



e-Conference on

Modern MRI:

From Core Principles to AI-Driven Applications



Thursday, 29th May 2025



09:00-12:30 hrs. (GMT)

14:00-17:30 hrs. (Pakistan Time)

Magnetic Resonance Imaging (MRI) is a useful technique enabling us to see inside the human body for diagnosis of many diseases. It enables imaging of soft tissues such as brain, spinal cord and muscles, which are often difficult and complex to study.

Established on the foundations of electromagnetic physics, MRI is a continuously evolving field. The integration of Artificial Intelligence (AI) in MRI has led to precise and clear imaging enabling accurate diagnosis. Comprehensive knowledge of the principles of MRI helps the radiologists and technicians in performing MRI scanning, effectively.

Jointly organized by the Commission on Science and Technology for Sustainable Development in the South (COMSATS) and the COMSATS University Islamabad (CUI), Pakistan, this e-Conference will delve into Modern MRI, from core principles to AI-Driven Applications. As we stand on the brink of a new era in medical imaging, this e-Conference serves as a platform to reflect, learn and collaborate for smarter, faster and more precise MRI diagnostics.

Expected Participants

Radiologists, MRI System Operators/Technicians, Medical Physicists, Biomedical Engineers, Clinical Researchers, Medical Doctors and Students, Allied Professionals, Health Tech Developers, and more.

Conference Aims to

- Provide overview of fundamental principles of MRI, its components and operation
- Present clinical and research applications of MRI
- Enhance understanding of MRI safety protocols
- Introduce robust and cutting edge MRI Reconstruction Algorithms
- Foster interdisciplinary collaboration

Key Topics

- Fundamentals of MRI
- AI-Driven Innovations in MRI
- Advanced MRI Acceleration methods
- Role of High Performance Computing (HPC) and Digital Design Framework (based on FPGAs/ASICs) in accelerating MRI Image Reconstruction
- Emerging Applications of MRI, including advanced Neuroimaging and Brain Health

For further details, including Event Program and Profiles of Speakers, click the link:

<https://tinyurl.com/econai25>

To Register:

<https://tinyurl.com/MRIAI2025>



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