



ICPEP-7

Souvenir

7th International Conference on Plants and Environmental Pollution

30 November - 2 December 2025



Conference Theme:

**Plants & Ecosystems for Advancing LiFE (Lifestyle for Environment),
Green Growth, and Sustainable Future**

Organized by

**International Society of Environmental Botanists (ISEB)
&
CSIR-National Botanical Research Institute, Lucknow**



राष्ट्रीय वनस्पति अनुसंधान संस्थान लखनऊ (वैज्ञानिक एवं औद्योगिक अनुसंधान परिषद्, भारत सरकार)



परिचय एवं इतिहास



- राष्ट्रीय वनस्पति अनुसंधान संस्थान, लखनऊ (सीएसआईआर-एनबीआरआई), वैज्ञानिक एवं औद्योगिक अनुसंधान परिषद्, नई दिल्ली के अंतर्गत एक प्रमुख पादप विज्ञान अनुसंधान केंद्र है। संस्थान को पादप जैव-विविधता, जैव-प्रौद्योगिकी, जैव-सूचना विज्ञान, पर्यावरणीय आकलन, पर्यावरणीय विष-विज्ञान, जैव-उपचार एवं फार्मास्यूटिकल शोध कार्य में दक्षता हासिल है।
- 1800 ईसा पूर्व, सिकंदरबाग के रॉयल गार्डन के नाम से प्रसिद्ध इस वनस्पति उद्यान को मुगल सल्तनत के नवाबों द्वारा स्थापित किया गया था। नवाब वाजिद अली शाह ने अपनी बेगम के नाम पर इस उद्यान का नाम सिकंदरबाग रखा था। ब्रिटिश शासन काल में इस उद्यान का नाम गवर्नमेंट हॉर्टिकल्चर गार्डन कर दिया गया।
- वर्ष 1932 में प्रसिद्ध वैज्ञानिक प्रो. बीरबल साहनी एवं डॉ. एस के चतुर्वेदी द्वारा इस सिकंदरबाग को वनस्पति उद्यान में तब्दील कर वर्ष 1948 में इसे नेशनल बोटैनिक गार्डन में परिवर्तित किया गया एवं 13 अप्रैल 1953 को वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद्, नई दिल्ली (सीएसआईआर) द्वारा नेशनल बोटैनिक गार्डन को अंगीकृत कर 25 अक्टूबर 1978 में इसका नाम बदल कर राष्ट्रीय वनस्पति अनुसंधान संस्थान किया गया।



मुख्य शोध एवं विकास क्षेत्र



- पादप विविधता, वर्गीकी एवं निम्न तथा उच्च पादप समूहों के लिए डेटाबेस
- औषध विज्ञान, पादप रसायन एवं भेषज विज्ञान अध्ययन
- मानव स्वास्थ्य देखभाल हेतु हर्बल उत्पादों का विकास
- जलवायु परिवर्तन, सूक्ष्मजीवी एवं पर्यावरणीय प्रौद्योगिकियों पर अनुसंधान
- पारंपरिक एवं आधुनिक प्रजनन द्वारा पादप सुधार एवं आनुवंशिक अभियांत्रिकी
- वनस्पति उद्यान, पादप संरक्षण एवं पुष्प कृषि हेतु पौधों की नवीन किस्मों का विकास
- ऊसर एवं अन्य बंजर भूमि के सतत विकास हेतु कृषि-प्रौद्योगिकियाँ
- कौशल विकास कार्यक्रम एवं समाज कल्याण हेतु गतिविधियाँ

संस्थान की राष्ट्रीय सुविधाएँ एवं सेवाएँ



वनस्पति उद्यान

उद्यान में देश की दुर्लभ, संकटाग्रस्त, समाप्य एवं वाणिज्यिक रूप से महत्वपूर्ण गैर-फलदायी पौधों की 5,000 से अधिक प्रजातियाँ संरक्षित हैं। वनस्पति उद्यान लखनऊवासियों में सुबह की सैर के लिए परसदीय स्थानों में एक है। प्रतिदिन 1000 से अधिक लखनऊवासी उद्यान के हरे और ताजा वातावरण से लाभान्वित होते हैं।



पादपालय

सीएसआईआर-एनबीआरआई में देश का तीसरा सबसे बड़ा पादपालय स्थित है जिसमें शीतान, बायोफाइबर, टेक्स्टाइल, शेक, जिप्सम और एंजियोस्पर्म के 2,50,000 से अधिक नमूने उपलब्ध हैं। यह राष्ट्रीय जैवविविधता प्राधिकरण द्वारा नामित एक राष्ट्रीय कोष है।



प्राकृतिक जड़ी बूटी/औषधि संग्रहालय

संग्रहालय में प्रमाणित औषधियों के करीब 2000 नमूने प्रदर्शित किये गए हैं। इन औषधीय नमूनों को देश के सुदूर भागों से एकत्रित कर इनके इस्तेमाल किये जाने वाले भागों जैसे रूट ड्रस, छाल ड्रस, लोफ ड्रस, स्टेम ड्रस, बीज ड्रस, असेंजिड ड्रस आदि के आधार पर आयुष प्रणाली के अनुसार फाँटल किया गया है।



पर्यावरण सूचका, जागरूकता, क्षमता निर्माण और आजीविका कार्यक्रम केंद्र

पर्यावरण सूचना, जागरूकता, क्षमता निर्माण और आजीविका कार्यक्रम केंद्र (ईएआईसीओ) पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार द्वारा पर्यावरण और वन क्षेत्रों के विषयों पर विंशित कार्य करने हेतु स्थापित किया गया है। संस्थान में स्थित यह केंद्र हितधारकों के लिए 'पौधों एवं प्रदूषण' विषयक कार्यक्रमों एवं मिशन लाइफ के अंतर्गत विभिन्न कार्य रहा है।



कौशल विकास कार्यक्रम

संस्थान द्वारा विभिन्न कौशल विकास कार्यक्रम शुरू किए हैं जिनमें जैव-टोक्सेनोलॉजी प्रोडक्शन फॉर एग्रोकल्चरल एप्लीकेशन, कर्माधिकार प्लॉट डिश्यू कल्चर, क्याक्टि एनालिसिस फॉर हर्बल इंस्ट्रुटी, जीनोमिक्स, इन-सिलिको एनालिसिस फॉर जीनोमिक्स एंड प्रोटीनोमिक्स एवं वीन स्विचल डैलनपैट मुख्य हैं।



केंद्रीय उपकरण सुविधा

संस्थान की यह सुविधा पादप आधारित विश्लेषणात्मक परीक्षण सेवाएँ प्रदान करती है जिसके अंतर्गत पौधों से प्राप्त होने वाले आवश्यक तत्वों के परीक्षण के साथ साथ प्रमाणित संदर्भ सामग्री (सीआरएम) का विकास भी किया जाता है। इस सुविधा को परीक्षण और ऑर्गेनिक प्रयोगशालाओं के लिए राष्ट्रीय प्रत्यावयन बोर्ड (एनएचएएल) से मान्यता प्राप्त है।



संस्थान द्वारा विकसित हर्बल उत्पाद

संस्थान वे वैज्ञानिक रस से मान्य हर्बल उत्पादों का भी विकास किया है जिनमें एनबीआरआई-डीबी: मधुमेह विरोधी हर्बल फार्मूलेशन (BGR34), एनबीआरआई यूरो-05, ट्रिपिकल हर्बल कैडिडा जेल, जोश: पारंपरिक काढ़ा, डेटी जेल: दातदं राहत जेल, कोमा -03: जैव उपलब्ध कर्कशिन, न्यूट्रोजेन शामिल हैं।



संस्थान द्वारा कृषि प्रौद्योगिकियाँ

संस्थान द्वारा किसानों को लाभान्वित करने हेतु विभिन्न प्रौद्योगिकियाँ विकसित की गयी हैं जिनमें नमो: 108 कमल की किस्म, एनोवो 'निहार', आर्सेनिक मुक्त धान 'मुक्ताश्री', उन्नत भारत हेतु हल्दी की किस्म-केसरी, सफेद मक्खी प्रतिरोधी तकलीकी, बोटी कॉटन तकलीकी, अनाकार्डिक एसिड आधारित शोध प्रमोटर, जय धीरेन युक्त ऑपियम पोषी लाइन, वायो-इलाकूलेंट्स, जैव-उत्प्रेषक एवं जैव-कीटनाशी मुख्य हैं।

अधिक जानकारी के संपर्क करें:

निदेशक, वै.औ.अ.प.-राष्ट्रीय वनस्पति अनुसंधान संस्थान, लखनऊ
राणा प्रताप मार्ग, लखनऊ-226001; फ़ोन: 0522-2297804

हमारे सोशल मीडिया प्रोफाइल को फॉलो करें

✉ @csirnbrilko 📱 Csir Nbrl 📺 CSIR NBRI 📷 csirnbrofficial
वेबसाइट: www.nbri.res.in



वै.औ.अ.प. - राष्ट्रीय वनस्पति अनुसंधान संस्थान CSIR - National Botanical Research Institute

Rana Pratap Marg, Lucknow, India

राणा प्रताप मार्ग, लखनऊ, भारत

An Institute of National Importance under Council of Scientific & Industrial Research (CSIR),
Department of Scientific and Industrial Research, Ministry of Science and Technology, Government of India



डॉ. अजित कुमार शासनी

निदेशक

Dr. Ajit Kumar Shasany

Director



Welcome by Director

On behalf of the CSIR-National Botanical Research Institute (CSIR-NBRI) and the International Society of Environmental Botanists (ISEB), it is my boundless pleasure to extend a warm welcome to all delegates attending the Seventh International Conference on Plants and Environmental Pollution (ICPEP-7) at CSIR-NBRI, Lucknow.

We are profoundly honoured by the presence of distinguished scientists, academicians, and professionals from across the globe, representing diverse disciplines of plant and environmental sciences as well as allied fields.

This conference is being convened at a time when environmental pollution poses a critical challenge to human health, community well-being, and the sustainability of plant life. Climate change has further intensified these concerns, with rising temperatures and increasing greenhouse gas concentrations exacerbating existing problems.

I am confident that ICPEP-7 will provide an excellent platform for delegates to engage in meaningful deliberations and discussions on pressing issues in plant and environmental sciences. The conference aims to foster the development of effective strategies to safeguard our planet's environment. We must explore, refine, and advance appropriate strategies and technologies to mitigate environmental pollutants and address the impacts of climate change, ensuring their practical application in the field.

On behalf of CSIR-NBRI, ISEB, and in my personal capacity, I once again extend a heartfelt welcome to all participants of ICPEP-7. I trust that your three-day stay in Lucknow (30th November – 2nd December), the Science City of North India, will be both scientifically enriching and personally enjoyable.

(Ajit Kumar Shasany)



सत्यमेव जयते

प्रो. अभय करंदीकर
Prof. Abhay Karandikar



सचिव
भारत सरकार
विज्ञान एवं प्रौद्योगिकी मंत्रालय
विज्ञान एवं प्रौद्योगिकी विभाग

Secretary
Government of India
Ministry of Science and Technology
Department of Science and Technology

11th November, 2025



MESSAGE

I am pleased to extend my warm greetings to the International Society of Environmental Botanists (ISEB) and CSIR–National Botanical Research Institute, Lucknow, on the occasion of the Seventh International Conference on Plants and Environmental Pollution (ICPEP-7). This Conference continues a distinguished legacy of bringing together scientists, environmentalists, policymakers, and young researchers to address one of the most pressing challenges of our time, environmental degradation and its impact on plant systems.

Plants form the very foundation of life on Earth, and understanding their responses to pollution, climate change, and ecological stress is essential for sustaining biodiversity, food security, and ecosystem resilience. ICPEP-7 provides an important platform to deliberate on recent scientific advances, innovative mitigation strategies, and nature-based solutions that can guide evidence-based environmental management. Such interdisciplinary discussions are crucial for shaping technologies and policies aligned with India's commitment to sustainable development.

I wish ICPEP-7 great success, with the hope that its deliberations lead to impactful ideas and actions for a cleaner, greener, and more sustainable future.


(Abhay Karandikar)



डॉ. मृत्युंजय महापात्र

मौसम विज्ञान विभाग के महानिदेशक,
विश्व मौसम विज्ञान संगठन में भारत के स्थाई प्रतिनिधि
विश्व मौसम विज्ञान संगठन के तीसरे उपाध्यक्ष

Dr. Mrutyunjay Mohapatra

Director General of Meteorology,
Permanent Representative of India to WMO
Third Vice President of WMO



भारत सरकार
पृथ्वी विज्ञान मंत्रालय
भारत मौसम विज्ञान विभाग
मौसम भवन, लोदी रोड़
नई दिल्ली-110003
Government of India
Ministry of Earth Sciences
India Meteorological Department
Mausam Bhawan, Lodi Road
New Delhi-110003

MESSAGE

I am happy to learn that the International Society of Environmental Botanists (ISEB) and CSIR-National Botanical Research Institute (CSIR-NBRI) are jointly organizing the 7th International Conference on Plants and Environmental Pollution (ICPEP-7) from November 30 to December 2, 2025 at CSIR-NBRI, Lucknow.

In recent decades, the accelerating pace of climate variability and extreme weather events has posed unprecedented challenges to ecosystems, agriculture, and human well-being. The need for robust scientific dialogue, interdisciplinary collaboration, and evidence-based policies has never been greater. Conferences such as ICPEP-7 significantly contribute to this mission by bringing together leading experts to exchange knowledge, share innovations, and chart pathways towards sustainable environmental stewardship.

I am sure that this International Conference will provide a vital platform to scientists, researchers, stakeholders and participants to deliberate upon key issues related to plants and environmental pollution and provide valuable understanding of these complex issues.

The India Meteorological Department remains committed to support national and global efforts to mitigate the impacts of climate change and enhance resilience through improved forecasting, climate services, and scientific partnerships.

I am confident that the deliberations and outcomes of ICPEP-7 will play a meaningful role in shaping future environmental strategies and fostering a deeper appreciation of the delicate balance that sustains life on our planet.

I congratulate the organizers for their dedication in convening this important conference and wish all participants fruitful discussions, productive collaborations and continued success in their scientific pursuits.


(Mrutyunjay Mohapatra)

त्रिलोचन महापात्र

अध्यक्ष

पौधा किस्म और कृषक अधिकार संरक्षण प्राधिकरण

(संसद के अधिनियम द्वारा निर्मित सांविधिक निकाय)

कृषि एवं किसान कल्याण मंत्रालय

भारत सरकार



Trilochan Mohapatra

Chairperson

Protection of Plant Varieties and Farmers'
Rights Authority

(A Statutory body created by an Act of Parliament)

Ministry of Agriculture and Farmers Welfare

Government of India



MESSAGE

It gives me immense pleasure to extend my warm greetings to the organizers and participants of the Seventh International Conference on Plants and Environmental Pollution (ICPEP-7), jointly organized by the International Society of Environmental Botanists (ISEB) and the CSIR–National Botanical Research Institute (CSIR–NBRI), Lucknow.

This conference is scheduled from 30th November to 2nd December, 2025, at Lucknow. The problems facing our planet, from climate change and air quality degradation to soil and water contamination, are problems that demand immediate, collaborative, and innovative solutions. Plants, being the lungs of our Earth, are not only victims of pollution but also stand as our most powerful allies in developing sustainable remediation strategies.

ICPEP-7 thus provides a unique opportunity to bring together scientists, researchers, policymakers, and students from around the world to share cutting-edge research and forge new partnerships.

I wish the organizers, participants, and the environmental botany community a very successful, productive, and inspiring conference. Let the insights here sprout into impactful solutions for a cleaner, greener, and healthier planet for all.


(Trilochan Mohapatra)

Date: 27th November, 2025

प्लांट अथॉरिटी भवन, एन.ए.एस.सी. कॉम्प्लेक्स के निकट, टोडापुर के सामने, नई दिल्ली-110012 (भारत)

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Foreword

Biodiversity conservation is crucial for maintaining ecological balance, providing essential resources like food and medicine, and ensuring the stability of ecosystems that support human life. As we all know that, the Biological Diversity 2002 (Amendment 2023) provides multiple layers of mechanism for managing and conserving biodiversity.

Biodiversity, the variety of life on Earth, is important for well-being of humans in many ways. It is a critical foundation of the earth's life support system. Biodiversity provides the basics of life – food, fuel and medicine, is responsible for eco-system functions such as water supply and water purification, pollination, regulation of pests and diseases, water cycle, carbon cycle and soil nutrient recycling, provides ecosystem resilience and is also valued for cultural, spiritual and religious reasons. The benefits provided by biodiversity are important to all people. A healthy biodiversity helps maintain the fine balance of our environment by continuously replenishing, recycling and rebuilding. The major threat to biodiversity today is land degradation and land use change, over exploitation, pollution, invasive alien species, ocean acidification and climate change. As biodiversity is lost, ecosystem services are compromised, at times, critical thresholds crossed, undermining the functioning of the Earth's support system.

I firmly believe that the International Conference will lay the foundation for more insightful discussions among the Scientists, Researchers, Teachers and Students and a special session on “Biodiversity, Threatened Plant Conservation and Palaeosciences” shall pave the way towards Biodiversity Conservation.

I extend my warm greetings to the Director, CSIR-National Botanical Research Institute for his able guidance, Organizers, Conveners and the organizing team for their painstaking effort in organizing the 7th International Conference on Plants and Environmental Pollution (ICPEP-7).

I extend a warm welcome to all the participants to the city, known as the "City of Tehzeeb", capital of Uttar Pradesh and wish them an engaging and fruitful experience in making this International Conference a resounding success.



(B Prabhakar)

Secretary,
Uttar Pradesh State Biodiversity Board,
Lucknow



Our Vision: Conservation beyond Imagination

East Wing, III Floor, 'A'-Block, PICUP BHAWAN, Vibhuti Khand, Gomti Nagar, Lucknow – 226010
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डॉ. ज़बीर अहमद
निदेशक
Dr. Zabeer Ahmed
Director

सीएसआईआर-भारतीय समवेत औषध संस्थान
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E-mail : director@iiim.res.in; zahmed@iiim.res.in
Website : www.iiim.res.in

MESSAGE



I am delighted to know that the International Society of Environmental Botanists (ISEB) and CSIR-National Botanical Research Institute (CSIR-NBRI), Lucknow, are jointly organizing the Seventh International Conference on Plants and Environmental Pollution (ICPEP-7) at Lucknow from 30th November to 2nd December, 2025.

This is a great platform to bring together eminent scientists, researchers and policymakers from different areas to deliberate on vital issues concerning environmental protection, sustainable development and the critical role of plants in mitigating pollution.

In today's era of global climate change, environmental degradation, and rapid urbanization, it is imperative that scientific communities collaborate to develop innovative, nature-based solutions for restoring ecological balance. This type of ICPEP-7 serve as catalysts for fostering interdisciplinary research, technological innovations, and policy frameworks aimed at achieving a cleaner, greener and healthier planet.

I am confident that the deliberations during this conference will lead to the valuable outcomes and contribute significantly to our collective efforts toward environmental sustainability.

I extend my heartiest congratulations and best wishes to the organizers, scientists, participants and other stakeholders for the productive and a grand success of the event.



(Zabeer Ahmed)

Dated.14 November, 2025



सीएसआईआर-केन्द्रीय औषधीय एवं सगंध पौधा संस्थान

(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद्)

कुकरैल पिकनिक स्पॉट रोड, पी.ओ.-सीमैप, लखनऊ-226 015, उ.प्र., भारत



CSIR-Central Institute of Medicinal and Aromatic Plants

(Council of Scientific & Industrial Research)

Kukrail Picnic Spot Road, P.O. CIMAP, Lucknow-226 015, U.P., India

डॉ. प्रबोध कुमार त्रिवेदी, एफएनए, एफएससी, एफएनएससी, एफएनएससी

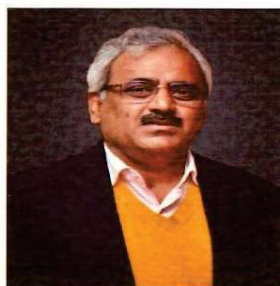
जे.सी. बोस नेशनल फेलो

निदेशक

Dr. Prabodh Kumar Trivedi, FNA, FASc, FNASc, FNAAS

JC Bose National Fellow

Director



MESSAGE

It is a matter of immense pleasure for me to know that the International Society of Environmental Botanists (ISEB) and CSIR-National Botanical Research Institute, Lucknow (CSIR-NBRI) are jointly organizing the 7th International Conference on Plants and Environmental Pollution (ICPEP-7) from 30th November to 2nd December 2025 in Lucknow, the Science City of India. The theme of the conference - "Plants & Ecosystems for Advancing LiFE (Lifestyle for Environment), Green Growth, and Sustainable Future" is very apt and timely. Among the most pressing challenges that are being faced by humanity in present times, climate change propelled by environmental pollution is at the forefront. ICPEP-7 is a prestigious global event that will bring together leading researchers, academicians, environmentalists, policymakers, industry professionals and other stakeholders from across the globe to discuss the impact of pollution on plants and ecosystems, as well as explore sustainable solutions for environment conservation. The participants will get an opportunity to interact among themselves and sow seeds of future collaborations. I am confident that the conference will be scientifically fruitful to all the participants and would be a great success with the proven track record of the organizers from CSIR-NBRI, Lucknow.

I wish great success for the conference and a pleasant stay for all the participants in the historical and traditionally-rich city of Lucknow.

(Prabodh K. Trivedi)

Message

PV Sane, Former Director, CSIR-NBRI



I am pleased that the International Society of Environmental Botanists (ISEB), in collaboration with the CSIR–National Botanical Research Institute, is organizing the 7th International Conference on Plants and Environmental Pollution (ICPEP7) in Lucknow from 30 November to 2 December, 2025. Given the rapid deterioration of the environment and the fast-tracking impacts of climate change, living systems face serious challenges. I am confident that, as with earlier ICPEP meetings, this conference will provide an excellent forum for academicians, scientists, engineers, policymakers, and other stakeholders to examine not only the causes and consequences of environmental degradation but also practical, research-based resolutions through collaborative efforts. I wish the delegates industrious discussions, a pleasant stay in Lucknow, and the conference a grand success.

A handwritten signature in blue ink that reads "Sane" with a horizontal line underneath.

PV Sane

Jason C. White, Ph.D.
Director, The Connecticut Agricultural Experiment Station
123 Huntington Street
New Haven, CT 06504
203-974-8440; Jason.White@ct.gov

Clinical Professor of Epidemiology; Yale School of Public Health
Adjunct Faculty; University of Massachusetts Amherst
Gratis Research Professor; University of Connecticut
Commissioned Official; US Food and Drug Administration (FDA)



Message

I am truly honored to participate in the *7th International Conference on Plants and Environmental Pollution (ICPEP-7)* that is being organized by the *International Society of Environmental Botanists (ISEB)* and the *CSIR–National Botanical Research Institute (CSIR–NBRI)*, Lucknow, from **November 30 to December 2, 2025**. The conference theme of “*Plants and Ecosystems for Advancing Life (Lifestyle for Environment), Green Growth, and Sustainable Future*,” is critical to the advancement of sustainability at a global scale. I look forward to the insightful and impactful presentations and discussions at ICPEP-7; I am certain they will lead to new collaborations that will successfully address the many challenges we face as a global society. Sincere congratulations to **Prof. Ajit K. Shasany**, Director, CSIR–NBRI, Lucknow, and President, ISEB; **Dr. Soumit Kumar Behera**, Secretary, ISEB; and the Organizing Secretaries of ICPEP-7 for their tireless efforts to bring this community together for these critical discussions.



North-Eastern Hill University

(A Central University Established under NEHU Act, 1973 by Government of India)

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Prof. (Dr.) Saroj K Barik

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25 November, 2025



*Immediate Past President, ISEB and
Co-Chairman, Organizing Committee*

Message

it is my great pleasure to extend a warm welcome to all the delegates of the three-day 7th International Conference on Plants and Environmental Pollution (ICPEP-7) being jointly organized by the International Society of Environmental Botanists (ISEB) and Council of Scientific and Industrial Research-National Botanical Research Institute (CSIR-NBRI), Lucknow in the heritage city of Lucknow, India from November 30 to December 2, 2025.

The ICPEP through its six editions since genesis in 1996 has been providing a vital platform to the leading plant and environmental scientists, academicians, young researchers, policy makers and professionals across the globe for high quality discourse and debate on the most critical environmental issues of the contemporary world. In fact, the ICPEP series in India is now synonymous with sharing fresh perspectives, fostering collaboration, and building a global network.

When the earth is struggling with three planetary crises viz., environmental pollution, biodiversity loss, and climate change, ICPEP-7 promises to provide an inspiring and thought-provoking experience by bringing together some of the brightest minds in plant and environment research from across the globe to search for innovative solutions to these planetary crises through high quality science and technology. It will focus on innovative strategies and advanced plan-based technologies with an aim to enhance the environment well-being by combating pollution, conserving biodiversity and mitigating/adapting to climate change.

The Symposium will feature an exciting and rich agenda of keynote speeches, panel discussions, joint workshops, and poster sessions, all designed to foster interdisciplinary collaboration and innovation in the field. I am confident that the Symposium will set a significant milestone in advancing knowledge and fostering key collaborations across the relevant disciplines. I congratulate the members of national, international and local organizing committees for their tireless effort to make ICPEP-7 a grand success.

May the ICPEP flourish through its endless future versions and I wish all the best for a productive and successful ICPEP-7.

(Saroj K Barik)

Prof. Elina Oksanen
University of Eastern Finland
Department of Environmental and
Biological Sciences, Finland
Email: elina.oksanen@uef.fi



Message

“I wish that the ICPEP-7 conference is an event where we can bring together and share our knowledge on recent advances in plant biology as well as discuss and co-create novel ideas and approaches from plant science for sustainable development and the well-being of the planet. I am expecting that the conference will foster international collaboration for tackling climate change, biodiversity loss and environmental pollution. As plant researchers we have the essential knowledge and skills for creating innovative nature-based strategies and solutions for the society, including climate-friendly food production, agroforestry, closer-to-nature forest management, urban greening, fighting against invasive alien species, risk mitigation due to extreme weather conditions and many other emerging and unexpected issues. Let’s do our best for the greener future of our planet!”

Sincerely

Elina Oksanen



Japan Agency for Marine-Earth Science and Technology (JAMSTEC)

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Message

It is with great pleasure that I extend my heartfelt congratulations to the organisers of the 7th International Conference on Plants and Environmental Pollution (ICPEP-7) for hosting this distinguished event. The conference arrives at a truly pivotal moment, as the world faces unprecedented challenges—accelerating climate change, intensifying climate extremes, rapid biodiversity loss, and mounting environmental pressures. ICPEP-7 offers an invaluable platform to share the latest scientific discoveries and innovative solutions that can guide sustainable environmental management and strengthen climate resilience.

Its focus on restoring degraded ecosystems, safeguarding plant biodiversity, and fostering adaptation aligns strongly with global frameworks such as the Sustainable Development Goals, the Kunming–Montreal Global Biodiversity Framework, and the UN Decade on Ecosystem Restoration. By serving as a bridge between science and policy, ICPEP-7 enables evidence-based decision-making at local, national, and international levels.

I wish all participants fruitful discussions, successful collaborations, and impactful outcomes from this important gathering.

A handwritten signature in dark ink, appearing to read "Swadhin Behera".

(Swadhin Behera)

22 November 2025

College of Sciences
Department of Marine, Earth & Atmospheric Sciences

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P: 919.515.3711



November 4, 2025.

Email: vpaneja@ncsu.edu

Subject: Aneja Message for ICPEP-7 Souvenir

Namaskar.

It is my distinct honor to extend heartfelt greetings to the International Society of Environmental Botanists and CSIR-National Botanical Research Institute, Lucknow, on this momentous occasion of the Seventh International Conference on Plants and Environmental Pollution (ICPEP-7). As we gather to explore the critical nexus of environmental pollution, climate change, and plant responses, this conference addresses one of humanity's most pressing challenges.

Plants, the foundation of terrestrial ecosystems and global food security, face unprecedented stress from rising environmental pollutants and climatic extremes. Understanding these interactions is vital for developing resilient agricultural systems and conservation strategies. I commend ISEB and CSIR-NBRI for their visionary leadership in advancing botanical research and fostering international collaboration.

May this conference inspire innovative solutions, strengthen global partnerships, and empower the next generation of environmental scientists and botanists. Together, let us work toward a sustainable future where science illuminates pathways to feed the increasing global population and protect our planet's invaluable plant biodiversity.

With warm regards and best wishes.

Sincerely,

Viney P. Aneja
Viney P. Aneja
Professor
go.ncsu.edu/aneja

Prof. Om Parkash Dhankher
Stockbridge School of Agriculture
Paige Lab room 318, 161 Holdsworth Way
University of Massachusetts Amherst, MA 01003, USA
Tel: +1-413-545-0062
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Message

I am delighted to learn that the *7th International Conference on Plants and Environmental Pollution (ICPEP-7)* is being organized by the *International Society of Environmental Botanists (ISEB)* and the *CSIR–National Botanical Research Institute (CSIR–NBRI)*, Lucknow, from **November 30 to December 2, 2025**. It is heartening to note that the conference is co-sponsored by the *International Union of Biological Sciences (IUBS)*, Paris, and several esteemed Indian government agencies including *DBT, DST, NBA, ICAR, NABARD*, among others.

I extend my heartfelt congratulations to **Prof. Ajit K. Shasany**, Director, CSIR–NBRI, Lucknow, and President, ISEB; **Dr. Soumit Kumar Behera**, Secretary, ISEB; and the Organizing Secretaries of ICPEP-7 for their leadership and commitment in hosting this significant international event. The sustained collaboration between CSIR–NBRI and ISEB over the past 24 years is truly commendable and continues to foster meaningful scientific dialogue and progress.

The conference theme, “*Plants and Ecosystems for Advancing Life (Lifestyle for Environment), Green Growth, and Sustainable Future*,” is both relevant and visionary. It addresses critical global challenges of environmental pollution while highlighting the pivotal role of plants in mitigating adverse effects on human and environmental health. The wide range of topics—spanning climate change adaptation, food safety and security, environmental biotechnology, plant responses to pollution, environmental impact assessment, bioindication, phytoremediation, plant–microbe interactions, waste management, and biodiversity—underscores the multidisciplinary nature of this forum.

I am confident that the deliberations and discussions at ICPEP-7 will yield valuable insights and practical strategies to counter environmental hazards, particularly those stemming from anthropogenic pressures and climate change, thereby contributing to a healthier and more sustainable planet.

I convey my warmest wishes to all delegates, organizers, and sponsors for the successful conduct of this prestigious conference. Having had the privilege of being part of ICPEP-6, I am honored to witness the continued growth of this global platform and wish ICPEP-7 resounding success.

Sincerely,

A handwritten signature in black ink, appearing to read 'Dhankher', with a long, sweeping horizontal stroke extending to the right.

(Om Parkash Dhankher)

Date: 18 November 2025

MESSAGE

Greetings from Kansas State University. Welcome to all the participants of the 7th International Conference on Plants and Environmental Pollution (ICPEP-7) being organized by the International Society of Environmental Botanists (ISEB) and Council of Scientific and Industrial Research – National Botanical Research Institute. The theme of 2025 conference “Plant and Ecosystems for Advancing LiFe (Lifestyle for Environment), Green Growth, and a Sustainable Future” is extremely important. I wanted to congratulate the organizers for choosing this critical and relevant current topic. This conference brings together students, scholars, researchers, educators, policy makers and practitioners from India and many other countries. It provides an excellent platform to share knowledge, learnings and highlight important technological and social innovations that will have positive impacts not only on lives and livelihood of people but also health of our environment and ecosystem. This will be a nice opportunity to build networks and partnerships between multiple organizations including public sector, private sector, practitioners, producers and importantly with people.



We currently have many challenges and wicked problems which include – food security, nutritional security, environmental security, climate security, water security, soil security, energy security, inequalities in access to resources, technologies, knowledge and many more. Our life style is generating lot of waste, using excessive inputs which is causing pollution, destroying biodiversity, degrading our natural resources and ecosystems. One-third of food produced is either wasted or lost. Our environment (soil, water and air) has many pollutants (e.g., carbon, particulates, poisonous gases, plastic, heavy metals) which is impacting health of humans, plants, animals (terrestrial and aquatic) and other organisms (both micro and macro). There has been significant and rapid increase in greenhouse gas emissions (e.g., carbon dioxide, methane, nitrous oxide, sulfur hexafluorides) resulting in climate change and climate variability. Global surface temperatures have been rising. These rapid changes in climate and extreme events are negatively impacting our agrifood systems, decreasing productivity of plants and animals, and harming human health and lifestyle. To meet the food, fiber and energy demands of growing human population we must focus on improving productivity, efficiency and sustainability. Increasing food productivity and positive environmental outcomes are not mutually exclusive – they can be achieved simultaneously if we emphasize on systems thinking and holistic approaches. We have few such for examples: sustainable agricultural intensification (focused on increasing productivity from existing farmland while regenerating natural resources); broader one-health (focused on combined health of soils, plants, animals, humans and ecosystems); and circular bioeconomy systems (focused on zero waste, recycling and value added products). In addition, we also have many innovations (both biophysical and social) for green growth, sustainability, decreasing pollution, adaptation and mitigation strategies to increase resilience to climate change, other abiotic and biotic stresses. This conference will not only highlight many of these critical and important issues, but more importantly focus and highlight solutions that are productive, economical profitable, environmental sustainable, and socially acceptable.

I want to thank the organizers for their vision and forward thinking in continuing this conference series in collaboration and partnership with local, regional, national and international organizations. I am sure that it will be an excellent event and the deliberations will produce clear outputs, outcomes, recommendations, and solutions that will be valuable to all participants.

I wish you all of you a pleasant and enjoyable stay in the beautiful city of Lucknow and experience the kind hospitality, culture, art and cuisine of India (Bharat).

Sincerely,



P.V. Vara Prasad
University Distinguished Professor, R.O. Kruse Endowed Professor and Director
Department of Agronomy, Kansas State University, Manhattan, Kansas, USA
President, Council for Agricultural Science and Technology
Former Director, Feed the Future Sustainable Intensification Innovation Lab
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Dr. Biswajeet Pradhan

*(SMIEEE; Alexander von Humboldt Fellow)
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University of Technology Sydney
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**Message**

It is my pleasure to extend warm greetings to the International Society of Environmental Botanists (ISEB) and CSIR-National Botanical Research Institute (CSIR-NBRI) on the occasion of the Seventh International Conference on Plants and Environmental Pollution (ICPEP-7).

As environmental pollution continues to exert multifaceted pressures on vegetation and ecosystems, integrating geospatial intelligence with environmental botany has become increasingly vital. Advanced spatial analytics, satellite observations and AI-driven modelling now enable us to assess plant vulnerability, understand stress dynamics and evaluate ecosystem resilience with greater clarity than ever before. These insights are essential for strengthening environmental monitoring and informing sustainable management strategies.

I am confident that ICPEP-7 will foster insightful discussions, inspire meaningful collaborations and contribute significantly to global efforts aimed at protecting our natural systems.

My best wishes for the grand success of the conference.

Biswajeet Pradhan



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Lucknow: The City of Culture

Lucknow, the capital and largest city of Uttar Pradesh, is the administrative heart of the state and a vibrant metropolis of more than four million people. Once the seat of the Nawabs of Awadh, the city evolved as a major cultural and artistic hub of North India and continues to be a centre of governance, education, commerce and innovation.

For generations, the very name of Lucknow evoked images of nawabs in their magnificent courts, elegant courtiers and courtesans, leisurely games of chess, kabootar-, batar- and patang-bazi, the fragrance of itra and perfumes, refined manners and warm hospitality. The city's legendary kebabs, biryani and elaborate Awadhi cuisine, its ghazals, mehfil and mushairas, and its sophisticated social etiquette together created the unique "Lakhnawi tehzeeb".

Architecturally, Lucknow presents a fascinating blend of Mughal, Persian, European and Indo-Saracenic styles. Imambaras, mosques, enclosed gardens, baradaris and palaces dot the historic core. While the University of Lucknow reflects European influences, Indo-Saracenic architecture is prominently seen in the Vidhan Bhavan and Charbagh Railway Station. Built largely with brick and lime mortar during roughly a century of Nawabi rule, these monuments have withstood time with remarkable grace.

Lucknow today stands as a vibrant bridge between its Nawabi past and a rapidly modernising present, where heritage and innovation coexist in everyday life. The city's festivals, literary gatherings, theatre performances and classical music concerts keep alive traditions of *mehfil*, *nazakat* and *tehzeeb* while welcoming contemporary forms of expression. From historic *imambaras* and colonial boulevards to new cultural centres, art galleries and cafés, every corner of the city offers a reminder that culture here is not just preserved but continuously reimagined. In this sense, Lucknow is less a museum of the past and more a living, breathing classroom of India's composite cultural identity.

The Hussainabad Clock Tower



Shaheed Smarak



Rumi Darwaza

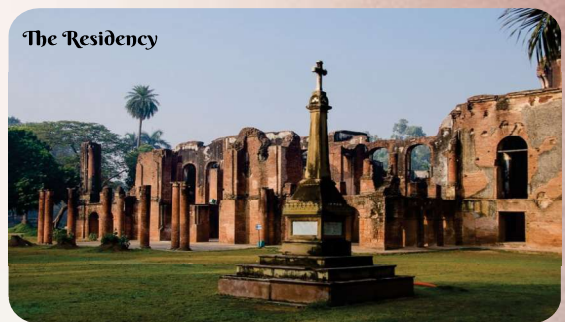


Heritage Landmarks of Lucknow

Most of Lucknow's iconic monuments were constructed during the Nawabi era, roughly within a hundred years. Built mainly in brick and mortar, they showcase the imagination of architects who created a skyline that still defines the city.

Major Heritage Sites

- *Bara Imambara*: A monumental complex with the famed Bhool-Bhulaiya labyrinth and a vast central hall built without beams.
- *Rumi Darwaza*: The grand ceremonial gateway that has become the signature symbol of Lucknow.
- *Chattar Manzil*: A riverside palace with distinctive umbrella-shaped domes reflecting Nawabi opulence.
- *Chhota (Hussaini) Imambara*: A beautifully ornamented Imambara known for its intricate interiors and chandeliers.
- *Hussainabad Picture Gallery & Clock Tower*: Heritage ensemble overlooking a large tank, with one of India's tallest clock towers.
- *The Residency*: Evocative ruins that witnessed the Revolt of 1857 and stand today as a poignant memorial.
- *Shaheed Smarak*: A graceful memorial on the Gomti riverfront honouring freedom fighters.
- *Shah Najaf Imambara*: A serene shrine modelled on the tomb of Hazrat Ali at Najaf.
- *La Martiniere College*: A unique fusion of palace and school, among the most iconic educational buildings in India.
- *Vidhan Bhavan (Council House)*: The imposing seat of the Uttar Pradesh Legislature in Indo-Saracenic style.
- *Charbagh Railway Station*: A palatial railway terminus whose arches and domes welcome travellers to the city.
- *Sikandar Bagh*: Once a royal garden and a key site of 1857, now integrated with the lush CSIR-NBRI campus.



Parks, Gardens & Green Retreats

Beyond its monuments, Lucknow is distinguished by its generous green spaces—parks, memorials and reserve forests that provide breathing spaces for residents and habitats for urban biodiversity.

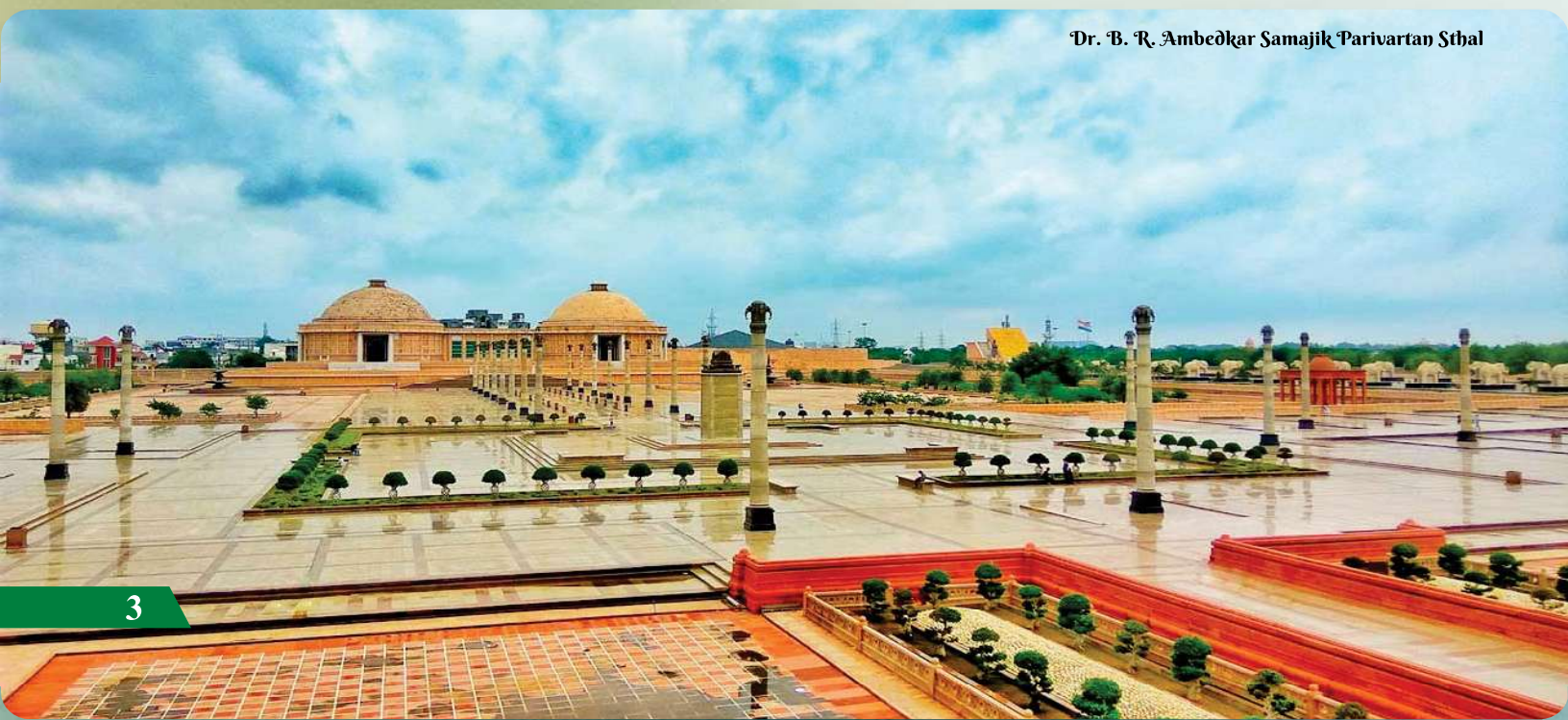
- **Dr. B. R. Ambedkar Samajik Parivartan Sthal** – A vast sandstone complex of domes, pillars and open plazas, symbolising social transformation and justice.
- **Dr. Ram Manohar Lohia Park** – A popular recreational park with lawns, fountains and walking tracks dedicated to the socialist leader.
- **Janeshwar Mishra Park** – Spread over about 376 acres, this modern eco-friendly park features lakes, a green belt, cycling and jogging tracks and landscaped gardens, making it one of Asia's largest urban parks.
- **Kukrail Reserve Forest** – A green oasis on the city's edge, known for its crocodile and gharial conservation centre, shady walking trails and rich birdlife.
- **Other Green Spaces** – Lohia Park, neighbourhood gardens and the Gomti Riverfront together enhance the city's urban ecology and quality of life.



Together, these landscapes serve as vital green lungs for the city, offering spaces for recreation, quiet reflection and community gatherings across seasons. They also help to moderate the urban microclimate, support groundwater recharge and provide refuges for birds, butterflies and other urban wildlife amid Lucknow's rapidly growing built-up areas. Morning walkers, joggers, children and senior citizens alike use these spaces for exercise, socialising and informal cultural events, which helps weave green spaces into the rhythms of daily urban life. Seasonal flower shows, plantation drives and awareness campaigns held in many of these parks nurture a sense of civic pride and environmental stewardship among citizens.



Dr. B. R. Ambedkar Samajik Parivartan Sthal



Cultural & Artistic Legacy

Arts, Culture and Nawabi Elegance

Lucknow has earned enduring fame as a cradle of fine arts, crafts and literature in both Urdu and Hindi. Its aesthetic sensibility and refined manners—*Lakhnawi tehzeeb*—are celebrated across India. Here, Indo-Persian courtly traditions blended with local folk creativity to give rise to a distinctive Ganga-Jamuni culture, in which music, poetry and everyday speech were suffused with grace and wit. The idiom of *adab* and *mehman-nawazi*—from the legendary “*pehle aap*” courtesy to the culture of addas, baithaks and mehfil—continues to shape social interactions in the city. Literary salons, mushairas and classical music gatherings still animate the older neighbourhoods, even as new cultural centres, theatres and festivals reinterpret Nawabi elegance for contemporary audiences. In this way, Lucknow remains a living museum of etiquette and aesthetics rather than a relic of the past.



Performing Arts

Lucknow is regarded as the home of the Lucknow gharana of Kathak, one of the principal classical dance forms of India and the only one rooted in North India. Legendary exponents such as Pandit Bindadin Maharaj, Kalka Prasad, Achhan Maharaj, Lachhu Maharaj, Kishan Maharaj and Pandit Birju Maharaj have nurtured and popularised this tradition. The city is also a major centre for Thumri, Dadra, Qawwali, Marsiya and Soz-Khwani, musical forms that flourished under royal patronage, especially during the reign of Nawab Wajid Ali Shah.

Crafts and Textiles

Lucknow's artisans are renowned for exquisite handwork:

- Chikankari – Delicate white-on-white embroidery that has become globally synonymous with Lucknow.
- Zardozi – Rich metallic embroidery used for royal and bridal attire.
- Other Textile Arts – Including batik painting and fine tailoring that continue to find markets worldwide.

These timeless crafts, often created in small *karkhanas* and by women artisans working from home, continue to sustain local livelihoods while carrying Lucknow's Nawabi elegance into national and global fashion markets.



Cuisine and Fragrance

The city's celebrated Awadhi cuisine—melt-in-the-mouth kebabs, aromatic biryani, nihari, sheermal, kulfi and a variety of breads and desserts—has shaped its reputation as a gastronomic capital (UNESCO Tag). The tradition of paan, especially the delicate gilori, and the craft of blending itra and perfumes add further layers to the sensory experience of Lucknow. The city's famed attar tradition i.e., delicate perfumes distilled from rose, jasmine, kewra and sandalwood, still wafts through old bazaar lanes and courtyards, lending an invisible yet lingering aura of Nawabi refinement to everyday life in Lucknow.

Education & Research

Lucknow has long been a cradle of learning and scientific excellence, nurturing institutions that command national and international respect.

Major Universities and Academic Institutions

- *University of Lucknow (1921)*: One of India's oldest universities, offering diverse disciplines in arts, science, commerce, law and management.
- *King George's Medical University (KGMU)*: Established as a medical college in 1911 and now a leading university-level centre for medical education, research and healthcare.
- *Dr. B. R. Ambedkar University*: A key state university expanding access to higher education.
- *Bhatkhande Sanskriti Vishwavidyalaya*: A unique university dedicated to classical music and performing arts.
- *Dr. Shakuntala Misra National Rehabilitation University*: Pioneering inclusive education and rehabilitation studies.
- *Indira Gandhi National Open University (IGNOU)*: Regional Centre – Providing open and distance learning opportunities to thousands.
- *Amity University, Lucknow Campus*: A modern multidisciplinary university emphasising innovation and industry linkage.

Premier Management Education

- *Indian Institute of Management Lucknow (IIM-L)*: Among India's top management schools, shaping business leaders and policymakers since 1984.



National Research and Specialised Institutes

- *CSIR–Central Drug Research Institute (CDRI)*: Advanced drug discovery and pharmaceutical research.
- *CSIR–Indian Institute of Toxicology Research (IITR)*: Environmental and industrial toxicology.
- *CSIR–National Botanical Research Institute (NBRI)*: Globally recognized for plant sciences, genetics, biotechnology and conservation.
- *CSIR–Central Institute of Medicinal and Aromatic Plants (CIMAP)*: Research on medicinal and aromatic plants.
- *Birbal Sahni Institute of Palaeosciences (BSIP)*: A global centre for palaeobotany and geosciences.
- *Indian Institute of Sugarcane Research (IISR)*: Centre of excellence in sugarcane research.
- *Central Institute for Subtropical Horticulture (CISH)*: Centre of excellence in horticulture.
- *National Bureau of Fish Genetic Resources (NBFGRI)*: Conservation of fish genetic diversity.
- *Sanjay Gandhi Postgraduate Institute of Medical Sciences (SGPGIMS)*: Super-speciality healthcare and medical research.
- *National Research Laboratory for Conservation of Cultural Property (NRLC)*: Conservation of art and heritage.
- *Railway Research, Design & Standards Organization (RDSO)*: Apex technical organisation of Indian Railways.



Modern Healthcare & Mobility

Modern Healthcare, Transport and Urban Transformation

Lucknow's growth into a modern metropolis is reflected in its expanding healthcare facilities and contemporary transport infrastructure.

Healthcare Hub

Alongside historic institutions like KGMU, the city is served by advanced hospitals such as Sanjay Gandhi Postgraduate Institute of Medical Sciences (SGPGIMS) and Dr Ram Manohar Lohia Institute, as well as several private super-speciality hospitals and medical colleges. Together, they make Lucknow a major regional centre for tertiary healthcare, research and medical education. In recent years, growing diagnostic facilities, specialised clinics and community health programmes have further strengthened access to affordable and quality care for people from Lucknow and neighbouring districts. Additionally, the expansion of telemedicine services and digital health platforms has improved continuity of care, enabling faster consultations and follow-up services for diverse patient needs. The city also attracts patients from across Uttar Pradesh and neighbouring states, thanks to its combination of specialised treatment facilities, medical colleges, and relatively affordable care supported by government health schemes.



Lucknow Metro – Moving the City

The Lucknow Metro stands as a symbol of the city's urban transformation. Inaugurated in 2017, it is one of India's fastest-executed metro projects, reflecting efficient planning, technological excellence and a commitment to sustainable mobility. Elevated tracks, modern stations and seamless connectivity have reduced travel time, eased congestion and provided residents with a clean, safe and reliable mode of transport.

Charbagh Railway Station



CSIR-National Botanical Research Institute

CSIR-National Botanical Research Institute (CSIR-NBRI) is a premier plant science research centre under the patronage of the Council of Scientific and Industrial Research (CSIR). The institute is renowned for its expertise in enriching the knowledge base on plant diversity in India, as well as its systematic documentation, conservation, and sustainable utilization through traditional and advanced biotechnological approaches. CSIR-NBRI has core competencies in plant biodiversity, biotechnology, bioinformatics, environmental science, ecotoxicology, bioremediation, and pharmaceutical research-based product development. The Institute's motto - *"Where plant-based research touches life through innovation"*, shows its commitment to promoting classical and cutting-edge research in the specialized fields of plant science for human welfare.



Equipped with state-of-the-art laboratories, botanic garden and strong national as well as international collaborations, CSIR-NBRI plays a pivotal role in translating plant-based discoveries into solutions for agriculture, industry and environmental sustainability. It also serves as an important training hub for students, research scholars and capacity-building programmes, nurturing the next generation of plant scientists and environmental stewards from across the country.



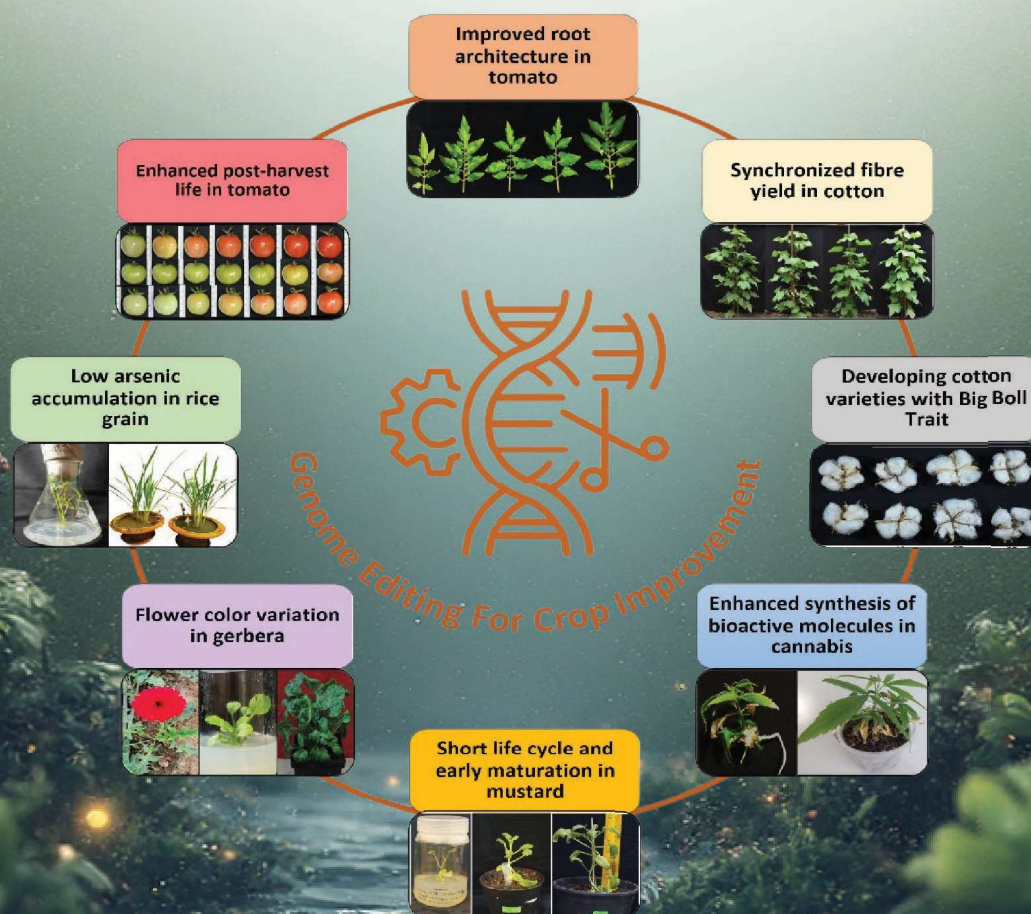
Historical background

CSIR-NBRI traces its roots to Lucknow's colonial and princely garden traditions, with its present campus located on the historic grounds of Sikandar Bagh and the former royal gardens of the Nawabs. The organisation began as the National Botanic Gardens and was integrated into CSIR in 1953; it evolved into the National Botanical Research Institute in the late 1978 to reflect its expanded research mandate. Over decades, the institute has grown from classical taxonomy and herbarium work into a multidisciplinary centre addressing floriculture breeding, plant genetic resources, conservation biology, climate change, and plant-based innovations.



Focused Research Areas and R&D Activities

The institute has various unique research areas that enable multidisciplinary research in the field of plant science. CSIR-NBRI holds the second-largest Herbarium in India, which houses more than 260,000 specimens of algae, bryophytes, pteridophytes, lichens, gymnosperms, and angiosperms. CSIR-NBRI herbarium has been designated as 'National Repository of Indian Flora' by the National Biodiversity Authority, Govt. of India. The herbarium offers services to the general public and researchers, including plant identification, authentication, and the preservation of voucher specimens for future reference. The institute also has expertise in the area of Herbal product research, with a focus on Pharmacognosy, Ethnopharmacology, and Phytochemistry for the development of herbal products and drugs. Novel drug delivery systems utilizing nanotechnology are also being explored to enhance the bioavailability and therapeutic efficacy of potential phytomolecules. The Plant Ecology, Climate Change, and Environmental Technologies Division has expertise in plant ecology, environmental sciences, physiology, and microbiology. Understanding changes at the genetic level in existing germplasm or cultivars through various approaches and utilizing the information generated to develop improved varieties can lead to an enhancement in yield, meeting the demand of an increasing population. To achieve these objectives, gene-mining, transgenic plant development, and genome-editing technologies are being applied to various crops. The broad research focus of the Plant Genetic Resources and Improvement division is to improve the genetic makeup of medicinal, underutilized, ornamental, and industrial crops (opium poppy, cannabis, winged bean, tree bean, chrysanthemum, linseed, guar, cotton, and guggul). The R&D activities of the Botanic Garden are primarily focused on germplasm collection and conservation of rare, endangered, and threatened species; development of new varieties and cultivars of floricultural crops; participation in Flower Shows and Exhibitions; and organization of training programs on various aspects of gardening.



Major Achievements and Success Stories

CSIR-NBRI continues to make impactful contributions through innovations in herbal healthcare, plant science, biotechnology, sustainable technologies, and conservation.

Healthcare segment:

- **URO 05-Anti-Urolithiasis Herbal Formulation:** Herbal formulation that markedly reduces kidney stones and urinary stone crystals, with lower dose than many existing remedies and clinical validation.
- **NBRMAP-DB - Anti-Diabetic Herbal Formulation:** Polyherbal anti-diabetic formulation with hypoglycaemic and DPP-4 inhibitory activity, validated in animal models and clinical trials for type-2 diabetes management.
- **Topical Herbal Anti Candida Gel:** Herbal topical gel for effective treatment of Candida infections (genital and mucosal) with strong antifungal and anti-inflammatory action.
- **Herbal Anti-Dandruff Hair Care Oil:** Herbal hair oil that controls dandruff by targeting causative microbes, reducing scalp inflammation and preventing recurrence.
- **Herbal Cough Syrup (NBICOF):** Five-herb cough syrup that relieves dry mouth, sore throat, cold-related cough, bronchial catarrh and throat allergies.
- **JOSH - Traditional Kadha:** Water-soluble Ayurvedic decoction of multiple anti-inflammatory, antioxidant herbs for immune support and respiratory wellness.
- **DENTOGEL - Toothache Relieving Gel:** Triple-medicated herbal hydrogel that provides fast relief from toothache with anti-inflammatory, analgesic and antimicrobial properties.
- **NITYA - Herbal Mask Stress Reducer:** Essential-oil based herbal mask spray that decongests nasal passages, eases breathing and reduces stress from prolonged mask use.



Food / Nutraceutical Segment:

- **CROMA-3 – Bioavailable Curcumin:** Gluten-free, highly bioavailable curcumin nutraceutical for managing chronic inflammation and oxidative stress without toxicity.
- **Nutri-Jam:** Nutrient-rich fruit jam fortified with bioactive plant ingredients to provide a healthier, antioxidant-rich spread.
- **Herbal Soft Drink (NBIRA SOF):** Herbal soft drink/sharbat that offers quick refreshment and energy using traditional cooling botanicals.
- **Amrit – Herbal Fermented Health Drink:** Naturally fermented herbal health drink providing probiotic-like benefits and general wellness support.
- **Amrita – Lotus Based Tea:** Lotus-based herbal tea blend developed as a soothing, antioxidant-rich functional beverage.



Agriculture Sector:

- **BT Cotton Technology:** Cotton technology/hybrids carrying Bt-based insect resistance for effective bollworm control and improved yield.
- **Whitefly Resistance Technology:** Crop improvement technology providing resistance to whitefly, helping reduce viral disease incidence and pesticide use.
- **Anacardic Acid Based Plant Growth Promotor:** Plant-derived anacardic-acid formulation used as a growth promotor to enhance plant vigour and productivity.
- **Microbial Bioinoculants:** Consortia of beneficial microorganisms used as biofertilizers to improve nutrient availability, soil health and crop yield.
- **NBRI-Flori Guard:** Formulation/technology for protecting ornamental plants from pests and diseases while improving flower quality and shelf/vase life.
- **Dehydration of Flowers, Foliage and Floral Craft:** Know-how for dehydrating flowers and foliage to produce long-lasting dried flowers and floral craft materials.
- **Plant Based Biofilms:** Biodegradable biofilm made from plant materials for use as eco-friendly packaging or coating.
- **Mandakini – High Yielding Opium Variety:** High-yielding opium poppy variety with desirable alkaloid profile for pharmaceutical applications.
- **Thebaine Rich Opium Poppy Lines:** Thebaine-rich opium poppy lines developed to efficiently produce thebaine-based pharmaceutical compounds (through Narcotics Dept.).
- **Low Arsenic Accumulating Rice Cultivar – CN1794-2-CSIR-NBRI:** Rice variety that accumulates less arsenic in grains, suitable for cultivation in arsenic-affected regions.
- **Agro-technology of Lotus ‘NBRI-Namoh 108’ cultivation:** Complete cultivation package for lotus variety ‘NBRI-NAMO 108’ with uniform, long-lasting flowers for ornamental and religious use.
- **Turmeric Variety for Northern India – Kesari:** High-yielding, low-temperature tolerant turmeric variety for North India, valued for essential oil content and pesticidal properties.
- **Arunima – Improved Variety of Bixa:** Early-ripening, high-bixin annatto (Bixa orellana) variety less prone to borer attack, offering a natural alternative to synthetic dye tartrazine.



NBRI-Namoh 108



Household Know-How:

- **Herbal Floor Cleaner and Disinfectant:** Non-toxic, biodegradable herbal floor cleaner that removes dirt and disinfects surfaces with plant-based antimicrobials.
- **Alcohol Based Herbal Hand Sanitizer (Liquid/Gel):** Isopropyl-alcohol based hand sanitizer enriched with herbal ingredients for rapid hand disinfection and skin comfort.
- **Herbal Dental Cream:** Herbal dental cream/toothpaste formulated from medicinal plants for maintaining oral hygiene and preventing common dental problems.
- **Zanthodent – Herbal Toothpaste:** Herbal toothpaste containing xanthone-rich plant extracts for plaque control, gum care and cavity protection.
- **Herbal Gulal:** Plant-based, non-toxic, fragrant colour powder for Holi and other festivals, safe for skin and the environment.
- **Herbal Gulal from Temple Used Flowers:** Eco-friendly herbal gulal produced by recycling flowers offered in temples, converting floral waste into safe festive colours.
- **Textile Colours from Temple Floral Waste:** Technology to extract natural textile dyes from discarded temple flowers, yielding vibrant, skin-friendly shades.
- **Shiv Bhabhut Technology:** Process for converting temple floral waste and sacred materials into eco-friendly 'bhabhoot' (holy ash) product.
- **Lotus Fibre-based Apparel:** Technology for extracting fine lotus fibre and producing soft, breathable, high-value textiles and garments.



Cosmeceutics Segment:

- **Herbal Colours:** Herbal colours made from fragrant medicinal plants, designed as safe, non-allergic, antioxidant-rich alternatives to synthetic cosmetic dyes.
- **Herbal Liquid Sindoor:** Heavy-metal-free liquid sindoor using plant-based pigments for safe, long-lasting cosmetic application on the forehead.
- **Herbal Nanoserum:** Nano-emulsion based herbal skin serum with tiny droplets of sandalwood and other oils for deep nourishment and enhanced delivery of actives.
- **FROTUS Kumbh:** Long-lasting perfume inspired by Mahakumbh sacred water and botanicals, providing a subtle spiritual fragrance.
- **FROTUS Fresh (Air Freshener):** Spray air freshener with a blend of pine, citrus, floral, camphor and musk notes that quickly neutralizes odours and freshens indoor air.
- **Lotus Based Perfume (FROTUS):** Lotus-based aquatic floral perfume offering a fresh, water-like long-lasting fragrance.
- **FROTUS Rudra (Eau de Parfum):** Divine-essence perfume blending Rudraksha, Mahakumbh water, tulsi and bel oils, evolving from sweet citrusy top notes to a pink-vanilla heart and woody base.

Conservation, Garden Science & Recent Landmark Developments:

- CSIR-NBRI's Botanic Garden continues to serve as a national hub for the conservation of rare and endangered plant species.
- Established the unique 'Touch and Smell Garden' equipped with Audio and Braille systems for persons with disabilities.
- Developed the iconic Lotus Garden designed in the shape of a Swastik, symbolizing harmony, prosperity, cultural heritage, and scientific landscaping excellence. This innovative thematic garden has become a prominent attraction, showcasing NBRI's leadership in landscape design, aesthetic horticulture, and plant diversity conservation.



About ISEB

The International Society of Environmental Botanists (ISEB) is a distinguished scientific organization committed to advancing knowledge at the nexus of plant sciences and environmental stewardship. Since its inception, the Society has worked tirelessly to foster interdisciplinary research, enhance scientific understanding, and promote global collaboration in addressing the multifaceted environmental challenges confronting humanity.

The Society is based on the campus of the CSIR-National Botanical Research Institute, Lucknow, which is a premier plant science research institute of the country under the aegis of the Council of Scientific & Industrial Research, New Delhi. Dr. Ajit K. Shasany, Director CSIR-NBRI, is the President of ISEB. Starting with 28 founder members, ISEB now has over 750 members from all corners of the globe.

ISEB's primary mandate is to encourage and disseminate research on plant responses to environmental stresses, phytoremediation, climate change impacts, ecosystem sustainability, and other emerging domains of environmental biology. Through its comprehensive scientific activities—including international conferences, specialized symposia, thematic workshops, and expert lectures—the Society provides an esteemed platform for the exchange of cutting-edge research findings and the development of collaborative networks. The Society's flagship event, the International Conference on Plants and Environmental Pollution (ICPEP), is widely recognized for bringing together leading scientists, policy planners, and young researchers from across the globe.

Six International Conferences on Plants and Environmental Pollution (ICPEP) were jointly organized by the International Society of Environmental Botanists (ISEB) and CSIR-National Botanical Research Institute during 1996, 2002, 2005, 2010, 2015, and 2018 in Lucknow, India. Delegates from the following countries attended these highly prestigious international conferences: Argentina, Australia, Azerbaijan, Bangladesh, Botswana, Brazil, Canada, Chile, China, Denmark, Egypt, Estonia, Finland, France, Germany, Greece, Hungary, India, Indonesia, Iran, Israel, Italy, Japan, Lithuania, Malaysia, Mauritius, Mexico, Nepal, Nigeria, Pakistan, Philippines, Poland, Russia, Slovakia, South Africa, Spain, Sri Lanka, Sweden, Taiwan, Thailand, the Netherlands, UK, Ukraine, U.S.A., Uzbekistan and Venezuela.



CSIR-National Botanical Research Institute, Lucknow

Welcomes

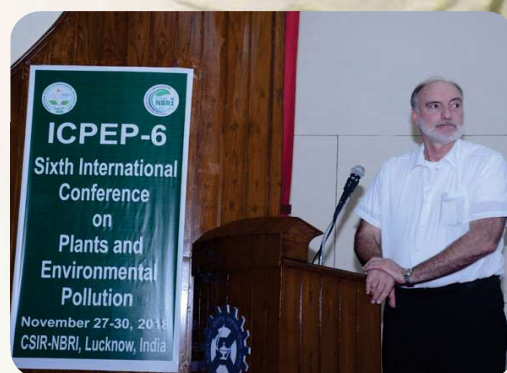
Shri Ram Naik,
Hon'ble Governor, Uttar Pradesh



to
6th International Conference on Plants and Environmental Pollution (ICPEP-6)



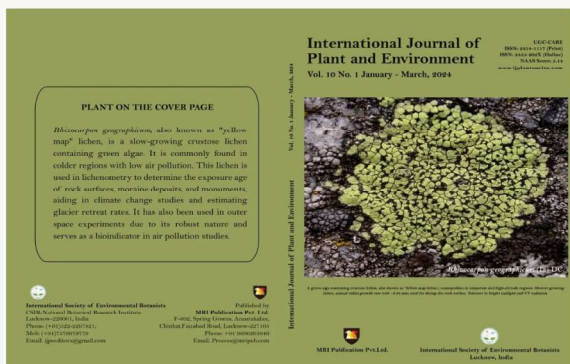
Leading international organizations like UNESCO, UNEP, TWAS, IUBS, COSTED, NAM S&T Centre, Indo-US Science & Technology Forum, AusAID, (Australian Government Overseas Aid Program), Murdoch University, Australia and several Government of India Ministries and Departments like CSIR, DST, MoEF&CC, DBT, Ministry of Non-Conventional Energy Sources, Ministry of Earth Sciences, and organizations like Indian National Science Academy, New Delhi, U.P. Council of Science & Technology, Lucknow, NABARD, Monsanto, State Bank of India had sponsored some of these conferences.



To bring the latest and complex scientific reports and research on environmental and plant sciences to the reach of non-specialists, ISEB has been publishing a quarterly newsletter, *Environews*, since 1995. This highly popular news magazine has a global reach.



To herald the new millennium, a special millennium issue was released on 1st January 2000. This issue, which featured highly informative articles by some well-known environmental scientists from around the globe, was widely appreciated and has become a collector's item. A Belarusian scientist has been granted permission to regularly translate *Environews* into Belarusian, benefiting scientists in that country.



International Journal of Plant and Environment (IJPE) is an official organ of the International Society of Environmental Botanists (ISEB). It is an inclusive, peer-reviewed, interdisciplinary journal aimed at advancing the interaction between plant and environmental science for the betterment of all stakeholders in society, present and future. IJPE was founded by a team of botanists and environmental scientists to accelerate scientific advancement and establish its value. We publish research in environmental botany and allied fields to benefit the scientific community, academicians, and policymakers.

IJPE welcomes high-quality submissions on all aspects of environmental contamination and air, water, and land; bioremediation strategies for pollutants; bioindication; ecosystem dynamics and forest degradation; environment and biodiversity conservation; sustainable agriculture; and global change impacts on plants. Responses of plants to abiotic stresses (salinity, heavy metals, drought, temperature stress, flooding, etc.) and biotic stress (plant insect, plant-microbe interaction, etc.), plant environmental interaction at the morphology, physiology, and molecular levels. Submitted manuscripts are evaluated against high ethical and scholarly standards, as well as perceived novelty. IJPE intends publication under the following categories: original communications, research updates/mini-reviews, and commentaries. The original research articles, mini-reviews/ research updates shall not exceed 10 printed pages. Articles published under the short communication category are expected to contain path-breaking research that requires urgent publication.

With a view to promoting its objectives, ISEB had, from the very beginning, decided to target its activities towards all sections of society, including illiterate masses and ordinary people in rural and urban areas, students in educational institutions from primary school level to university level, and scientists and research workers in universities and national laboratories.

During the past twenty-four years, ISEB has organized a broad spectrum of activities, including a large number of environmental awareness, educational, and training programmes, lectures, demonstrations, slide and film shows, art and poster competitions, debates at rural community centers, panchayats, schools, colleges, government offices, etc. Scientific talks, popular lectures, radio and TV talks by eminent scientists and experts in various disciplines were organized at regular intervals. Each year, World Environment Day is celebrated on 5th June with great enthusiasm. ISEB maintains a highly informative and educational website which has become popular all over the world. Over the past three years, it has been visited by more than 40,000 individuals from 131 countries worldwide.

ISEB also confers the ISEB Fellowship and ISEB Young Scientist Medals to recognize scientists and young researchers who have made significant research contributions in Ecology and Environmental Science.



Detailed technical reports and recommendations of the previous Conferences (ICPEP-1 to ICPEP-6) were forwarded to relevant International agencies, academic institutions, and organizations (both government and non-government) for their perusal and implementation. These can also be accessed from the ISEB website: <http://isebindia.in>.

ISEB, in collaboration with CSIR-NBRI, is organizing the Seventh International Conference on Plants and Environmental Pollution (ICPEP-7) from 30 November to 2 December 2025 at CSIR-NBRI. This Conference aims to bring together leading researchers, academicians, environmentalists, policymakers, and industry professionals to discuss the impacts of pollution on plants and ecosystems and explore sustainable solutions for environmental conservation.

An International Advisory Committee comprising some of the most renowned and highly distinguished environmental and plant scientists has been constituted to guide and advise us in planning and organizing this Conference. In December 2025, ISEB will complete 31 years of its high-profile existence, during which it has made an enormous contribution and crossed several milestones of success. ISEB extends a very warm welcome to all distinguished guests and delegates to ICPEP-7.

With its unwavering commitment to scientific rigor, international cooperation, and societal relevance, the International Society of Environmental Botanists continues to be a respected and influential body that contributes meaningfully to global efforts toward environmental sustainability and ecological well-being.



मण्डी परिषद द्वारा संचालित कल्याणकारी योजनाएँ

मण्डी परिषद द्वारा मण्डी समितियों के अध्यक्ष से किसान मण्डियों एवं तारिफेंली व्यापारियों/अवस्थितियों के हितार्थ कल्याणकारी योजनाएँ चलायी जाती रही हैं, जो इस प्रकार हैं:-

1. मुख्यमंत्री कृषक दुर्घटना सहायता योजना

इस योजना का कार्यक्षेत्र समस्त उत्तर प्रदेश होगा। उत्तर प्रदेश के समस्त कृषक, खातिर मजदूर एवं मण्डी समिति से लाईसेंस प्राप्त फलेदार, तौलक/मापक जो केवल कृषि अथवा कृषि से सम्बन्धित कार्य में सलग्न हों, इस योजना के अन्तर्गत आकावेष्टित होंगे। इस योजना के अन्तर्गत दुर्घटनाओं द्वारा मृत्यु अथवा शारीरिक क्षति हुई हो, तो निम्न विवरणिका में उल्लिखित सहायता दिये जाने का प्रावधान है:-

क्रमांक	दुर्घटना का प्रकार	देय सहायता वनराशि
1	दुर्घटना द्वारा मृत्यु होने पर	₹ 3,00,000.00
2	दुर्घटना द्वारा दोनों पैर दोनों हाथ या दोनों आँखें या उपरोक्त में से कोई दो की क्षति होने पर	₹ 75,000.00
3	दुर्घटना द्वारा एक हाथ, एक पैर अथवा एक आँख की क्षति होने पर	₹ 40,000.00
4	दुर्घटना द्वारा एक हाथ की एक साथ चार अंगुलियों की क्षति होने पर	₹ 30,000.00
5	दुर्घटना द्वारा एक हाथ की एक साथ तीन अंगुली की क्षति होने पर	₹ 25,000.00
6	अंगूठे की क्षति होने पर	₹ 20,000.00
7	दुर्घटना द्वारा एक हाथ की दो अंगुलियों की क्षति होने पर	₹ 15,000.00
8	किसी एक अंगुली की क्षति होने पर	₹ 5,000.00

2- मुख्यमंत्री खेत-खलिहान अग्निकाण्ड दुर्घटना सहायता योजना

इस योजना का कार्यक्षेत्र सम्पूर्ण उत्तर प्रदेश होगा। इस योजना में उत्तर प्रदेश शासन द्वारा अधिव्यक्ति समस्त मण्डी समितियों के सैकन्दर्गत खलिहान से एकत्रित फसल एवं क्षेत्र में कड़ी फसल में अग्नि दुर्घटना में हुई क्षति हेतु नीचे दिये गये विवरण के आधार पर सहायता दिये जाने का प्रावधान है:-

क्रमांक	अग्निकाण्ड में क्षतिग्रस्त फसल/खेतफल	देय सहायता धनराशि
(अ)	एक हेक्टेयर अर्थात् 2.5 एकड़ तक क्षतिग्रस्त होने की दशा में	अधिकतम ₹ 30,000/- अथवा वास्तविक अंकलित क्षति जो भी कम हो।
(ब)	एक हेक्टेयर से 2 हेक्टेयर अर्थात् 2.5 एकड़ से 5 एकड़ तक क्षतिग्रस्त होने की दशा में	अधिकतम ₹ 40,000/- अथवा वास्तविक अंकलित क्षति जो भी कम हो।
(स)	2 हेक्टेयर या 5 एकड़ से अधिक क्षतिग्रस्त होने की दशा में	अधिकतम ₹ 50,000/- अथवा वास्तविक अंकलित क्षति जो भी कम हो।

3. मुख्यमंत्री कृषक उपहार योजना

इस योजना के अन्तर्गत कृषक उपहारों को सहायता बढ़ाये जाने के लिए नीचे दी गयी स्थलों में कृषि उपज का विक्रय करने की दशा में प्रत्येक पत्नी एवं प्रत्येक संख्या-6 के आधार पर कृषकों को ₹ 5,000/- मूल्य पर इनामी कुपन निर्गत कर त्रैमासिक एवं छ-माही द्वारा निम्नवत् उपहार दिये जाने की व्यवस्था लागू है:-

त्रैमासिक द्वा :-

उपहार	उपहार की वस्तु	प्रत्येक सम्भाग में उपहारों की संख्या
प्रथम	प्रथम एवं दुर्धन केमस में खनिज सेंट (8 हासलदार किलोस्कर इन्जन)	दो
द्वितीय	द्वितीय एवं दुर्धन केमस में रोटाटोर	दो
तृतीय	हेपी सीडर	तीन
चतुर्थ	पावर टोवर	तीन
	मिक्सर ग्राइंडर	तीन

छ-माही बम्पर द्वा -

उपहार	उपहार की वस्तु	प्रत्येक सम्भाग में उपहारों की संख्या
प्रथम	ट्रेक्टर 30 हार्त पावर प्रथम छ-माही में पावर ट्रेक्टर (सीट-युक्त 900 सीएमपी) (11केबी/11.7 एच पी)	दो
द्वितीय	द्वितीय छ-माही में राइड स्ट्रिकर	दो
तृतीय	प्रथम छ-माही में पावर/बोपर	तीन
चतुर्थ	द्वितीय छ-माही में पावर ट्रेक्टर/सीट (4.00 हासलदार सीटल इन्जन क्षमिता)	तीन
	मिक्सर पावर पैक सर्वत्र	दस

4. मुख्यमंत्री कृषक छात्रवृत्ति योजना

उत्तर प्रदेश में सरकारी एवं सरकारी सहायता प्राप्त कृषि विश्वविद्यालयों, कृषि संस्थानों एवं कृषि महाविद्यालयों में अध्ययनरत कृषि/होम साइंस स्नातक एवं स्नातकोत्तर में अध्ययनरत छात्र व छात्राओं को मण्डी परिषद द्वारा छात्रवृत्तियाँ दिये जाने की व्यवस्था है। छात्रवृत्ति की धनराशि एवं योजना की शर्त एवं निम्न निम्नवत् है:-

क्रमांक	विद्यार्थी संस्था का नाम	पाठ्यक्रम स्तर	छात्र/ छात्राओं की संख्या	छात्रवृत्ति की दर (₹ 0 प्रतिमाह)
1	कृषि विश्वविद्यालय एवं कृषि संस्थान	कृषि स्नातक	25	₹ 3000/-
		होम साइंस स्नातक	08	₹ 3000/-
		कृषि स्नातकोत्तर	10	₹ 3000/-
		होम साइंस स्नातकोत्तर	04	₹ 3000/-
2	कृषि महाविद्यालय	कृषि स्नातक	10	₹ 3000/-
		कृषि स्नातकोत्तर	05	₹ 3000/-

5. मुख्यमंत्री कृषि उत्पादन मण्डी समिति के व्यापारी एवं आदमी दुर्घटना सहायता योजना

उक्त योजना-अन्तर्गत मण्डी समिति से लाईसेंस प्राप्त किसी व्यापारी एवं आदमी की निर्मित मण्डी स्थल/उपमण्डी स्थल परिसर में निर्दिष्ट कृषि उत्पादों का व्यापारिक कार्य करते समय बर्तन हस्तिक एवं दुर्घटना कारणों से मृत्यु होने पर उक्त विधिक उत्तराधिकारी को आर्थिक सहायता के रूप में सहायता राशि ₹ 3.00 लाख (तीन लाख) दिये जाने की व्यवस्था की गयी है।

6. मुख्यमंत्री मण्डी स्थल/उप मण्डी स्थल अग्निकाण्ड दुर्घटना सहायता योजना

इस योजना-अन्तर्गत मण्डी स्थल एवं उप मण्डी स्थल के परिसरों में कार्यरत ऐसे लाईसेंस प्राप्त व्यापारियों एवं आदमियों, जिन्हें मण्डी समिति में दुर्जन अथवा स्थान अर्जित किया गया है, मण्डी स्थल एवं उपमण्डी स्थल के परिसर में वास्तविक कारणों अथवा तद्विना (लाइटनिंग) प्राकृतिक बिजली गिरने से अग्निकाण्ड दुर्घटना होने पर व्यापारियों एवं आदमियों को वास्तविक क्षति बराबर क्षति ₹ 2.00 लाख (दो लाख) जो भी कम हो, आर्थिक सहायता के रूप में दिये जाने की व्यवस्था की गई है।

7. मूल्य संवर्धन को प्रोत्साहित करने हेतु किसानों एवं व्यापारियों हेतु योजना

पावर हाईड्रॉ लीसेज को खून करने तथा इसके द्वारा किसानों की आय में वृद्धि के लिए मण्डी समिति द्वारा निशुल्क वार्षिक वार्षिक कटौत/वार्शिक ईट उपलब्ध करने की योजना पर निम्नानुसार मानकों के साथ कार्यवाही की जा रही है।

(1) वार्षिक कटौत का वितरण

विगत तीन वर्षों में मण्डी में सबसे अधिक मूल्य योग के फल-सब्जी (आलू, प्याज व सहसुन को छोड़कर) लाने वाले किसान से आरम्भ कर घटते क्रम में प्रत्येक किसान को 04 कटौत निशुल्क उपलब्ध कराया जायेगा। मण्डी समिति द्वारा किसानों की संख्या का कोटा वार्षिक निर्धारित होगा।

क्र	विवरण	किसान	प्रति नग	कुल कट
1	"क" विशिष्ट श्रेणी की मण्डी में	500	04	2000
2	"ख" श्रेणी की मण्डी में	250	04	1000
3	"ग" श्रेणी की मण्डी में	200	04	800
4	"घ" श्रेणी की मण्डी में	150	04	600

(2) वार्षिक शीट का वितरण

विगत से पूर्व तीन वर्षों में अधिक मूल्य योग के निर्दिष्ट कृषि उत्पाद लाने वाले व्यापारी से आरम्भ कर घटते क्रम में मण्डी समिति द्वारा की संख्या निर्धारित होगी।

क्र	विवरण	व्यापारी	प्रति नग	कुल वार्षिक शीट
1	"क" विशिष्ट श्रेणी की मण्डी में	100	04	400
2	"ख" श्रेणी की मण्डी में	80	04	320
3	"ग" श्रेणी की मण्डी में	60	04	240
4	"घ" श्रेणी की मण्डी में	40	04	160

नोट:- योजनाओं में लाभ लेने हेतु विशेष जानकारी प्राप्त करें अपने अधिकारी से

A constituent multidisciplinary research laboratory under CSIR, dedicating for Industrial development and societal upliftment of NER India by nurturing basic and applied research for developing technologies with sustainable development goals to improve quality of life in the region.

64 celebrating
years of
glorious
existence

Some Major Technology Recipients & Collaborators

- M/s Kudos Laboratories, New Delhi
- M/s Acinom Aromatics Pvt.Ltd, Guwahati
- M/s Mphinite Solutions Pvt.Ltd, Bangalore
- Sigma Aldrich Co., LLC, USA
- Eco Friendly Foundation, Gultekadi, Pune
- Oil India Limited, Duliajan, Assam
- Numaligarh Refinery Ltd, Golaghat, Assam
- Assam Petrochemical Limited, Namrup, Assam
- Arunachal Pradesh State Council for S & T

More than 70 ongoing research projects

CSIR-Aroma Mission, CSIR-Floriculture Mission, Millets Mission, Agro-mission, API Mission, CSIR-Safe and Sustainable Climate Resilient Building for India etc.

Major Testing and Analytical Facilities Available

- 500 MHz NMR, GC-MS, LCMS, FTIR, CHN & Sulphur Analyser
- Confocal Microscope
- Ion Chromatography System
- Fluorescence Activated Cell Sorter & Flow Cytometre
- Universal Testing Machine
- High Pressure Reactor
- Ultra High Performance Liquid Chromatography
- X-Ray Photoelectron Spectrometer
- High Resolution Mass Spectrometer (HRMS)
- Thermal Analyser for DTA, TGA & DSC
- Atomic Emission Spectrophotometer (ICP-AES)
- High Resolution Transmission Electron Microscope
- Scanning Electron Microscope
- Isotope Ratio Mass Spectrometer (IRMS)
- Nuclear Magnetic Resonance (NMR)

PhD programmes for Research Scholars

- Skill Development under CSIR Interagted Skill Facilities
- Testing and Analytical Services
- CSIR-Jigyasa: Student-Scientists Connect Programme

NEIST making Impact in NER through

- Basic, exploratory, and applied research
- Survey, exploration & utilization of medicinal, aromatic and spice plants, social microbes, minerals etc.
- Seismicity Studies
- MSME Scale Technologies



More than 130 Technologies Developed



सीएसआईआर-भारतीय विषविज्ञान अनुसंधान संस्थान CSIR-INDIAN INSTITUTE OF TOXICOLOGY RESEARCH



“सामूहिक सफलता में ही प्रत्येक व्यक्ति की सफलता निहित है।”
“Until all of us have succeeded, none of us have”



अनुसंधान एवं विकास प्रभाग

- खाद्य, औषधि, पर्यावरण और प्रणाली विषविज्ञान (FEST)
- विश्लेषणात्मक विज्ञान, सेवाएं और तकनीकी समाधान के माध्यम से औद्योगिक सहायता (ASSIST)
- विनियामक और कम्प्यूटेशनल विषविज्ञान (ReaCT)

अनुसंधान क्षेत्र

- खाद्य, औषधि और रासायनिक विषविज्ञान
- पर्यावरण विषविज्ञान
- नियामक विषविज्ञान
- टॉक्सिकोइफॉर्मेटिक्स एवं औद्योगिक अनुसंधान
- प्रणाली विषविज्ञान एवं स्वास्थ्य आपदा मूल्यांकन

उद्योग और स्टार्टअप के लिए आर एंड डी साझेदारी

- सेंटर फॉर इनोवेशन एंड ट्रांसनैशनल रिसर्च (सितार-बाइरेक-बायोनेस्ट)
- डीएसआईआर-आईआईटीआर-सीआरटीडीएच पर्यावरण निगरानी और हस्तक्षेप हब

सेवाएं दी गईं

- जीएलपी प्रमाणित पूर्व-नैदानिक विषाक्तता अध्ययन
- एनएबीएल (आईएसओ/आईसी 17025:2017) मान्यता प्राप्त एनसीई की सुरक्षा/विषाक्तता मूल्यांकन
- जल गुणवत्ता मूल्यांकन और निगरानी
- विश्लेषणात्मक सेवाएं
- पर्यावरण निगरानी और प्रभाव मूल्यांकन
- रसायनों/उत्पादों के बारे में जानकारी
- कम्प्यूटेशनल भविष्य कहनेवाला विषाक्तता मूल्यांकन

मान्यताएं

- वैज्ञानिक और औद्योगिक अनुसंधान संगठन (एसआईआरओ)
- यूपी प्रदूषण नियंत्रण बोर्ड (जल और वायु)
- भारतीय कारखाना अधिनियम (पीने का पानी)
- भारतीय मानक ब्यूरो (सिंथेटिक डिटर्जेंट)
- भारतीय खाद्य सुरक्षा और मानक प्राधिकरण (FSSAI)

विकसित/उपलब्ध प्रौद्योगिकियां

- ओनीर- सुरक्षित पेयजल के लिए एक नया समाधान
- पोर्टेबल जल विश्लेषण किट
- पर्यावरण और मानव स्वास्थ्य के लिए मोबाइल प्रयोगशाला
- सरसों के तेल में आर्जिमोन की त्वरित जांच के लिए एओ किट
- मक्खन गीले रंग का पता लगाने के लिए एमओ जांच, एक मिलावटी, खाद्य तेलों में

R & D Divisions

- Food, Drug, Environment & Systems Toxicology (FEST)
- Analytical Sciences & Services and Industrial Support through Technological Solutions (ASSIST)
- Regulatory and Computational Toxicology (ReaCT)

Research Areas

- Food, Drug & Chemical Toxicology
- Environmental Toxicology
- Regulatory Toxicology
- Toxicoinformatics & Industrial Research
- Systems Toxicology & Health Risk Assessment

R & D Partnership for Industries & Startup

- Centre for Innovation and Transnational Research (CITAR-BIRAC-BioNEST)
- DSIR-IITR-CRTDH Environmental Monitoring and Intervention Hub

Services Offered

- GLP certified pre-clinical toxicity studies
- NABL (ISO/IEC 17025:2017) accredited Safety/ toxicity evaluation of NCEs
- Water quality assessment and monitoring
- Analytical services
- Environmental monitoring and impact assessment
- Information on chemicals/ products
- Computational predictive toxicity assessment

Recognitions

- Scientific & Industrial Research Organizations (SIROs)
- UP Pollution Control Board (Water & Air)
- Indian Factories Act (Drinking water)
- Bureau of Indian Standards (Synthetic detergents)
- Food Safety & Standards Authority of India (FSSAI)

Technologies Developed/ Available

- Oneer- A novel solution for safe drinking water
- Portable Water Analysis Kit
- Mobile Laboratory for environment and human health
- AO Kit for rapid screening of Argemone in mustard oil
- MO Check for detection of Butter Yellow, an adulterant, in edible oils



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director@iitrindia.org www.iitr.res.in

75 Years of Excellence in Food Science & Technology Research



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- Centre for excellence in molecular nutrition and millet research
- Doctoral, Post-Doctoral, M.Sc. (Food Technology) and Certificate Course in Milling Technology
- PMFME-Common Incubation Facility for coffee and banana processing
- Nutrephyto Incubation Centre to boost entrepreneurship
- BioNEST – Bioincubator provide cutting edge access to the best bio-incubation environment and mentorship



CSIR- CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE
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Website : www.cftri.res.in



TECHNOLOGIES AVAILABLE



Radiation
shielding tiles



Raman
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HP Composites



Radiation
Shielding
Panels



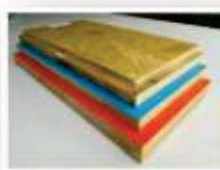
Bamboo
Composites



Al Foam
Casting



Al Foam Core
Sandwich
Panel



Parali
Evergreen
Hybrid Wood



Water filters
for Arsenic &
Fluoride



Hypochlorite
Generator

MAJOR R&D AREAS

- ❖ LIGHTWEIGHT MATERIALS & COMPOSITES
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- ❖ ENVIRONMENTAL STUDIES
- ❖ GRAPHENE APPLICATIONS
- ❖ MICROPLASTIC STUDIES

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Website: www.ampri.res.in

14 अप्रैल, 1960 को स्थापित सीएसआईआर-भारतीय पेट्रोलियम संस्थान (भापेसं) एक वैश्विक मान्यता प्राप्त तथा आईएसओ 9001:2008 प्रमाणित अनुसंधान एवं विकास संगठन है, जो राष्ट्रीय और अंतर्राष्ट्रीय उद्योगों को अभिनव प्रौद्योगिकियां और तकनीकी सहायता प्रदान करता है। सीएसआईआर-भापेसं अपस्ट्रीम फ्लो, डाउनस्ट्रीम हाइड्रोकार्बन क्षेत्र और सम्बंधित उद्योगों के बहु-विषयक अनुसंधान में विशेषज्ञ है, जिसमें प्रक्रम और उत्पाद विकास (प्रयोगशाला से पायलट स्तर), प्रक्रम अनुकूलन, उन्नयन (स्केल-अप) और तकनीकी-आर्थिक व्यवहार्यता अध्ययन आदि सम्मिलित हैं। इसके प्रमुख कार्यक्षेत्रों में पेट्रोलियम शोधन, उत्प्रेरक प्रक्रम, विलायक निष्कर्षण, अधिशोषण, मेम्ब्रेन और उत्पाद अभिलक्षण शामिल हैं। संस्थान के नवीनतम प्रयास पेट्रोलियम स्ट्रीम्स के जैव-प्रसंस्करण, वैकल्पिक ईंधन और विशिष्ट रसायन पर केंद्रित हैं। इस संस्थान ने उद्योगों को कई प्रौद्योगिकियां सफलतापूर्वक हस्तांतरित की हैं। भारत में लगभग हर रिफाइनरी में सीएसआईआर-भापेसं की लाइसेंस प्राप्त प्रौद्योगिकी प्रयोग की जा रही है। संस्थान ने वीआईएस मानकों के अनुसार पेट्रोलियम उत्पादों के लिए मूल्यांकन तकनीकों का विकास किया है तथा यह अनुबंध अनुसंधान एवं तकनीकी सेवाओं के लिए सतत वैश्विक साझेदार है। 2,100 से अधिक प्रकाशनों और 300 पेटेंट के साथ, इस संस्थान को सीएसआईआर प्रौद्योगिकी पुरस्कार और स्वदेशी प्रौद्योगिकी के वाणिज्यीकरण के लिए राष्ट्रीय पुरस्कार जैसे प्रतिष्ठित पुरस्कार प्राप्त हो चुके हैं। यह संस्थान ऊर्जा क्षेत्र के लिए निरंतर विशेष प्रशिक्षण तथा कौशल विकास कार्यक्रम आयोजित करता है।

प्रमुख कार्यक्षेत्र

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| <ul style="list-style-type: none"> ☐ उन्नत पृथक्करण प्रक्रम रू आसवन, विलायक निष्कर्षण, अधिशोषण, अवशोषण, मेम्ब्रेन पृथक्करण ☐ उत्प्रेरक और रूपांतरण प्रक्रम ☐ नवीकरणीय ईंधन, ट्राइबोलाजी और स्नेहक ☐ औद्योगिक तथा घरेलू दहन ☐ पेट्रोरसायन प्रक्रम ☐ जैवउत्प्रेरण ☐ अपशिष्ट का पुनरुपयोग ☐ एडिटिव एवं विशिष्ट रसायन | <ul style="list-style-type: none"> ☐ कच्चे तेल का मूल्यांकन एवं पाइपलाइन प्रवाह ☐ रिफायनरी हाइड्रोकार्बन स्ट्रीम्स तथा पेट्रोलियम उत्पाद अभिलक्षण ☐ अंतर्दहन(आईसी) इंजन उत्सर्जन और वैकल्पिक ईंधन अध्ययन ☐ CO₂ उपयोग तथा पेट्रोरसायन ☐ पिच विश्लेषण ☐ आणविक प्रतिरूपण तथा अनुरूपण |
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हाल ही में हस्तांतरित मुख्य प्रौद्योगिकियाँ

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| <ul style="list-style-type: none"> ☐ वैक्स वितैलन प्रौद्योगिकी, नुमालीगढ़ रिफाइनरी, असम ☐ बेंजीन पुनरु प्रापण इकाई (बीआरयू), रिलायंस इंडस्ट्रीज लि., जामनगर ☐ एल पी जी स्वीटनिंग उत्प्रेरक 'थाक्सकैट ईएस'(10 भारतीय तथा 2 विदेशी रिफाइनरियां) | <ul style="list-style-type: none"> ☐ विस्ब्रेकिंग विद सोकर इंटरनल टेक्नॉलॉजी, हल्दिया रिफाइनरी ☐ उन्नत पीएनजी बूल्हे ☐ द्वि- ईंधन जेनसेट प्रौद्योगिकी |
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वाणिज्यीकरण हेतु तैयार प्रौद्योगिकियाँ

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| <ul style="list-style-type: none"> ☐ यूएस-ग्रेड गैसोलीन और उच्च शुद्धता-बेंजीन का एक साथ उत्पादन ☐ पैराफीन और सूक्ष्मक्रिस्टलीय मोम (वैक्स) के लिए मोम वितैलन प्रौद्योगिकी ☐ 'थाक्सकैट ईएस' रू एक नया एलपीजी स्वीटनिंग उत्प्रेरक ☐ नवीकरणीय बायोमीथेन के लिए उन्नत वीएसए (AVSAR™) ☐ सोकर इंटरनल विस्ब्रेकिंग प्रौद्योगिकी ☐ पौधों से प्राप्त तेलों तथा पशुओं से प्राप्त वसा से संवहनीय विमानन ईंधन हेतु एकल चरण प्रक्रम ☐ सामान्य तापमान बायोडीजल के उत्पादन के लिए प्रौद्योगिकी ☐ डीजल जेनसेट को द्वि-ईंधन मोड में परिवर्तित करने हेतु प्रौद्योगिकी ☐ घरों में पाइप प्राकृतिक गैस (पीएनजी) पर खाना पकाने हेतु नवीन ईंधन कुशल बर्नर | <ul style="list-style-type: none"> ☐ उन्नत बायोमास चूल्हा प्रौद्योगिकी ☐ पर्यावरण - अनुकूल और ऊर्जा दक्ष गुड़ संयंत्र के लिए प्रौद्योगिकी ☐ बायोजेनिक ईंधन उत्पादन हेतु पिरुल - ब्रिकेटिंग ☐ जैव-व्युत्पन्न रसायन और उत्पाद ☐ अपशिष्ट स्नेहकों (स्पेंट ल्यूब आयल्स) का पुनः परिष्करण और रंग स्थिरीकरण ☐ अपशिष्ट प्लास्टिक से ईंधन और रसायन के लिए प्रौद्योगिकी ☐ CO₂ से मेथनॉल ☐ तिपहिया डीजल ऑटो के इलेक्ट्रिक ऑटो में रूपांतरण (रेट्रो-फिटमेंट) के लिए EV किट ☐ पर्यावरणीय ऑडिट |
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प्रशिक्षण कार्यक्रम तथा कौशल विकास

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| <ul style="list-style-type: none"> ☐ नवीन पेट्रोलियम रिफाइनिंग प्रौद्योगिकियां ☐ सीबीजी तथा फ्लेक्स ईंधन इंजन / वाहन के क्षेत्र में उभरते रुझान। ☐ इलेक्ट्रिक मोबिलिटी तथा उन्नत ऑटोमोटिव प्रौद्योगिकी ☐ ऑटोमोटिव अनुप्रयोग के लिए वैकल्पिक ईंधन ☐ वाहन उत्सर्जन और नियंत्रण ☐ न्यून कार्बन प्रौद्योगिकियां और कार्बन संग्रह (CCUS) | <ul style="list-style-type: none"> ☐ वैकल्पिक ऊर्जा, जैव ऊर्जा तथा हरित हाइड्रोजन ☐ पेट्रोरसायन, पॉलिमर और कच्चे तेल से रसायन ☐ पेट्रोलियम तथा संबद्ध उत्पादों का विश्लेषण ☐ सीएफआर इंजिन (RON/MON/Cetane Number) प्रचालन तथा देखभाल ☐ विभिन्न विश्लेषणात्मक तकनीकों पर कौशल विकास कार्यक्रम |
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A frontline plants research lab of CSIR dedicated to high quality research in the area of biological and chemical sciences and extending technologies and services to the farmers and entrepreneurs

SERVICES OFFERED

- Training and consultancy for cultivation of medicinal and aromatic plants.
- Supply of nucleus planting material of improved varieties.
- Herbal formulations for commercialization by the industries.
- Supply of publications and engineering designs.
- Technology Business Incubation Facility for start-ups

TECHNOLOGIES & PRODUCTS

- Improved agro and processing technologies
- Extraction technologies of high value rose, khus, geranium and other essential oils
- Herbal mosquito repellent formulations, hand and surface disinfectant, Lip balm, sanitary pad, Herbi-Chew, Kaya Kawach (SPF-40), Aloe Vera gel without any preservative, Psoria-CIM, Natural cough syrup and Incense sticks and other herbal products.

IMPROVED AGRO & PROCESSING TECHNOLOGIES FOR MEDICINAL AND AROMATIC PLANTS

Mentha arvensis (Menthol Mint), *Mentha piperita* (Peppermint), *Cymbopogon winterianus* (Citronella), *Cymbopogon martinii* (Palmarosa), *Cymbopogon flexuosus* (Lemongrass), *Pelargonium graveolens* (Geranium), *Rosa damascena* (Rose), *Chrysopogon zizanioides* (Vetiver), *Catharanthus roseus* (Periwinkle), *Withania somnifera* (Ashwagandha), *Ocimum spp.* (Tulsi), *Plantago ovata* (Isabgol), *Cassia angustifolia* (Senna), *Asparagus racemosus* (Sataver), *Artemisia annua*, *Aloe vera*, *Andrographis paniculata* (Kalmegh), etc.

For further information, please contact:



DIRECTOR

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RESEARCH CENTRES

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परिकल्पना: जैवआर्थिकी के उन्नयन हेतु प्रौद्योगिकीय उद्भवता एवं विकास में हिमालयी जैवसंपदा के संपोषणीय उपयोग द्वारा विश्व स्तर पर अग्रणी होना

उद्देश्य: सामाजिक, औद्योगिक, पर्यावरणीय और अकादमिक हित हेतु हिमालयी जैवसंपदा से प्रक्रमों, उत्पादों और प्रौद्योगिकियों की खोज, नवोन्मेष, विकास एवं प्रसार



संस्थान की निम्नलिखित व्यवसायिक उत्पादन के लिए प्रौद्योगिकियाँ

- रेडी टू ईट क्रिस्पी फ्रूट एवं परम्परागत व्यंजन
- मूल्यवर्धित बक्कवीट
- बहु-अत्रीय (मल्टीग्रेन) उच्च प्रोटीन पेय एवं तत्काल (इन्स्टेंट) सूप
- स्फिरूलीना आधारित एनर्जी बार
- पादप वृद्धि हेतु राइजोबेक्टीरिया
- हींग
- केसर (Tissue Culture Protocol) & Agrotechnology
- कैला लिली, जरबेरा, गुलदाउदी की उन्नत किस्में
- हर्बल चाय
- मिनी डिस्टिलेशन यूनिट (हर्बोस्टिल ट्रेडमार्क)
- कम्पोस्ट बूस्टर
- आयरन युक्त फ्रूट बार
- चाय कैटेकिन
- हर्बल सोप
- हर्बल इन्सेन्स कोन
- हैंड सैनिटाइजर
- गुणवत्तायुक्त और स्वच्छ शहद हेतु उन्नत बी हाइव
- स्टीविया पाउडर और स्टीविया तरल द्रव्य (कम कैलोरीयुक्त स्वीटनर)
- अर्नेबिया यूक्रोमा से नेफथोकीन (लाल रंग) के लिए *इन विट्रो* उत्पादन प्रणाली (Lab Scale)
- खाद्य प्राकृतिक रंग, हर्बल लिपस्टिक
- हाइड्रोपोनिक खेती की तकनीक से लिलियम और ट्यूलिप के पुष्पण काल में कमी
- वेलेरियाना जटामांसी अपस्थानिक जड़ संवर्धन प्रौद्योगिकी
- विटामिन डी2 युक्त शिटाके मशरूम
- एल-एस्परजिनेस (Lab Scale Technology)
- हाइड्रॉक्सीमिथाइलफ्यूरेल (5-एचएमएफ)

संपर्क करें:

निदेशक, सीएसआईआर- हिमालय जैवसंपदा प्रौद्योगिकी संस्थान
 पालमपुर (हि.प्र.) - 176061, टेलीफोन- 01894-230411, फैक्स 01894-230433,
 ईमेल: director@ihbt.res.in, वेबसाइट - <https://www.ihbt.res.in/en/>

CSIR-Indian Institute of Integrative Medicine, Jammu J&K, India-180001



CSIR-Indian Institute of Integrative Medicine (CSIR-IIIM) is a premier national research institution under the aegis of the Council of Scientific & Industrial Research (CSIR), located



in Jammu, with branch lab in Srinagar and four field research stations across different locations in the Union Territory of Jammu and Kashmir. CSIR-IIIM is actively involved in the discovery of new drugs and therapeutic approaches from natural products of both plant and microbial origin, leveraging biotechnology to develop high-value technologies, drugs, and products for national and international markets.

Over the years, CSIR-IIIM has pioneered several innovative technologies, processes, and models that have greatly contributed to national goals. The institute has played a crucial role in fulfilling the nation's mandate to double farmers' income, driving the Purple Revolution through the introduction of lavender farming and promoting various aromatic and medicinal plants in the J&K region. With its formidable research infrastructure and expert manpower, CSIR-IIIM has consistently addressed emerging challenges and offered sustainable solutions to pressing problems.

Thus, CSIR-IIIM is engaged in multidisciplinary R&D programs that encompass both basic and applied research across scientific disciplines, focusing on economic, environmental, and societal benefits for the people of India. With a vision to emerge as a globally recognized R&D institute trusted by industries and valued by society, CSIR-IIIM continues to make strides in drug discovery and allied sciences. The institute is already involved in technology transfer partnerships with various industries and has established an extensive client network both nationally and internationally.

Another vital aspect of CSIR-IIIM's mission is its significant contribution to employment oriented skill development initiatives, empowering youth with sustainable skills for future growth.

CSIR-IIIM provides expertise in its core competencies, which include NABL-GLP compliant lab standards, which are meant for animal testing, analysis, quality control, CMC drugs and drug leads. The institute offers lab to pilot scale chemical and fermentation process development, as well as standardization, cGMP extraction, and formulation capabilities for botanical drugs. Additionally, CSIR-IIIM undertakes R&D and extension projects through consultancy, collaboration, sponsorship, and Public-Private Partnership (PPP) arrangements.

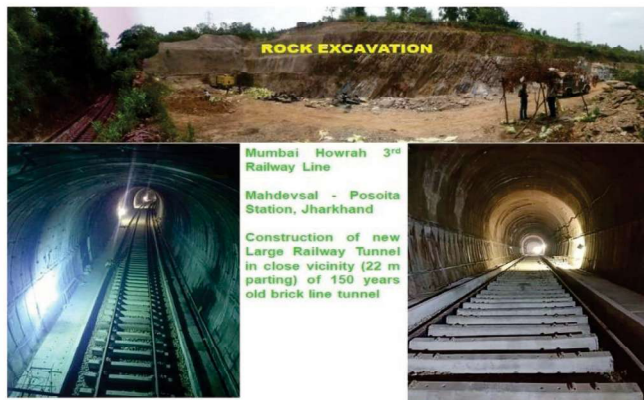
Contact: Director, CSIR-Indian Institute of Integrative Medicine (IIIM)

Canal Road, Jammu-180 001, J&K (INDIA). Tel No.:0191-2584999, 2585222.

Email: director@iiim.res.in

Website: www.iiim.res.in

CSIR-CENTRAL INSTITUTE OF MINING AND FUEL RESEARCH (CIMFR), DHANBAD, a constituent laboratory under the aegis of Council of Scientific and Industrial Research (CSIR), New Delhi aims to provide R&D inputs for the entire coal-energy chain encompassing exploration, mining and utilization with the Vision **"To be an internationally acclaimed mining and fuel research organisation"**



Major Contributions of CSIR-CIMFR are:

- Development of Safe Methods and Assessment of Stability of Mine Workings
- Design of Backfilling Systems for Stabilization of Mine Workings
- Design of Safe Blasting Patterns of Mines
- Assessment of Subsidence and Ground Movement due to Mining
- Design of Environmental Management Plan for Eco-Friendly Mining and Coal Based Industries
- Investigations on Methane Emission due to Mining and GHG Inventories
- Resource Evaluation and Reservoir Modeling of Coal bed Methane
- Evolution of Methods to Control Mine Fire
- Design of Support Systems for Mines
- Design & Development of Equipment, Instruments and Components for Safe Mining
- Coal Quality Assessment
- Basic Studies on Coal Science
- Coal Preparation
- Coal Carbonization
- Coal Liquefaction – Direct and Indirect routes
- Coal Gasification
- Coal Combustion
- Non Fuel Uses of Coal/ Value Added Chemicals
- Fly Ash Utilization



CSIR-CIMFR also extends testing, evaluation, calibration and consultancy services for explosives and accessories, mine ventilation and safety equipment, roof supports, personnel protection equipment, flameproof and intrinsically safe equipment, electrical cables, mining and allied industrial components, wire ropes, cage and suspension gear components, aerial ropeways, etc., for their safe use. All facilities for conventional & instrumental analysis of coal & coke, coal washing pilot plant, pilot coke oven by electrical heating & non-recovery type, XRF, XRD, FTIR, FETR, DTF, TGA, Surface Area Analyser, Porosimeter, coal water emulsion, GTL, PTGA-MS, HPLC, CPT, IPT, etc; EIA & monitoring of air, water, noise & soil pollution, GC, particle size analyzer, washability investigations on coals for cleaning potentialities, various laboratory tests on coal preparation, coal washing pilot plant for coarse and fine coal beneficiation.

For Further Information Please Contact:

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Director

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Phone : 91-326-2296023/ 2296006/ 2381111

Fax : 91-326-2296025/2381113

E-mail : director@cimfr.nic.in

Website:- www.cimfr.nic.in



Better price discovery calls for robust markets.

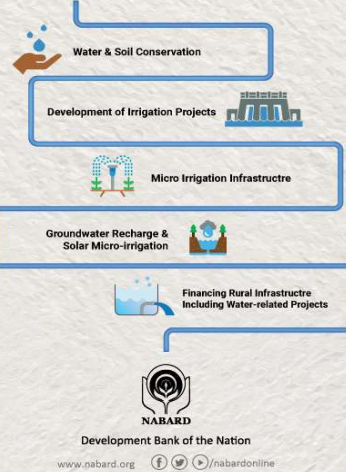
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दिनांक-24/11/25

अवगत कराना है कि हमारी कम्पनी पी0सी0एस0 फिनटेक कन्सलटेन्सी प्रा0लि0, 302 ग्रेण्ड, मैनोर अपार्टमेंट, मुराद अली लेन, हुसैनगंज लखनऊ द्वारा प्रदेश के शिक्षा विभाग स्वास्थ्य विभाग यूपीडा, जननायक चन्द्रशेखर विश्वविद्यालय बलिया, नगर पालिका, श्रम विभाग, परती भूमि विकास विभाग, अनुसूचित जाति वित्त एवं विकास निगम लि0, भारत पेट्रोलियम कार्पोरेशन लि0 कोयम्बटूर तमिलनाडु, नेशनल फर्टिलाइजर लिमिटेड नोएडा, जैसे विभिन्न विभागों/निगमों में अतिकुशल, कुशल, तथा अकुशल श्रेणी के कार्मिकों की आपूर्ति करायी जा रही है।

एन0एस0डी0सी0 द्वारा प्रायोजित प्रधानमंत्री कौशल विकास योजना के अन्तर्गत युवा/युवतियों को निःशुल्क कौशल विकास प्रशिक्षण प्रदान कर उन्हें रोजगार/स्वरोजगार से जोड़ते हुये स्वर्णिम विकास करने का उद्दिष्ट कार्यक्रमों में प्रशिक्षण/शिक्षण का कार्य ग्रामीण क्षेत्रों में करायी जाती है। उपरोक्त समस्त गतिविधियों में हमारी कम्पनी द्वारा प्रतिभाग किया जाता है।

अफ्ट्रान पावरट्रानिक्स* (उ0प्र0 सरकार का उपक्रम) में हमारी कम्पनी इम्पैनलमेन्ट वेण्डर है, के माध्यम से प्रयागराज विकास प्राधिकरण एवं आगरा विकास प्राधिकरण में साफ्टवेयर हेतु ई0आर0पी0 माड्यूल के अन्तर्गत ई-टिकट, ई-चालान, ई-आक्शन, ई-टेण्डर, ई-लॉटरी, ई-न्यूज का कार्य सफलतापूर्वक करायी जा रहा है।

श्रीद्वान इण्डिया लि0 (उ0प्र0 सरकार का उपक्रम) में हमारी कम्पनी इम्पैनलमेन्ट वेण्डर है, जिसके माध्यम से गौतमबुद्धनगर, मिर्जापुर मथुरा में ईकाई स्थापित कर आधार कार्ड अपडेशन का कार्य किया जा रहा है।

उपरोक्त के सन्दर्भ में यह भी अवगत कराना है कि हमारी कम्पनी अफ्ट्रान, यूपीएलसी, यू0पी0डेस्को, कृषि वित्त निगम, उ0प्र0कौशल विकास मिशन, (उ0प्र0 सरकार का उपक्रम) की भी इम्पैनलमेन्ट वेण्डर है।

सधन्यवाद!



पी0सी0एस0 फिनटेक कन्सलटेन्सी प्रा0लि0

Certifications

- ISO 9001 : 2015
- ISO 20000-1-2018 (ITMS)
- ISO 27001 : 2013
- ISO 10667-2-2011
- ISO SA 8000 : 2014
- CMMI Level 3

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