



# Samvardhan



Quarterly Newsletter of CSIR-AMPRI, Bhopal

October-December 2025, Volume 1, Issue 3

## CONTENTS

- ◆ From the Director's Desk
- ◆ R&D Highlights
- ◆ New Projects
- ◆ Patents
- ◆ Publications
- ◆ Honors/ Awards
- ◆ Research Council Meeting
- ◆ MoU Signed
- ◆ AcSIR
- ◆ Awards to Students
- ◆ Skill development
- ◆ Jigyasa
- ◆ Events
- ◆ Rajbhasha
- ◆ Outreach Activities
- ◆ Invited Lectures
- ◆ Visit of Dignitaries to the Institute
- ◆ CSIR-AMPRI in Media





## From the Director's Desk



I feel delighted to present Volume 1, Issue 3 (October to December 2025) of the quarterly newsletter 'Samvardhan' of CSIR-AMPRI, Bhopal. CSIR-AMPRI, a premier research institute under the Council of Scientific and Industrial Research (CSIR), New Delhi.

During this quarter, an MoU was inked with M/S Re Sustainability Limited and IIT, Hyderabad. The 51st Research Council meeting was held on 26-27 October 2025 under the chairmanship of Prof. V.K. Singh. Papers were published in reputed journals, and scientists and students received awards at various platforms. Team CSIR-AMPRI contributed to the Integrated Skill Initiative and Jigyasa by organizing training programs and the 9th National Science Teachers Workshop. The Curtain Raiser Event of IISF-2025 was organized, and the 84th CSIR Foundation Day was celebrated during the quarter with great enthusiasm. Our team participated and showcased scientific innovations

in the 7th edition of Bharatiya Vigyan Sammelan (BVS-2025) at Tirupati and in the 10th International Agri and Horti Technology Expo-2025. At the 17th GRIHA Summit at New Delhi, the GRIHA COUNCIL conferred the State-of-the-Art Green Laboratory Building of CSIR-AMPRI, Bhopal, with a Five Star GRIHA provisional rating up to October 2030 and the winner for Renewable Energy Utilization for the year 2025-26. The workshop was organized in Rajbhasha for newly recruited administrative staff of CSIR-AMPRI, Bhopal.

CSIR-AMPRI is committed to develop internationally competitive technologies /products in the area of advanced materials for social benefits and to contribute to the Indian government's vision to transform India into a developed Nation by 2047.

With best wishes,

**- Dr. Thallada Bhaskar**

## R&D Highlights

### Development of cost-effective copper-graphene powder material using fluidized bed process systems (supported by Ministry of Mines)

There is always a requirement of establishing uniform mixing technique for powder materials eg. mixing of copper-graphene powder material. In any such process, there is also chance of deterioration in the properties of graphene, development of poor interfacial bonding and scalability of the mixing process. In the carried out work a noble and scalable process route had been established for the development of copper-graphene composites. The uniform mixing of graphene into copper matrix was ensured with the help of established

Fluid bed coating and drying methodology (Fig. 1). Using the established process uniform dispersion is achievable without the deterioration of graphene properties and the process is also easily scalable for the preparation of powders in bulk quantity. The prepared powders were finalized into the shape of strips/ plates by powder metallurgy route followed by thermomechanical processing (Fig. 2). The developed composite material is thoroughly characterized for its microstructural and mechanical properties. The developed material can be used in heat sink/exchangers and for Cu-Carbon electrode applications.

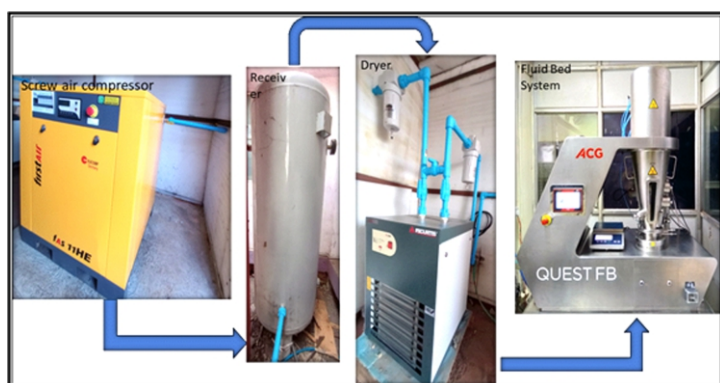


Fig. 1: Fluid bed coating and drying facility developed at LWMD, CSIR-AMPRI, BHOPAL

Fig. 2: Copper-graphene composites developed using Fluid bed coating and drying facility





## New Projects

A Highly Sensitive Biosensor with Self-Made Electrodes for Non-Invasive Point-of-Care Testing (POCT) of

Ovarian Cancer, Sponsored by Indian Council of Medical Research (ICMR), Project Cost: Rs. 45,68,026

## Patents

A Process for the Removal of Aluminium Black Surface Field Layer from Spent Crystalline Silicon Photovoltaic Cells. Application number: 202511132940, Filed on 26 December 2025.

Inventors : Neeraj Dwivedi, Krishan Kumar Patel, Chetna Dhand, Sandeep Singhai

## Publications

1. S. Jaiswal, C. Dhand, N. Dwivedi, Shape Morphable Soft Machines and Systems Enabled by Responsive Advanced Materials, *Small Methods*, 9, e01019, 2025. IF:9.1
2. V.P. Singh, G.K. Gupta and S.Mishra, Corrosion Behavior of GO-Reinforced Multilayer Al6061 Composite Fabricated by Accumulative Roll Bonding, *Journal of Materials Engineering and Performance*, Oct 2025 (Early Access).IF:2.0 <https://doi.org/10.1007/s11665-025-12275-2>
3. K. Kumar, R. Munjal, , Vandana, SERS-Based Detection of Arsenic by a Silver-Nanoflower-Covered Porous Silicon Sensor, *ACS Applied Nano Materials*, 8 (41), 20006, 2025.IF:5.5.
4. K. Sharma, S. Sonu, P. Singh, T.Ahamad, S.Kaya, Konstantin, P.Katin, N. Kumar, A. Singh, C.M.Hussain, P.Raizada, Synergy between dual Z-scheme heterostructured  $\text{Vo-Bi}_2\text{WO}_6/\text{Bi}_2\text{S}_3/\text{Ag}_2\text{S}@\text{Chitosan}$  for the effective degradation of fuchsin basic dye, *Journal of the Taiwan*



- Institute of Chemical Engineers, 175, 106265, 2025. IF:6.3
5. A.Sharma, R. Chahal, A.Ohlan, N.Dwivedi, G.Gupta, H.Shukla, D.P. Mondal, R.Kumar, EMI shielding properties of graphene-decorated magnetic oxide nanoparticle-reinforced carbon composite foams: A comparative study of graphene @ NiO, graphene @Co<sub>3</sub>O<sub>4</sub>, and graphene@Fe<sub>3</sub>O<sub>4</sub> fillers, Next Materials, 9, 2025, 101311, 2025. Cite score 1.9.
  6. R.Sharma, P.Bharti, D.K. Rajak, A. K. Srivastava, Subramanian K. R. S. Sankanarayanan, C. Dhand & N.Dwivedi, Friction and wear control via hybrid 2D materials, Advanced Composites and Hybrid Materials, 8, 448, 2025. IF-21.8
  7. K.Yadav, A. Singhwane, K.Chaturvedi, R.K. Mohapatra & S.Verma, A critical review of 3D-printed alginate-based materials for biomedical applications, Polymer Bulletin, 82,12523, 2025.IF:4
  8. Y.Singh, M.S.Chauhan, A.Pappu Enhanced performance of epoxy-modified E-waste plastic-fly ash hybrid composites: Mechanical, spectroscopic and thermal characterization, Construction and Building Materials, 501, 144135, 2025. IF: 8.0.
  9. Y.Singh, M. S.Chauhan, A.Pappu, Novel hybrid E-plastic composite panels and its materials performance- A sustainable and environmentally friendly approach for circular economy, Ceramics International, 51(26) , Part B, 49867, 2025. IF: 5.6.
  10. P.Prabhakar, R.K.Sen, M.Patel, J.Vishwakarma, A. Vikram, A. Dwivedi, J.P. Chaurasia, A.K. Srivastava, N. Dwivedi, C. Dhand, Polydopamine- functionalized graphene oxide integrated PCL/gelatin nanofibers for wound infection control, Journal of Drug Delivery Science and Technology, 113, 107379, 2025.IF: 4.9.
  11. R.Kumar, A.Sudhaik, A.Asalam, P.Khan, Van-Huy Nguyen, A.Singh, P.Singh, S.Thakur,



P.Raizada, Designing tandem S-scheme photo-catalytic systems: Mechanistic insights, characterization techniques and applications, *Acta Physico-Chimica Sinica*, 41(11), 100150, 2025. IF:13.5.

12. Ritu, R. Mitra, P.C. Sherrell, M. K.Gupta, S.Houshyar, L. Wang and M.K. Patel, High-Strength Flexible Cellulose-MgAl Layered Double Hydroxide Based Triboelectric Nanogenerator for Ocean Wave Energy Harvesting, *ACS Applied Materials & Interfaces*, 17(47), 64709, 2025, IF: 8.2.

13. K.Yadav, S. Verma, Additive manufacturing of smart 3D-printed radiation shielding materials—An innovation in recent times, *Canadian Journal of Chemical Engineering*, December 2025 (Early Access), First published: 04 December 2025.

IF:1.9. <https://doi.org/10.1002/cjce.70143>.

14. D Shanmugarajan, C David, A Parihar, P Kulkarni, N Arya, R

Khan, Network Pharmacology Analysis Reveals Multi-target Interactions of Phytochemicals in *Cardiospermum halicacabum* and their Potential in Breast Cancer Therapy, *Current Bioactive Compounds* 21 (7), E15734072309930, 2025. Cite Score:1.8.

15. T Vyas, MA Sadique, J Lodhi, A Joshi, R Khan, Carbon Quantum Dots: Dimethylglyoxime Thin Film-Based Chemosensors for the Specific Detection of Nickel Ions in Water Resources, *ACS Applied Nano Materials*, 8, 11811, 2025. IF:5.5.

16. S.A. Hussain, D.Mahanta, A.A. Ali, D.Maheswari, M.A. Sadique, H.S.Dutta, R. Khan, S. Gogoi, Borophene /carbon dots nanohybrid with peroxidase mimic activity for sensitive detection of glutathione, *Microchemical Journal*, 218, 115688, 2025. IF: 5.1.

17. S.Pandey, S. Mishra &H. N. Bhargaw, Nanocomposite fluorescence sensor for ultrafast



- and reliable fluoride detection in real water samples, *International Journal of Environmental Analytical Chemistry*, 1–31, 2025. IF:2.5. <https://doi.org/10.1080/03067319.2025.2600592> © 2025
18. A. Singh, V. Soni, S. Sonu, P. Raizada, A. Singh, A. Aslam, P. Khan, P. Singh, Recent updates on improving photocatalytic activity of graphdiyne derived photocatalyst for dye and antibiotic degradation, *Inorganic Chemistry Communications*, 182, 115656, 2025. IF:5.4.
  19. P. Arya, U.K. Tiwari, M.K. Gupta, High performance flexible surface functional mediated piezoelectric MXene  $Ti_3C_2T_x$  nanosheets based nanogenerator, *Journal of Alloys and Compounds*, 1043, 184283, 2025. IF: 6.3.
  20. A.K. Yadav, G. Ciatto, P. D. Babu, S. K. Ghosh, S. Jana, P. Kumar, D. Bhattacharyya, Investigating the Local Coordination and Electronic States of Fe-Doped Graphitic ZnO Using X-Ray Absorption Spectroscopy, *Journal of Physical Chemistry C*, 129, 18291, 2025. IF: 3.2
  21. S. Ghotia, R. Singhal, S. Banerjee, A. Kumar, P. Kumar, Lateral Size Driven Wettability, Conductivity, Magnetism and Hydrogen Storage Properties of  $Ti_3C_2T_x$ -MXene, *ACS Applied Engineering Materials*, 3, 3862, 2025. IF: 5.5.
  22. S. Shil, M. Chauhan, S. Ghotia, A. Tyagi, P. Kumar, S. Singh, CVD-Grown NiO-Carbon Nanofiber Decorated rGO Hybrids for High-Performance Electrochemical Hydrogen Storage: Role of Hierarchical Porous Structures, *Nanoscale* 17, 21175, 2025. IF: 5.1
  23. G. Murmu, M. Chauhan, P. Kumar, S. Saha, S. Singh, Assessing MXene-supported polyoxometalate electrocatalysts: Is MXene always a miracle material for HER and OER applications, *Inorganic Chemistry Communications* 178, 114601, 2025. I.F.: 5.4

## Honors/ Awards

1. Dr. Thallada Bhaskar, Director, CSIR-AMPRI, Bhopal, received Professor R. D. Desai 80th Birthday Commemoration Medal & Prize: (Annual) under Category B: Endowment Awards, Indian Chemical Society Awards: 2025 at 62nd Annual Convention of Chemists (ACC) 2025 and

International Conference on "Net Zero Goal & Sustainability: Role of Chemical Sciences in Green Energy, Circular Economy, and Prosperity of India" jointly organized by Indian Chemical Society and Department of Chemistry, Madras Christian College, December 18-20, 2025



*Dr. Thallada Bhaskar receiving the award and addressing the audience*

2. Dr. Kirti Soni, Senior Principal Scientist, CSIR-AMPRI, Bhopal received the 'Acoustical Society of India (ASI) M.S. Narayanan Memorial Lecture Award for 2025' in the 'India International Symposium on Acoustics 2025',

Gurugram, Haryana, 30th October - 01st November, 2025, (Co-sponsored by International commission on Acoustics(ICA) and Acoustical Society of America(ASA)



*Dr. Kirti Soni receiving the Award*









## AcSIR

- AcSIR Science Club of CSIR-AMPRI, Bhopal celebrated Teachers' Day and felicitated the faculty on 3rd October, 2025 (September 05 - National Teachers' Day & October



05 - World Teachers' Day). Prof. Thallada Bhaskar, Director, CSIR-AMPRI & Outstanding Professor, addressed the audience.



*Teachers' Day by AcSIR Science Club of CSIR-AMPRI*

- Mr. Ranjan Chaturvedi, 20EE18A35002, Ph.D student of AcSIR, Supervisor: Dr. Asokan Pappu, Co-supervisor: Dr. Manoj Kumar Gupta successfully defended Ph.D thesis titled "Experimental

investigation on stone waste particulates as a functional filler in poly(vinyl chloride) based composite materials" on 10th November, 2025.

## Awards to Students

- Ritika Phogot, Project Associate, received Best Paper Presentation Award in 'India International Symposium on Acoustics (IISA)-2025', K-IIT College of Engineering, Gurugram, Haryana, 30th October-01st November, 2025.
- Sakshi Tiwari, AcSIR, Ph.D Student received Best Poster Presentation Award in 'International Conference on Advances in Nanomaterials and

Devices for Energy and Environment (CANDEE-2025)', Atal Bihari Vajpayee Indian Institute of Information Technology and Management, Gwalior, November 16-18, 2025.

- Ayushi Singhal, AcSIR, Ph.D Student, CSIR-AMPRI & RMIT University, Australia received Best Oral Presentation Award in 'International Conference on



Advances in Nanomaterials and Devices for Energy and Environment (CANDEE-2025)', Atal Bihari Vajpayee Indian Institute of Information Technology and Management, Gwalior, November 16-18, 2025.

- Dr. Rainy Gupta, DST Women Scientist (WISE - SCOPE fellowship) received best oral presentation award in International Conference on "Recent Trends in Functional Materials (ICRTFM-2025), Maulana Azad National Institute of Technology (MANIT) Bhopal, December 01 - 03, 2025.
- Dr Akshay Singh Tomar, CSIR-Research Associate received best poster presentation award in 'Young Scientist Conclaves' organized as a part of 11th IISF-

2025 in Theme 'Science for a Circular Economy: Waste Valorisation and Resource Efficiency', Panchkula, Haryana, December 06 - 09, 2025.

- Mr. Dheeraj Barmase, Project Associate received best presentation Award in Oral category in International Conference on Chemistry and Sustainability: Pathways to achieve SDGs -2025, Graphic Era University, Dehradun, December 11-12, 2025
- Mr. Tanmay Sardar, AcSIR, Ph.D Student received the Best Paper Presentation Award in "HYDRO International 2025, 30th International Conference on Hydraulics, Water Resources, River and Coastal Engineering", NIT Rourkela, December 18-20, 2025

## Skill Development

1. Under the aegis of CSIR Integrated Skill Initiative Phase III, CSIR-AMPRI organised five-day Training program titled 'CNC Turner, Conventional Turner, Welder and Fitter' from November 01-07, 2025. 18 students and 2 faculty members from the Govt. Polytechnic College, Raisen participated in the programme. The valedictory function was organised on November 07, 2025. On this occasion, Dr. Thallada

Bhaskar, Director, CSIR-AMPRI distributed the certificates to the students.

2. Under the aegis of CSIR Integrated Skill Development Initiative Phase III, two five-day skill development programs (December 08 - 12, 2025) were inaugurated on December 08, 2025 at CSIR-AMPRI, Bhopal titled 'Synthesis, Characterisation and Application of Nanomaterials'





## Events

### Lecture on Ayurveda Day-2025

On the occasion of 10th Ayurveda Divas, CSIR-AMPRI organised Ayurveda lecture on “Secret of Ayurveda in daily

life” followed by Ayurveda OPD deliver by Dr. Preeti Chopra, MD Ayurveda at AMPRI on October 7, 2025.



*Ayurveda Day-2025 at CSIR-AMPRI*

### Special Campaign 5.0 (October 2-31, 2025)

As a part of Special Campaign 5.0 (October 02 - 31, 2025), for institutionalizing Swachhata and minimizing

pendency in government offices, staff members of CSIR-AMPRI, Bhopal, took the Swachhata Pledge, participated in a walk and cleanliness drive on October 09, 2025.



*Special Campaign 5.0 at CSIR-AMPRI*

### Vigilance Awareness Week 2025 (October 27- November 02, 2025)

Various activities were performed at CSIR-AMPRI, Bhopal, as part of Vigilance Awareness Week 2025.

i) October 27, 2025: Dr. Thallada Bhaskar, Director, CSIR-AMPRI Bhopal administered the Integrity

Pledge to all staff members reaffirming their collective commitment to integrity, transparency, and good governance.

ii) October 28, 2025: An essay/slogan competition has been organized on the topic “Vigilance: Our Shared Responsibility”

- iii) October 29, 2025: A lecture on CCS (Conduct Rules) 1964 was given by Shri Mukund Sahay, Retd. Controller of Administration.
- iv) November 04, 2025: An awareness programme was organised in

village Mugaliyachhap and a competition was held during the programme to encourage participation among villagers. Officials shared their views on the importance of vigilance.



*Vigilance Awareness Week 2025 at CSIR-AMPRI*

### 84th CSIR Foundation Day -2025

CSIR- AMPRI, Bhopal celebrated 84th CSIR Foundation Day on October 31, 2025. Dr. Sudhir Kumar Mishra, DRDO Chair (Emeritus), Former Director General (BrahMos), DRDO & CEO and MD, BrahMos Aerospace was the Chief Guest on the occasion.

CSIR-Foundation Day Business Meet was organised on November 1, 2025. Shri Ashish Patel, Chairman & Managing Director, Hindustan Fibre Glass Works Pvt. Ltd. was the Chief Guest. CSIR-AMPRI, Bhopal, observed

an open day on Nov. 01, 2025. On open day, the institute showcased various R&D activities/products in an exhibition. Students from schools, colleges, and the public came and witnessed the research & advancements happening at CSIR-AMPRI.

A Cultural programme comprising fancy dress, dance, drama, puppet show etc was also organised on the evening of October 31, 2025 for staff members, their family, and researchers. Mrs. Thallada Bhavani graced the occasion as chief guest.



*Glimpses of 84th CSIR Foundation Day celebration at CSIR-AMPRI*



## राजभाषा

दिनांक 29 दिसंबर 2025 को संस्थान में नवनियुक्त प्रशासनिक कर्मचारियों के लिए एक राजभाषा कार्यशाला का आयोजन किया गया। कार्यशाला में भारत सरकार की राजभाषा नीति की अनिवार्यताओं के संबंध में जानकारी दी गई। कार्यशाला का संचालन वरिष्ठ हिंदी अधिकारी डॉ मनीषा दुबे ने किया।



राजभाषा कार्यशाला की झलक

## Outreach Activities

1. CSIR-AMPRI, Bhopal participated and showcased scientific innovations in 7th edition of



Bharatiya Vigyan Sammelan(BVS-2025) Organised from, December 26–29, 2025 at Tirupati.



Glimpses of BVS 2025 at Tirupati

2. CSIR-AMPRI, Bhopal participated and showcased scientific innovations in 10th International



Agri and Horti Technology Expo-2025 held from 26-28, December 2025 at Bhopal.



Glimpses of Expo at Bhopal



## Invited Lectures

1. Dr. Raju Khan, Senior Principal Scientist, delivered invited talk entitled "Point-of-Care Graphene Oxide - Silver Nanohybrid Electrochemical Biosensors for Early Detection of Dengue Biomarkers" in International Conference on Frontiers of Engineering for Healthcare (FEH-2025), December 10-12, 2025, Indian Institute of Technology, Gandhinagar, Gujrat.
2. Dr. Sarika Verma, Senior Principal Scientist delivered an invited talk on "Nanoengineered Functional Materials: Innovative Radiation Shielding Solutions for Healthcare and Environmental Safety" at 4th International Conference on Advances in the Nano materials and Devices for Energy and Environment (CANDEE-2025), November 16-18, 2025 organized by Advanced Materials Research Group, Department of Engineering Sciences, ABV-IIITM, Morena, Gwalior, M.P. She also Chaired of one of the sessions during the conference
3. Dr. Alka Mishra, Principal Scientist participated in 'Awareness Programme on IPR under MSME Innovative Scheme' and delivered talk on 'Agro-Waste and Marble Waste Recycling Technology for Converting into Hybrid Composite Particle Board' 23rd December, 2025, Harda M.P.

## Visit of Dignitaries to the Institute

1. Professor Venu Gopal Achanta, Director, CSIR-NPL Delhi on 23rd October, 2025
2. Prof. S.B. Jonnalagadda, Senior Research Associate & Emeritus Professor, School of Chemistry & Physics, University of KwaZulu-Natal, Durban, South Africa visited CSIR-AMPRI, Bhopal and delivered Expert Lecture titled "Nanocomposites and Mixed Oxide Materials as Recyclable Catalysts for Green Synthesis and Other Applications" on 17th November, 2025
3. Dr. Parthasarathi Ramakrishnan, Head, CSIR-HRDG, New Delhi, visited CSIR-AMPRI, Bhopal, and delivered a talk on "Bridging Research and Innovation: Pathways to Translation and Transformation" on 25th November, 2025.
4. Professor Pradeep Kumar Ramacharla, Director of CSIR-CBRI, Roorkee visited CSIR-AMPRI, Bhopal on December 24, 2025.




# CSIR-AMPRI in Media

Ministry of Science & Technology

**CSIR-AMPRI and Re Sustainability Limited Join Hands for Collaboration in Sustainability and Industrial Waste Management**

Posted On: 15 OCT 2025 5:15PM by PIB Bhopal

In a significant step towards promoting sustainable development and efficient industrial waste management, CSIR-Advanced Materials and Processes Research Institute (CSIR-AMPRI), Bhopal and M/S Re Sustainability Limited, Hyderabad have entered into a collaborative partnership. This strategic alliance leverages the unique expertise of both organizations to build a scalable and integrated model addressing critical environmental challenges.



The collaboration was formalized during a meeting held on October 14, 2025, at the premises of M/S Re Sustainability Limited, Hyderabad. The meeting was co-chaired by Prof. Dr. Thallada Bhaskar, Director, CSIR-AMPRI, Bhopal, and Mr. Masood Mallick, Managing Director, M/S Re Sustainability Limited, Hyderabad. Senior officials from both organizations were present, including Dr. Mohd. Akram Khan, Chief Scientist, and Dr. Sandeep Singhal, Head of Business Development Group (BDG), CSIR-AMPRI.

Ministry of Science & Technology

**9th National Science Teachers Workshop 2025-26 Organized at CSIR-AMPRI, Bhopal**

Posted On: 10 DEC 2025 5:23PM by PIB Bhopal

CSIR-Advanced Materials and Processes Research Institute (CSIR-AMPRI), Bhopal have organized Two-Day 9th National Science Teachers Workshop (2025-26) under the CSIR-Iggyasa Programme on December 10-11, 2025. The theme of the workshop was "Inspiring Rational Minds: The Role of Teachers in Shaping Scientific Future." More than 200 Science teachers from Kendriya Vidyalaya Sangathan (KVS), Navodaya Vidyalaya Samiti (NVS), State government and private schools have actively participated in this workshop. The program aimed to strengthen the scientific temperament of teachers and provide them with updated knowledge on recent advances in science and technology.



On the first day of the workshop, December 10, 2025, the inaugural ceremony commenced with lighting of the lamp and a floral welcome to the dignitaries by Prof. Thallada Bhaskar, Director, CSIR-AMPRI, Bhopal. The event was graced by Prof. Suresh Kumar Jain, Vice-Chancellor, Barkatullah University (BU), Bhopal as Chief Guest, and Prof. Anuj Haudet, Department of Physics and Electronics, IETHE, Bhopal as the Guest of Honour.

विज्ञान एवं प्रौद्योगिकी मंत्रालय

**सीएसआईआर-एम्प्री, भोपाल द्वारा भारत अंतर्राष्ट्रीय विज्ञान महोत्सव (आईआईएसएफ) 2025 का कर्टेन रैज़र कार्यक्रम आयोजित**

प्रतिष्ठित तिथि: 25 NOV 2025 5:31PM by PIB Bhopal

सीएसआईआर-प्रगत पदार्थ तथा प्रक्रम अनुसंधान संस्थान (एम्प्री), भोपाल ने 24 नवंबर, 2025 को भारत अंतर्राष्ट्रीय विज्ञान महोत्सव (आईआईएसएफ) 2025 का कर्टेन रैज़र कार्यक्रम आयोजित किया। यह कार्यक्रम 6-9 दिसंबर 2025 की अवधि में पंचकुला, हरियाणा में "विज्ञान से सम्पद्धि: आमनिर्भर भारत के लिए" विषय पर आयोजित किया जाएगा। इस अवसर पर मेनेट, भोपाल के निदेशक प्रोफेसर करुणेश कुमार मुख्तार मुख्य अतिथि थे। विधा के राष्ट्रीय संयुक्त आयोजन सचिव श्री प्रवीण रामदास विशेष अतिथि थे।

कार्यक्रम का प्रारम्भ सरस्वती वन्दना से हुआ। सीएसआईआर-एम्प्री, भोपाल के निदेशक प्रोफेसर थल्लाडा भस्कर ने मुख्य अतिथि और विशेष अतिथि का स्वागत किया। प्रो. भस्कर ने आईआईएसएफ को मनाने की संकल्पना के बारे में जानकारी दी। उन्होंने इस बात पर प्रकाश डाला कि हमें विज्ञान में नवाचार करके "आमनिर्भर भारत" विकसित करने की आवश्यकता है और आईआईएसएफ इस संबंध में एक प्रमुख कदम है। उन्होंने राष्ट्र निर्माण में विज्ञान के योगदान और महत्व के बारे में बताया। उन्होंने कहा कि विज्ञान आम लोगों के लिए है और इसे आम लोगों के बीच प्रदर्शित किया जाना चाहिए। हमें विज्ञान और समाज के बीच की दूरी को घटाने की जरूरत है और यह आईआईएसएफ का एक महत्वपूर्ण उद्देश्य है।



Ministry of Science & Technology

**CSIR-AMPRI, Bhopal Organises Curtain Raiser Event for India International Science Festival (IISF) 2025**

Posted On: 25 NOV 2025 5:31PM by PIB Bhopal

CSIR-Advanced Materials and Processes Research Institute (AMPRI), Bhopal organised Curtain Raiser Event of India International Science Festival (IISF) 2025 on November 24, 2025 which will be going to held in Panchkula, Haryana on theme "Vigyan se Samruddhi: For Atmanirbhar Bharat" during 6-9 December 2025. Prof. Karunesh Kumar Shukla, Director, MANIT, Bhopal was the Chief Guest on the occasion. Shri Praveen Ramdas, National Joint Organizing Secretary, IISF was the Guest of Honour.

Programme began with Saraswati Vandana. Prof. Thallada Bhaskar, Director, CSIR-AMPRI, Bhopal welcomed the Chief Guest and Guest of Honour. Prof. Bhaskar briefed about the conceptualization of celebrating IISF. He highlighted that we need to develop "Atmanirbhar Bharat" (Self-Reliant India) by innovating science and IISF is a prime step in this regard. He spoke about the contributions and importance of science in Nation Building. The science is for the common people and should be showcased among the common people. We need to bridge the gap between science and society and this is one of the important purpose of IISF.

Dr. Mohd. Akram Khan, Chief Scientist, CSIR-AMPRI, Bhopal highlighted the details of the programme. He emphasised that purpose of IISF is to ignite youth to take science as carrier, to bring science to society and to showcase India's scientific achievements. Shri Praveen Ramdas, addressed the gathering. He highlighted that IISF showcased journey of India from ancient times till present era and its objective is to celebrate India's achievements and to bring science to everyone. During his address, he mentioned about various programmes that will be organised during upcoming IISF 2025 covering students-science village, four days camp, plenary lectures on topics like green energy, semiconductors, quantum technologies and many more.



75 Azadi Ka Amrit Mahotsav

**सीएसआईआर-एम्प्री द्वारा 84वें सीएसआईआर स्थापना दिवस का आयोजन**

प्रतिष्ठित तिथि: 01 NOV 2025 9:14PM by PIB Bhopal

सीएसआईआर-प्रगत पदार्थ तथा प्रक्रम अनुसंधान संस्थान (एम्प्री), भोपाल ने 31 अक्टूबर, 2025 को 84वें सीएसआईआर स्थापना दिवस मनाया। इस अवसर पर मुख्य अतिथि डॉ. सुधीर कुमार मिश्रा (एम्प्री), पूर्व महानिदेशक (ब्रह्मोस), डॉ. अजरतुल्लाह एवं मुख्य कार्यकारी अधिकारी एवं महाप्रबंधक, ब्रह्मोस एरोस्पेस डॉ. सुधीर कुमार मिश्रा थे।



प्रारंभिक सत्र में डॉ. सुधीर कुमार मिश्रा ने सीएसआईआर-एम्प्री द्वारा विकसित प्रमुख उपकरणों की प्रदर्शनी का उद्घाटन किया। स्थापना दिवस समारोह का प्रथम सीएसआईआर-एम्प्री के निदेशक डॉ. थल्लाडा भस्कर द्वारा डॉ. सुधीर कुमार मिश्रा के स्वागत के साथ हुआ। अपने स्वागत भाषण में, डॉ. भस्कर ने सीएसआईआर-एम्प्री में वास्तुशिल्प अनुसंधान एवं विकास कार्य के क्षेत्रों की जानकारी दी और आमनिर्भर भारत के आदर्श के अनुसार विकसित की जा रही प्रणालियों और प्रक्रमों के विकास की राह पर प्रकाश डाला। उन्होंने इसे श्रेष्ठ उपस्थिति के लिए स्थापित एक संस्थान - एक प्रतिष्ठित संस्थान के रूप में विकसित और आज एक प्रगतिशील संस्थान के रूप में कार्यरत बताते हुए रेखांकित किया। इसके अलावा, हमारे युवा वैज्ञानिकों को राष्ट्र निर्माण हेतु एक टीम के रूप में कार्य करने हेतु केयर करने में संस्थान की भूमिका को भी उन्होंने रेखांकित किया।



Ministry of Defence

**84th CSIR Foundation Day Celebrated at CSIR - AMPRI**

Posted On: 01 NOV 2025 9:25PM by PIB Bhopal

CSIR-Advanced Materials and Processes Research Institute (AMPRI), Bhopal celebrated 84th CSIR Foundation Day on October 31, 2025. Dr. Sudhir Kumar Mishra, DRDO Chair (Eminent), Former Director General (BrahMos), DRDO & CEO and MD, BrahMos Aerospace was the Chief Guest on the occasion.

In the morning session, Dr. Sudhir Kumar Mishra, inaugurated the exhibition showcasing the exhibits of CSIR-AMPRI processes/products developed. The foundation day celebrations started with warm welcome of Dr. Sudhir Kumar Mishra by Dr. Thallada Bhaskar, Director, CSIR-AMPRI. During his welcome address, Dr. Bhaskar briefed areas of R & D works at CSIR-AMPRI, highlighted the journey of transformation of lab and processes being developed as per the vision call of an Atmanirbhar Bharat. Created as an institute for Regional Presence - Grown as Institute of Eminence and Today its Institute of Relevance. Further, to nurture our young scientists to work in a team to build the nation.



Dr. P Asokan, Chief Scientist, CSIR-AMPRI, Bhopal highlighted the details of the programme. Dr. Mohd. Akram Khan, Chief Scientist, CSIR-AMPRI, Bhopal introduced the Chief Guest to the audience and highlighted his achievements.



Ministry of Science & Technology

**75**  
Azadi Ka  
Amrit Mahotsav

### CSIR-AMPRI, Bhopal, and IIT, Hyderabad, ink a MoU for research collaboration in the areas of mutual interest

Posted On: 18 OCT 2025 1:34PM by PIB Bhopal

CSIR-Advanced Materials and Processes Research Institute(AMPRI) inks MoU with Indian Institute of Technology (IIT) Hyderabad for collaborative research & development in the areas of material science, chemical technology and allied domains of mutual expertise of additive manufacturing, waste-to-wealth technologies and sustainability. The MoU was exchanged at a ceremony held at IIT Hyderabad on 15/10/2025 between Prof. Thallada Bhaskar, Director CSIR-AMPRI, Bhopal and Prof. B S Murthy, Director IIT Hyderabad. The event was graced by team from IIT Hyderabad including Prof. G Narhari Sastry Dean (Research), Dr Sudarsanam Pulla, Dr. Mayur Vaidya and team from CSIR-AMPRI including Dr. Sandeep Singhai, Head Business Development and Dr. Ram Kumar, Scientist. The collaboration between CSIR-AMPRI and IIT Hyderabad is expected to generate significant advances in the field of metals, advanced materials, advanced processes and other allied fields benefitting both research communities and nation as a whole.



**CSIR News** ISSN 0409-7467  
NEWSLETTER OF THE COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH

Volume 75 No. 10 <https://csirnews.niscpr.res.in> | <https://www.csir.res.in> October 2025

*of informed policy and effective science communication.*

### MoUs/Agreements

## CSIR-AMPRI Signs an MoU with IMD

**CSIR-AMPRI designed & developed the SODAR system facility, inaugurated at IMD**

On the auspicious occasion of CSIR's Foundation Day, 26 September 2025, the SODAR (Sound Detection and Ranging) system facility, designed & developed by CSIR-Advanced Materials and Processes Research Institute (AMPRI), Bhopal, was inaugurated at the India Meteorological Department (IMD), Delhi by Honourable Dr M Ravichandran, Secretary, Ministry of Earth Sciences (MoES), Dr Mrutyunjay Mohapatra, Director General of Meteorology, India Meteorological Department and Prof. Dr Thallada Bhaskar, Director, CSIR-AMPRI, Bhopal, Dr Mohd Akram Khan, Chief Scientist & Energy and Environment Solutions Division, Dr Sandeep Singhai, Senior Principal Scientist & Head, Business Development Group.

194 CSIR News October 2025

**CSIR News** ISSN 0409-7467  
NEWSLETTER OF THE COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH

Volume 75 No. 10 <https://csirnews.niscpr.res.in> | <https://www.csir.res.in> October 2025

### In the News

participating licensees, it as a visionary step toward promoting "Lab to Market to Masses", ensuring that innovations reach and benefit common citizens. Stall-wise list of participated CSIR labs and products is as follows:

Stall no	CSIR Lab	Products List
Stall 1	CSIR-CIMAP	Agarbatti/Incense sticks, Dhoop sticks, Dhoop cones, Havan cups, Essential oils, Detoxifying Body Wash with Aloe Vera & Lime, Geranium 2 in 1 Anti-Dandruff Shampoo with Menthol Herbs, Anti-Hairfall Bhringraj & Amla Shampoo with Reetha & Shikakai, Vitamin C Orange Face Wash, Acne Preventive Face Wash with Neem & Aloe Vera, Mosquito Repellent Room Spray, Lemon Fresh Floor Wash - Infused with Lemon Grass & Cedarwood Essential Oils 500ML, Herbal Hygiene Mint Liquid Sanitizer Spray 500ML, 100% Pure Rose Water Mist & Face Toner Spray, Shankpushpi Anti-Hair Fall Oil, Pain Relief Oil
Stall 2	CSIR-AMPRI, CSIR-NIIST	D-tox Neer Water Filter, Leather-like Products from Plant-based Materials, such as handbags and wallets.

*A wide range of CSIR-based products were showcased under various categories.*

**CSIR News** ISSN 0409-7467  
NEWSLETTER OF THE COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH

Volume 75 No. 11 <https://csirnews.niscpr.res.in> | <https://www.csir.res.in> November 2025

### Inauguration of the AcSIR Science Club at CSIR-AMPRI

Prof. Manoj Kumar Dhar, Director, AcSIR, inaugurated the AcSIR Science Club at CSIR-AMPRI, Bhopal, on 2 September 2025. In the first session, the programme began with the lighting of a lamp by all dignitaries, followed by Saraswati Vandana by AcSIR PhD students. Prof. Thallada Bhaskar, Director, CSIR-AMPRI, Bhopal, welcomed Prof. Dhar with a floral bouquet.

Dr Mohd Akram Khan, Chief Scientist, CSIR-AMPRI, provided a brief introduction about the programme. He highlighted about main objectives of the Science Club, which are to ignite minds and inculcate creativity in AcSIR students and to give the opportunity to think out of the box and foster and showcase their inherent talent and creativity, including art, music, dance, social gathering, debate and many more.

During his address, Prof. Thallada Bhaskar highlighted the importance of creating the Science Club at various CSIR labs, which encourages the students who are the torch bearers to showcase their work accurately and in time time-bound manner using their hidden talent. He emphasised skill development and correlated skill development with employment. He said that skills are demanded for career development. Many skills their work and give their best to be outstanding among the crowd. He appreciated and highlighted the contributions of Prof. Dhar for uplifting and streamlining various activities of AcSIR.

Dr Alka Mishra, Principal Scientist and Co-ordinator, AcSIR, CSIR-AMPRI, Bhopal, spoke about "Nurturing Scholars, Driving Research". Through her presentation, she highlighted the importance of the Science Club. She presented the growth and journey of AcSIR at CSIR-AMPRI and highlighted the progress over the years.

All the office bearers of the Science Club took the oath given by Prof. Dhar. Students delivered a

*Prof. Thallada Bhaskar highlighted the importance of creating the Science Club at various CSIR labs, which encourages the students who are the torch bearers to showcase their work accurately and in time time-bound manner using their hidden talent.*





## Contact

**Prof. Dr. THALLADA BHASKAR, DIRECTOR**

CSIR - Advanced Materials and Processes Research Institute  
Narmadapuram Road, Bhopal-462026 (MP)

Tel. : +91-755-2457105

Email: [director.ampri@csir.res.in](mailto:director.ampri@csir.res.in)

Website: <https://ampri.res.in/>

### Stay Connected:



<https://x.com/csirampribhopal>



<https://www.facebook.com/csirampri>



<https://www.instagram.com/csirampribhopal/>