduled for commissioning soon, Southern Railway has entrusted CSIR-SERC with the critical task of verifying the performance and safety of the structures under actual service conditions.

CSIR Jigyasa in Media (November 2025)

CSIR-Institute of Himalayan Bioresource Technology
@CSIR_IHBT

Under the CSIR-Jigyasa Programme, CSIR-IHBT welcomed 152 students and 9 teachers from PM SHRI GSSS Dhundla, Una (H.P.) on November 11, 2025. The visit sparked curiosity, fostered scientific dialogue, and provided hands-on exposure to cutting-edge research in the Himalayas.

CSIR-IIIM @csiriiim · Nov 15

Day 3 of AI-D2A 2025 delivered some of the most engaging moments of the workshop, wherein close to 200 students and teachers under @CsirJigyasa also participated.

The live drone demonstrations—featuring AI-based drone detection using acoustic/vision sensors and deep-learning models for weed identification —stood out as a major highlight.

The day also included an impactful talk by Dr. Karan Nathwani (IIT Jammu) on the pervasive role of AI, followed by machine-learning sessions using real-world datasets.

With participation from students and young researchers across 14 institutions, the workshop offered valuable hands-on exposure to AI applications in agriculture, environmental monitoring, and early-stage drug discovery.

#AI #DroneTech #CSIRJIGYASA #Agritech #MachineLearning #AID2A2025 #CSIRIIIM #BIRAC #BioNEST #Research #Innovation #Kathua

CSIO JIGYASA
@CsioJigyasa

The Jigyasa team at CSIR-CSIO hosted the undergraduate students from ICFAI University, Himachal Pradesh for an interdisciplinary lab visit on 11th November 2025. The team of 48 students and 4 teachers got to visit the labs under the departments of AED and ISenS.

#CSIR #Jigyasa

CSIR-Institute of Himalayan Bioresource Technology
@CSIR_IHBT

On 13th November 2025, CSIR-IHBT welcomed 102 students and 5 teachers from G.A.V. Public School, Kangra and Viveka Foundations School, Palampur for an inspiring educational visit to our R&D facilities under CSIR-JIGYASA program. @CSIR_IND @CsirJigyasa @DrSudeshKumarY1

CSIR Jigyasa in Media (November 2025)

CSIR-CDRI @CSIR_CDRI · Nov 12

The #CurtainRaiser program of #IISF2025 @CSIR_CDRI will highlight the India's scientific strength, spirit of collaboration, and vision for a #ViksitBharat through science and technology.
@CSIR_IND @IISF2025 @IndiaDST @moesgoi @Vibha_India @DrJitendraSingh @PMOIndia

CSIR-CDRI @CSIR_CDRI · Nov 13

To mark the beginning of India's biggest celebration of science and innovation: #IISF2025!
@CSIR_CDRI #Lucknow organized the two days #CurtainRaiser program of #IISF2025 outreaching to 1000+ students and teachers
@CSIR_IND @PMOIndia @DrJitendraSingh @moesgoi @CsirJigyasa

CSIR-CEERI @CSIRCEERI · Nov 14

The event was coordinated by Dr. Vijay Chatterjee, and the Vote of Thanks was delivered by Mr. Sai K. Vaddadi, acknowledging the contributions of all dignitaries, participants, and partner organisations toward the vision of IISF-2025. @DrJitendraSingh, @moesgoi, @CSIR_IND

CSIR-CMERI Durgapur
19 November ·

CSIR-CMERI conducted a Jigyasa Outreach Programme on 17 November 2025 at PM SHRI Kendriya Vidyalaya CRPF, Agartala, inspiring young minds to explore the world of science and innovation.

Students enjoyed an expert talk on "Energy Conversion Systems for Renewable Energy", witnessed live demos of the E-Tractor and Mechanized Sewerage Cleaning Machine, and participated in hands-on DIY activities using the Stirling Engine, Solar Fan, and more.

A total of 210 students and 6 teachers took part with great enthusiasm, making the programme a vibrant and engaging learning experience.

#CSIRCMERI #Jigyasa #STEMEducation #ScienceOutreach #RenewableEnergy #InnovationForIndia #Agartala #StudentEngagement #FutureScientists #EnergyConversion #HandsOnLearning
CSIR, India CSIRJIGYASA
https://www.facebook.com/share/19kxXcUF9j/

CSIR-Institute of Himalayan Bioresource Technology
@CSIR_IHBT

Under the CSIR-Jigyasa Program, we were thrilled to host 35 enthusiastic students and 4 dedicated teachers from Kendriya Vidyalaya Bangana, Una, H.P. on 12.11.2025.They explored our cutting-edge research laboratories and facilities. @CSIR_IND @CsirJigyasa @DrSudeshKumarY1

CSIR Jigyasa in Media (November 2025)

CSIR-Institute of Himalayan Bioresource Technology
@CSIR_IHBT

As part of the inaugural programme of the 2-day event "Empowering Chamba (Aspirational District): Driving Sustainable Growth with CSIR-IHBT's Cutting-Edge Technologies," an educational visit was organized for 40 students and 2 teachers from PM SHRI Kendriya Vidyalaya, Palampur.

CSIR-Institute of Himalayan Bioresource Technology
@CSIR_IHBT

Under the CSIR-Jigyasa Programme, 240 students accompanied by 36 teachers from MMM SD Public School, Nagrota Bagwan, Dist. Kangra (H.P.) visited CSIR-IHBT, Palampur on 21.11.2025. They were exposed to different R&D activities of the Institute through lectures and demonstrations.

CSIR-Institute of Himalayan Bioresource Technology
@CSIR_IHBT

Under the CSIR- Jigyasa Program, 42 students accompanied by 4 teachers of Sri Guru Harkrishan Sr. Sec. Public School, Mallianwal, District Gurdaspur, Punjab visited different laboratories and facilities of the Institute on 24.11.25. @CSIR_IND @CsirJigyasa @DrSudeshKumarY1

CSIR-CMERI Durgapur
23 November at 15:27 ·

CSIR-CMERI organized a vibrant Jigyasa Outreach Programme on 20 November 2025 at PM SHRI Kendriya Vidyalaya Kunjaban, Agartala, igniting scientific curiosity among students.

The event included an engaging expert session on "Energy Conversion Systems for Renewable Energy," demonstrations of cutting-edge technologies like the E-Tractor and Mechanized Sewerage Cleaning Machine, and interactive DIY activities featuring the Stirling Engine, Solar Fan, and more.

A total of 250 students and 7 teachers participated with high enthusiasm, actively immersing themselves in each session and making the programme a great success.

#CSIRCMERI #JigyasaOutreach #ScienceEducation #RenewableEnergy #Innovation #STEMLearning #Agartala #HandsOnLearning #ScienceForStudents #TechnologyForSociety

CSIR, India
https://www.facebook.com/share/19kxXcUF9j/

CSIR Jigyasa in Media (November 2025)

CSIR-CMERI Durgapur
24 November at 18:23 ·

CSIR-CMERI hosted an engaging Jigyasa Outreach Programme on 21 November 2025 at Kendriya Vidyalaya NIT, Agartala, inspiring students to explore the world of science and technology.
⚡ The programme featured an insightful expert session on Energy Conversion Systems for Renewable Energy, along with model demonstrations of the E-Tractor and Mechanized Sewerage Cleaning Machine. Students also enjoyed interactive DIY activities using kits like the Stirling Engine, Solar Fan, and more.
🎒 With 90 students and 6 teachers actively participating, the event turned into a lively platform for creativity, learning, and scientific exploration.

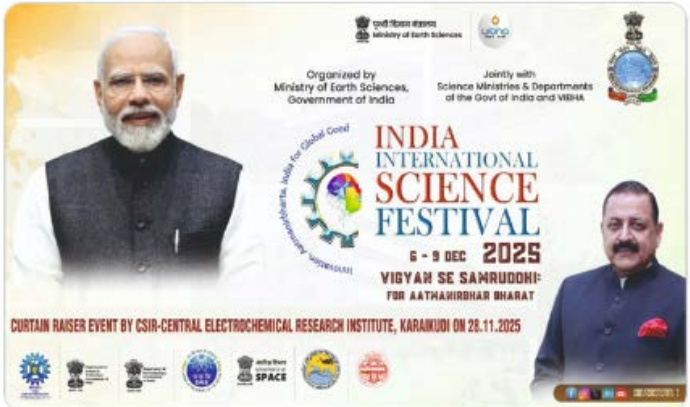
#CSIRCMERI #Jigyasa #ScienceForSociety #STEMLearning #RenewableEnergy #InnovationInEducation #Agartala #HandsOnLearning #InspiringStudents

CSIR, India
https://www.facebook.com/share/17i8HSeSQa/

CSIR-Central Mechanical Engineering Research Institute

CSIR-CECRI
@CSIR_CECRI

@DrJitendraSingh
@CSIR_IND
@moesgoi
@IISF2025
@CSIR_NIScPR
Curtain Raiser Event of India International Science Festival (IISF) 2025 by CSIR-Central Electrochemical Research Institute, Karaikudi on 28th November 2025.



CSIR-Institute of Himalayan Bioresource Technology
@CSIR_IHBT

On 25 November 2025, CSIR-IHBT hosted a group of 39 students and 5 teachers from GSSS Pukhri, Salooni, Aspirational District Chamba (H.P.) under the CSIR-Jigyasa Program. During the visit, the participants were introduced to the Institute's diverse R&D activities. @CSIR_IND

NATIONAL NEWS

A curtain-raiser program of India International Science Festival (IISF) at CSIR-IMMT, Bhubaneswar

By India Education Diary Bureau November 26, 2025

India International Science Festival (IISF) is a mega science festival that celebrates the integration of science with society, showcasing Indian scientific achievements, promoting innovation, and fostering collaboration among stakeholders.
This year the India International Science Festival (IISF) 2025 will take place from December 6 to 9, 2025, in Panchkula, Haryana.
The mission of the India International Science Festival (IISF) 2025 – "Vigyan Se Samruddhi: for Aatmanirbhar Bharat"- is to celebrate and advance the spirit of science-led growth for a self-reliant and prosperous India, rooted in the vision of "Innovation, Aatmanirbharta" and "India for Global Good". IISF 2025 aims to bring together scientists, innovators, educators, students, industry leaders, Science Communicators, and policymakers on one platform to promote collaboration, creativity, and knowledge exchange. "Vigyan Se Samruddhi: for Aatmanirbhar Bharat" embodies the belief that true prosperity arises from the application of scientific knowledge, transforming ideas into innovations, discoveries into development, and science into societal well-being.
IISF-2025 is organised by the Ministry of Earth Sciences, Government of India, in collaboration with various scientific departments of the Government. India (CSIR, DST, DAE, ISRO, DRDO, ICAR, DBT, etc.) and Vijnana Bharati (VIBHA).
A curtain-raiser event of IISF 2025 is organized at CSIR-IMMT, Bhubaneswar on 26th Nov 2025.
Dr. Shiv Kumar Sharma, National Organising Secretary, Vijnana Bharati (VIBHA) was the Chief Guest of the function. He encouraged the students to have fixed aim in life and remove doubts from mind to be successful. He also told, confidence gives success and hence all students should be positive, aiming high, maintain river like continuity, manage time efficiently and be hardworking to succeed in their career.
Guest of honour, Prof. Shreepad Karmalkar, Director, IIT Bhubaneswar addressed the gathering. He told about the importance of activity based learning in our education system. He mentioned about Critical thinking among young people which will help India's development.
Dr. Ramanuj Narayan Director IMMT gave the presidential address. He told the invited school and college students on need of Science for Vikshit Bharat. He also advised students to utilise time properly to become successful like great scientists and successful sports person. He told most science related ministries are involved in contributing to IISF with a mission for a successful scientific outreach program. He also invited everyone to participate and celebrate IISF2025.
Dr. Bikash Kumar Jena, the coordinator of the curtain raiser program presented on IISF 2025 details and activities to be held during 6 to 9 Dec 2025 at Panchkula, Haryana.
Other dignitaries, Chief Scientists of CSIR-IMMT, Dr. Nabin Kumar Dhal, Dr. Trupti Das and Dr. Yatendra Singh Chaudhary were on the dais along with Chief Guest, the Guest of honour and the Director, CSIR-IMMT.
In this event students of schools and colleges have participated. Nearly 400 students and teachers visited IMMT for this program. The students were exposed to the R&D facilities and laboratory demonstrations by JIGYASA team. Students and teachers of Saraswati Sishu Vidyamandir of Unit 8, Niladrivihar and BaragarBrit colony, University High School Vanivihar, RRL Project UP School and Dadhichi College of Pharmacy attended the event.
The event also included poster presentation by research scholars and best posters were awarded on the stage by the guests.

CSIR Jigyasa in Media (November 2025)

CSIR-Institute of Himalayan Bioresource Technology
@CSIR_IHBT

Under CSIR-Jigyasa Program, an exposure visit was organized for 51 students and 5 teachers from PM SHRI Govt Girls School Maur Mandi, Distt. Bathinda, Punjab on 26.11.2025. @CSIR_IND @CsirJigyasa @DrSudeshKumarY1

CSIR-Institute of Himalayan Bioresource Technology
@CSIR_IHBT

On 27 November 2025, CSIR-IHBT, welcomed 54 students and 5 teachers from Kendriya Vidyalaya, Mandi and DAV Public School Palampur (H.P.) under the CSIR-Jigyasa Program. During their visit, they explored the Institute's cutting-edge laboratories and research facilities. @CSIR_IND

CSIR-Institute of Himalayan Bioresource Technology
@CSIR_IHBT

Under CSIR-Jigyasa Program, 107 nursery and L.K.G. students accompanied by 6 faculty members from Cambridge International School, Palampur(H.P.) visited Bamboo Museum and Floriculture fields of the Institute on 28.11.2025.@CSIR_IND @CsirJigyasa @DrSudeshKumarY1

Special Service and Features

Azadi ka amrit mahotsav

CSIR-Central Electrochemical Research Institute organises Curtain Raiser event for India International Science Festival – 2025

प्रेस रिलीज़ 28 NOV 2025 9:49PM by PIB Chennai

CSIR-Central Electrochemical Research Institute (CSIR-CECRI) organized the Curtain Raiser Event for the upcoming India International Science Festival (IISF-2025) on November 28, 2025 at CSIR-CECRI, Karaikudi in a grand festive way. After the traditional invocation, while welcoming the scholarly gathering, Dr. Jonas Davidson, Chief Scientist, CSIR-CECRI explained the origin of organizing IISF since 2015 and the previous edition at IIT-Guwahati in 2024. He gave a glimpse of the events being planned at the IISF-2025 scheduled at Panchkula, Haryana during December 6-9, 2025 particularly the Thematic Sessions meant mainly for the student community. He further informed that IISF is a flagship annual celebration of science and technology, designed to foster a culture of scientific curiosity, innovation, and collaboration. Since its inception, IISF has served as a vibrant platform for scientists, researchers, students, innovators, and the general public to engage with science in an inclusive and inspiring manner, he added. Dr. Davidson encouraged the participants to visit the IISF website and browse for more details of their choice.

In his Presidential Remarks, Dr. K. Ramesha, Director, CSIR-CECRI expressed his gratitude to the Chief Guest of the Event, Dr. Dr. S.A. Ilangovan, former Deputy Director, Vikram Sarabhai Space Centre, Thiruvananthapuram for embellishing the event with his gracious presence. He recalled the remark of Shri. Narendra Modi, our Hon'ble Prime Minister and President of CSIR on the current generation of youth as *Gen Z, the innovators of future*, and called upon them to make the most of the scientific opulence of the Chief Guest. IISF is a science festival of grandeur and gaiety for everyone especially the younger generation as it is a perfect stage for amalgamation of ancient & modern science and shall serve as a launching pad for a flourishing future, he remarked. He appealed to the students to play their part in realizing Viksit Bharat and Aatmanirbhar Bharat. Dr. Ramesha, while presenting the profile of Dr. Ilangovan, proudly mentioned that the batteries made by Dr. Ilangovan are out of this world i.e. in space!

After a formal Curtain Raiser inauguration, Dr. Ilangovan delivered the lecture on *Science and Society for Viksit Bharat - Role of Students*. Terming his visits to CSIR-CECRI as truly home coming, he fondly remembered his frequent visits since 1985 on various occasions, mainly for R&D collaborative work. He began his presentation by delineating the definition of the term Science and its evolution through the selfless sacrifice of many eminent scholars. He affirmed that Science is the only tool to solve all the problems of our life. Quoting the famous word of Thiruvalluvar – செல்வத்துள் செல்வம் செவிச்செல்வம் அச்செல்வம் செல்வத்துள் எல்லாம் தலை & கற்க கசடறக் கற்பவை கற்றபின் நிற்க அதற்குத் தக – he emphasized upon the students on the essentiality of attentive listening and learning as the key parameters towards success. When Independent India enters its Centenary Year in 2047, the students will be the real torchbearers of our Nation, he opined. He also emphasized that setbacks are common in any invention and correcting them is the key towards success.

Dr. Ilangovan presented on the evolution of Science and Technology and highlighted on the significant milestones surpassed since the stone age. He also spelt out the negative impacts and burning global issues including exploitation of fossil fuel resources, carbonization ill-effects, fluctuating economy & inflation, etc. In order to curb the critical CO_2 emission, we have to consciously move forward towards effective and efficient sustainable energy sources and EV mobilization, he mentioned. He highlighted the Milestones and Achievements of ISRO and its continuous efforts towards indigenization of all its needs. He proclaimed with pride that the entire activities related to Space Missions of India are completely automated and cited the example of indigenous software, SITARA of ISRO. He made a clarion call to the students to never forget their Motherland and always nurture it with proper care by giving priority to its progress over serving foreign countries' need. He advised the students to shun inhibition to obtain clarifications/logical reasoning and advocated to them to adopt good practices and to avoid committing evil deeds so as to reap everlasting results. An intriguing Q&A session ensued which evinced energetic exchanges between the Chief Guest and the Students.

CMERI makes automated scavenging systems to replace dangerous manual mode

STATESMAN NEWS SERVICE
Durgapur, 28 November

Automated scavenging systems mounted on vehicles may soon replace the unwelcome manual mode if the three prototypes indigenously developed by the Central Mechanical Engineering Research Institute (CMERI) are widely utilised, especially in West Bengal, where at least 29 manual sanitation workers have lost their lives over the last decade after inhaling poisonous fumes.

The systems were on display today at the 11th India International Science Festival in Durgapur. "They are the outcome of our aim to eradicate manual labourers from this ancient system of scavenging," said a CMERI scientist behind the project. The mechanised systems were developed after studying the diverse nature of Indian sewerage systems and the type of blockages they encounter. Sustainable usage of water is also a feature in the technology, which "is modular in design so as to ensure customised deployment strategies as and where required"

Dr Avinash Yadav, principal scientist, Electric Mobility & Tribology Research group of CMERI, said: "Government had banned hazardous jobs exploiting manual labour years ago through the Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013, which inspired us to develop indigenous low cost machines for the purpose."

He added: "Some imported systems use ending mechanism to clear the blockage in sewage lines, but our system has endoscopic cameras and high-flow jet pumps to secure job precision." The team's chemical engineer Dr Kulbhusan Samal said: "For sustainable water usage, our systems suck slurry from choked sewage systems, filter them and redirect the water to clearing blockage using a self-propelled nozzle."

CMERI, a Council of Scientific & Industrial Research organisation, has consistently been exploring ways to develop low-cost 'Make in India' scavenging technology since mid 2021 which, according to the officials, has yielded three successive integrations in five years. At the Festival, the organisation presented Vehicle mounted drain cleaning machine', 'Compact vehicle integrated septic tank cleaning machine,' and 'Compact sewer cleaning machine'. They were inspected by biotechnology scientist Padmashree Narayan Chakraborty, who said: "These are the examples of how India is gradually becoming stronger towards Atmanirbhar Bharat."

The Statesman Sat, 29 November 2025
https://epaper.thestatesman.com/c/78637677

CSIR Jigyasa in Media (November 2025)

भारत अंतर्राष्ट्रीय विज्ञान महोत्सव के लिए शहर में हुआ कर्टेन रेजर

सीएसआईआर-एनएमएल में आयोजन की थीम पर हुआ मंथन

जमशेदपुर : भारत अंतर्राष्ट्रीय विज्ञान महोत्सव (आईआईएसएफ) 2025 का कर्टेन रेजर कार्यक्रम गुरुवार को सीएसआईआर-राष्ट्रीय धातुकर्म प्रयोगशाला (एनएमएल) जमशेदपुर में आयोजित किया गया. यह आयोजन 6 से 9 दिसंबर 2025 तक पंचकूला, हरियाणा में होने वाले 11वें भारत अंतर्राष्ट्रीय विज्ञान महोत्सव के पूर्वाभ्यास के रूप में संपन्न हुआ, जिसका राष्ट्रीय थीम 'विज्ञान से समृद्धि -आत्मनिर्भर भारत के लिए' निर्धारित किया गया है.कार्यक्रम की शुरुआत सीएसआईआर-एनएमएल की 75 वर्ष की प्लेटिनम जुबिली डॉक्यूमेंट्री के प्रदर्शन से हुई,जिसके बाद मुख्य अतिथि एवं अन्य विशिष्ट अतिथियों का आगमन हुआ. दीप प्रज्वलन के साथ समारोह का औपचारिक उद्घाटन किया गया. सीएसआईआर-एनएमएल के निदेशक, डॉ. संदीप घोष चौधरी ने स्वागत वक्तव्य प्रस्तुत करते हुए प्रयोगशाला के धातुकर्म नवाचार, सतत औद्योगिक विकास और राष्ट्रीय प्राथमिकताओं के अनुरूप प्रौद्योगिकी उन्नयन में योगदानों पर प्रकाश डाला.

मटीरियल्स की दुनिया पर दी अहम जानकारी

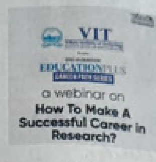
मुख्य अतिथि प्रोफेसर इंद्रनील मन्ना कुलपति, बिरला प्रौद्योगिकी संस्थान, मेसरा एवं पूर्व निदेशक, भारतीय प्रौद्योगिकी संस्थान, कानपुर, ने 'द वर्ल्ड ऑफ मटीरियल्स: इम्पैक्ट ऑन डेवलपमेंट एंड ग्रोथ' विषय पर व्याख्यान दिया. उन्होंने राष्ट्रीय प्रगति में सामग्री विज्ञान की भूमिका, संरचना एवं गुणों के पारस्परिक संबंध, तथा विद्यार्थियों को विकसित भारत @2047' के लिए इंजीनियरिंग में योगदान देने की प्रेरणा पर जोर दिया.

कालेजों के छात्रों ने की शिरकत

अल कबीर पॉलिटेक्निक, श्रीनाथ विश्वविद्यालय और अर्का जैन विश्वविद्यालय के छात्र-छात्राओं एवं संकाय सदस्यों ने उत्साहपूर्वक भाग लिया.प्रतिभागियों ने सीएसआईआर-एनएमएल के प्लेटिनम जुबिली प्रदर्शनी (एक्सपो) का भी अवलोकन किया, जिसे संस्थान के 75वें स्थापना दिवस समारोहों के अंतर्गत आयोजित किया गया था. प्रदर्शनी में सीएसआईआर-एनएमएल की सात दशक लंबी उत्कृष्ट धातुकर्म उपलब्धियों को इंटरैक्टिव मॉडल, वैज्ञानिक पोस्टर और उन्नत अनुसंधान उपकरणों के प्रदर्शन के माध्यम से प्रस्तुत किया गया.कार्यक्रम का समापन प्रोफेसर इंद्रनील मन्ना के सम्मान-अभिनंदन के साथ हुआ, जिसे डॉ. संदीप घोष चौधरी द्वारा प्रस्तुत किया गया. इसके पश्चात डॉ. एस. के. पाल, प्रमुख—अनुसंधान नियोजन एवं व्यवसाय विकास, द्वारा धन्यवाद प्रस्ताव रखा गया और कार्यक्रम का समापन राष्ट्रगान के साथ हुआ.

Webinar on pursuing a career in research to be held today

The Hindu Bureau
CHENNAI



Vellore Institute of Technology (VIT), Vellore, in association with *The Hindu EducationPlus*, is presenting a 'Career Path Series' session on 'How to Make a Successful Career in Research'.

The webinar is scheduled to be held at 11.30 a.m. on November 6.

It aims at guiding aspiring researchers, academicians, and students who wish to build a strong and fulfilling career in research.

The speakers will share insights on developing essential research skills, identifying emerging areas, publishing impactful work, and navigating the professional challenges associated with research-based careers.

A. Nirmala Grace, Professor and Director, Centre for Nanotechnology Research, VIT, Vellore, will deliver a talk on 'An overview of careers in research, strategies for building a successful research career, and insights into research opportunities at VIT', while Jobel Jose, research scholar, VIT, Vellore, will share insights on 'The journey of a research scholar – understanding research, choosing a research topic, and how institutions collaborate with industries'.

Vaishali Kulkarni, Founder and Chief Executive Officer, KBCols Sciences Pvt. Ltd., Pune, will deliver a talk on the 'Transitioning from academia to industry – challenges, opportunities, and applications of research'. Soma Basu, journalist, will moderate the webinar. To register, visit newsth.live/THVITED or scan QR code.

IISF 2025 curtain raiser showcases CSIR-NML's legacy of innovation

Mail News Service

Jamshedpur, Nov 27 :The India International Science Festival (IISF) 2025 Curtain Raiser was held at CSIR-National Metallurgical Laboratory (CSIR-NML) at Burmamines on November 27, offering a preview of the upcoming 11th IISF scheduled in Panchkula, Haryana, from December 6 to 9, under the theme "Vigyan Se Samruddhi - For Atmanirbhar Bharat."

The event commenced with the screening of CSIR-NML's 75-years Platinum Jubilee documentary, followed by a formal lamp-lighting ceremony. In his welcome address, CSIR-NML Director Dr. Sandip Ghosh Chowdhury highlighted the laboratory's pioneering contributions to metallurgical research, sustainable industrial development, and science-led national progress.

Chief Guest Professor Indranil Manna, Vice Chancellor of BIT Mesra and former Director of IIT Kanpur, delivered a keynote lecture titled "The World of Materials: Impact on Development and Growth." He elaborated on the transformative

role of materials science, the connection between material structure and performance, and encouraged young participants to contribute to "Engineering for Viksit Bharat @2047."

Students and faculty from Al Kabir Polytechnic, Srinath University, and Arka Jain University participated in the programme and visited the CSIR-NML Platinum Jubilee Expo. The exhibition showcased the institute's seven-decade journey through interactive models, scientific posters, and demonstrations of advanced research instrumentation.

The event concluded with the felicitation of Professor Manna by Dr. Chowdhury, followed by a vote of thanks from Dr. S. K. Pal, Head (RPBD), and the National Anthem. (W-pm)

IISF-2025 की कर्टेन रेजर सेरेमनी CSIR-CMERI, दुगार्पुर में सम्पन्न

रोजाना टाइम्स/सुजीत कुमार

दुर्गापुर : सेंट्रल मैकेनिकल इंजीनियरिंग रिसर्च इंस्टीट्यूट (CMERI) में शुक्रवार को 11वें इंडिया इंटरनेशनल साइंस फेस्टिवल (IISF)-2025 की कर्टेन रेजर सेरेमनी उत्साहपूर्ण माहौल में आयोजित की गई। IISF-2025 का आयोजन 6 से 9 दिसंबर 2025 तक पंचकूला (हरियाणा) में होना है, जिसकी थीम विज्ञान से समृद्धि : आत्मनिर्भर भारत के लिए रखी गई है। यह फेस्टिवल भारत की वैज्ञानिक उपलब्धियों को प्रदर्शित करने और इनोवेशन, सस्टेनेबिलिटी तथा आत्मनिर्भरता को बढ़ावा देने के उद्देश्य से आयोजित किया जा रहा है। इस महोत्सव का आयोजन मिनिस्ट्री ऑफ अर्थ साइंसेज (MoES) तथा विज्ञान भारती (VIBHA) संयुक्त रूप से कर रहे हैं। कार्यक्रम में पद्मश्री (2024) प्रो. नारायण चक्रवर्ती बतौर मुख्य अतिथि शामिल हुए। उन्होंने अपने प्रेरक संबोधन में युवाओं और वैज्ञानिक समुदाय को नवाचार और अनुसंधान की दिशा में आगे बढ़ने के लिए प्रोत्साहित किया। सेरेमनी के दौरान वक्ताओं ने आत्मनिर्भर भारत के लक्ष्य को साकार करने में विज्ञान और तकनीकी अनुसंधान की निर्णायक भूमिका पर प्रकाश डाला। इस अवसर पर CSIR-CMERI द्वारा विकसित अपनी पहली प्रमुख टेक्नोलॉजी स्वराज पर आधारित एक कॉफी टेबल बुक का भी लोकार्पण किया गया।

कार्यक्रम में जवाहर नवोदय विद्यालय, बांकुरा और जेमुआ भादुबाला विद्यापीठ (H.S.), दुर्गापुर के 90 छात्रों और 6 शिक्षकों ने भाग लिया। इस पहल का उद्देश्य छात्रों में वैज्ञानिक जिज्ञासा व नवाचार के प्रति रुचि को बढ़ाना था, ताकि आने वाले समय में देश के वैज्ञानिक विकास में युवा पीढ़ी की सशक्त भूमिका सुनिश्चित की जा सके। समारोह का समापन CSIR-CMERI द्वारा विकसित विभिन्न अत्याधुनिक कृषि एवं सामाजिक तकनीकों के लाइव डेमोंस्ट्रेशन के साथ हुआ। इनमें इलेक्ट्रिक ट्रैक्टर, इलेक्ट्रिक टिलर, मैकेनाइज्ड ड्रेन क्लीनिंग सिस्टम, सेप्टिक टैंक क्लीनिंग सिस्टम जैसी तकनीकें शामिल थीं, जो सस्टेनेबल डेवलपमेंट और सामाजिक उत्थान में महत्वपूर्ण योगदान दे रही हैं।

कार्यक्रम ने पंचकूला में होने वाले IISF-2025 को देश की वैज्ञानिक क्षमता और आत्मनिर्भरता की दिशा में एक बड़े कदम के रूप में स्थापित करने के लिए संयुक्त प्रतिबद्धता और उत्साह को मजबूती प्रदान की।

इंडिया इंटरनेशनल साइंस फेस्ट के कर्टेन रेजर में बोले प्रो इंद्रनील

इंजीनियरिंग की ताकत से साकार करें विकसित भारत का सपना

सीएसआईआर-एनएमएल

लाइफ रिपोर्टर @ जमशेदपुर

CSIR-SERC Conducts Jigyasa ATL Workshop in Dharmapuri Schools

CHENNAI

The CSIR-Structural Engineering Research Centre (CSIR-SERC), Chennai, in association with the CSIR Madras Complex (CMC), successfully concluded a two-day Jigyasa ATL Workshop (Student-Scientist Connect Programme) from November 6-7, 2025, in four schools across Dharmapuri district, Tamil Nadu.

The Jigyasa initiative is a significant effort by CSIR to strengthen Scientific Social Responsibility (SSR) by connecting students with the scientific community. It is inspired by the vision of the Prime Minister to foster a scientifically aware and innovative India.

The workshop witnessed active participation from approximately 400 students and 30 teachers. Scientists and technical experts, including Dr. S. Parivallal, Chief Scientist, led interactive sessions. Students engaged in hands-on experiments, notably learning to construct a simple battery to power an LED bulb and building a working DC motor using common materials like copper wire and safety pins.

These practical sessions effectively translated classroom knowledge into real-world scientific experiences, explaining complex concepts simply and making science fun and practical. The Jigyasa ATL workshop achieved its objective of successfully cultivating curiosity, creative thinking, and teamwork among the youth through experimentation.

Contact us for contribution to this Newsletter

Dr. Parthasarathi Ramakrishnan
Head, CSIR-Human Resource Development Group
CSIR Complex
Library Avenue, Pusa
New Delhi 110012
Email: head.hrdg@csir.res.in

Dr. K. Shreedhar
Senior Principal Scientist & Jigyasa Programme Coordinator
CSIR-Human Resource Development Group
CSIR Complex, Library Avenue, Pusa, New Delhi-110012
Email: jigyasa.hrdg@csir.res.in

Jigyasa Coordinating Team

Mr. S. Vinayagamoorthy
Sr. Technical Officer, CSIR-HRDG

Ms. Raina Dua
Principal Project Associate, CSIR-HRDG

Mr. Aniket Arora
Principal Project Associate, , CSIR-HRDG

Mr. Jatin Bhardwaj
Executive Assistant, , CSIR-HRDG

https://jigyasa-csir.in

https://x.com/CsirJigyasa

https://www.youtube.com/@JIGYASACSIR

https://www.facebook.com/profile.php?id=100076640628018

https://www.instagram.com/csirjigyasa/

https://www.linkedin.com/in/csir-jigyasa-b9a67b222/

CSIR Complex, Library Avenue, Pusa, New Delhi-110012

CSIR - JIGYASA
WhatsApp channel