The Abdus Salam International Centre for Theoretical Physics

IAEA International Atomic Energy Agency

unesco United Nations Educational, Scientific and Cultural Organization

Workshop on Delay-Tolerant Networks (DTN) Solutions for Environmental Monitoring

Description:

Delay-Tolerant Networks (DTNs) support reliable data collection in extreme environments, essential for ecological, pollution, and disaster science, especially in Asia's remote or rural regions with frequent disasters and sparse infrastructure.

MORE INFORMATION:

DTNs provide a robust solution for reliable data gathering and transmission in environments that face significant connectivity challenges or disruptions. DTNs are invaluable for scientists engaged in ecological preservation, pollution monitoring, and emergency response operations, as these fields often require seamless information flow in areas with little or no communication infrastructure. Their importance is particularly pronounced in Asia, a continent marked by vast, sparsely populated regions, recurrent natural disasters, and underdeveloped rural infrastructure.

By enabling interventions and monitoring in these hard-to-reach locations, DTNs support better decision-making and more effective protection of environmental and human health.

TOPICS:

- Introduction to Delay-Tolerant Networks (DTNs)
- Applications of DTNs in Environmental Monitoring
- DTN Network Design and Optimization
- Mobile Nodes and Data Mules
- Environmental Challenges and Adaptations
- Low-power design
- Basic know-how about antennas and radio coverage
- Real-Time Monitoring and Early Warning Systems

11 - 15 May, 2026

Kathmandu, Nepal

Deadline:

15 February 2026

DIRECTORS:

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FURTHER INFORMATION:

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Female scientists are encouraged to apply.

GRANTS:

A limited number of grants are available to support the attendance of selected participants, with priority given to participants from developing Asian countries.
There is no registration fee.