

## **Special Session 6 (SS06)**

### **Monitoring and Imaging with Smart Devices**

**Organizers:**

Jiaze He, Harbin Institute of Technology, China

Mohammad Harb, American University of Beirut, Lebanon

**Description:**

This session explores the latest innovations in structural health monitoring (SHM) and smart materials, focusing on transformative technologies and methodologies. Topics include, but are not limited to, smart sensor networks for real-time monitoring, piezoelectric wafers, fiber optic sensors, ultrasound imaging, seismology, SHM strategies for various structures (metal, composite, and earth structures), artificial intelligence-driven imaging and monitoring, novel nondestructive evaluation (NDE) methods, and digital twin technology. Through expert presentations and case studies, attendees will gain valuable insights into future directions and practical applications of these advanced SHM and smart material technologies.