

PAS-ANSO Conference on

Smart Solution of a Green Future: AI in Ecosystem and Climate Action

The international conference “*Smart Solutions for a Green Future: AI in Ecosystem and Climate Action*” brings together leading scientists, technologists, and policymakers to explore how cutting-edge artificial intelligence can drive sustainable environmental solutions. Organized by the Pakistan Academy of Sciences and the Chinese Academy of Sciences, in collaboration with FUUAST, the University of Karachi, ICCBS, and the China-Pakistan Joint Research Centre on Earth Sciences, the event aims to advance AI-enabled climate resilience, biodiversity protection, and ecosystem restoration. With a strong focus on transdisciplinary collaboration and regional scientific cooperation—particularly within the Belt and Road Initiative—the conference also seeks to empower young researchers from developing countries to contribute to global dialogues on smart, sustainable innovation.



Important Dates

Call for Proposal: **15th December 2025**
Abstract Submission Deadline: **15th January 2026**
Notification of Acceptance: **01st February 2026**
Paper Submission Deadline: **01st March 2026**

Submission Guidelines:!

We invite contributors to submit original, unpublished work that integrates Artificial Intelligence, Big Data, and Earth Science to address regional climate and ecosystem challenges, especially within the Belt and Road regions. Submissions may include research papers, technical studies, policy analyses, or cutting-edge case studies demonstrating the use of AI in climate modeling, smart agriculture, biodiversity monitoring, or early warning systems for natural disasters. All manuscripts should clearly outline the research problem, methods, and key findings, and must follow standard academic formatting with an accompanying abstract. Selected submissions will be considered for oral or poster presentations, and at least one author must register and attend the conference to present their work.

Submissions are welcome on (but not limited to) the following themes:

- Promoting AI-enabled innovations for climate resilience, biodiversity conservation, and ecosystem restoration.
- Supporting sustainable and high-quality development across Belt and Road regions and the Global South.
- Advancing research in AI-based climate modeling, early warning systems, and environmental forecasting.
- Enhancing smart agriculture and precision ecosystem management through digital and data-driven tools.
- Leveraging big-data analytics for biodiversity monitoring and ecological decision-making.
- Strengthening ethical and responsible AI governance for environmental applications.
- Fostering international scientific collaboration among China, Pakistan, and broader BRI partners.
- Empowering young scientists and early-career researchers to contribute to global sustainability dialogues.

An individual paper/ poster proposal should include a title, an abstract (up to 250 words), and a short biographical note (up to 150 words).

For further conference information and submission instructions, please email to cas_ansoconference@fuuast.edu.pk or visit <https://fuuast.edu.pk/oric/>



Conference Agenda

The focus will be on the application of smart technologies to environmental challenges:

- AI-based climate modelling and early warning systems.
- Smart agriculture and precision ecosystem management.
- Big data applications in biodiversity monitoring.
- AI governance for environmental ethics.

Objectives and Context

The initiative is proposed by the Federal Urdu University of Arts, Science & Technology (FUUAST) in collaboration with the Pakistan Academy of Sciences (PAS), University of Karachi, ICCBS-KU, and the China-Pakistan Joint Research Centre on Earth Sciences (CPJRC). It directly aligns with the ANSO mission to promote shared scientific and technological development and tackle global sustainability challenges, particularly within the Global South.

Importance to the Belt and Road Regions

The conference is of great importance to the sustainable and high-quality development of the Belt and Road (BRI) Regions and beyond:

- *Promotes AI-Driven Innovations:* The event directly supports development goals by promoting cutting-edge, AI-driven innovations for climate resilience, biodiversity conservation, and ecosystem restoration.
- *Fosters International Collaboration:* It encourages international collaboration, especially among scientists from China, Pakistan, and broader BRI partners, aligning scientific knowledge with policy and local needs.
- *Contributes to Green Economies:* By integrating smart technologies with sustainable practices, the conference contributes to greener economies, climate adaptation, and environmental security—core priorities for long-term prosperity across the Belt and Road.

Conference Organizers/ Speakers



Prof. Dr. Zabta K. Shinwari
Host/ Speaker
(Pakistan Academy of Sciences/
VC Federal Urdu University)



Prof. Peng Cui
Co-host/ Speaker
(China-Pakistan Joint Research
Center on Earth Sciences)



Prof. Tianhua Hong
Co-host/ Speaker
(China-Pakistan Joint Research
Center on Earth Sciences)



Prof. Dr. Khalid Mahmood Iraqi
Co-Host/ Speaker
(VC, University of Karachi)



Prof. Guo Huadong
Speaker
(Director, International Research
Center of Big Data for Sustainable
Development Goals (CBAS))



Prof. Zeng Yi
Speaker
(Chinese Academy of Sciences;
Dean, Beijing Institute of AI Safety
and Governance)



Prof. Luisa Orsini
Speaker
(School of Biosciences,
University of Birmingham)



Dr. Shahbaz Khan
Speaker
(UNESCO Regional Head, Beijing)



Prof. Kausar A. Malik
Speaker
(President Pakistan Academy of
Sciences)



Prof. Qasim Jan
Speaker
(Former President Pakistan
Academy of Sciences)



Prof. Thomas Brooks
Speaker
(Chief Scientist IUCN
(International Union for
Conservation of Nature)



Prof. Dr. Raza Shah
Speaker
(Director ICCBS,
University of Karachi)



Conference venue

International Center of Chemical and Biological Sciences, University of Karachi,
University Road, KARACHI, Pakistan