



2015 IEEE International Conference on Imaging Systems and Techniques (IST 2015)



September 16-18, 2015

Macau, China



Sponsored by IEEE Instrumentation and Measurement Society
and TC 19 Technical Committee on Imaging Systems

In conjunction with the IEEE International School of Imaging

Initial Full Paper Deadline:	June 23, 2015
Notification of Acceptance:	July 5, 2015
Final Paper Deadline:	August 2, 2015

The IEEE International Conference on Imaging Systems and Techniques will take place jointly with the IEEE International School on Imaging in the beautiful island of Macau, China, in September 16-18, 2015. IEEE is the world's largest professional association, with nearly 500,000 members, dedicated to advancing technological innovation and excellence for the benefits of humanity. IEEE promotes advancement of knowledge and technologies in many areas of electrical and electronic engineering: computing, aerospace, medical devices, healthcare, telemedicine, communications, sustainable energy systems, solid-state devices, nanotechnology, robotics, and more.

Engineers, scientists and medical professionals from industry, government, academia, and healthcare sectors who intend to bridge technology and clinical disciplines in the multidisciplinary areas of imaging, spectroscopy and medical diagnostic device industry, are invited to attend the School and interact with worldwide experts, aimed at advancing the science of imaging, the development of visualization technologies, to increase the understanding of pathophysiology and metabolism and measure therapeutic efficacy of drugs; remote sensing, space instrumentation, semiconductor and material inspection and characterization; exploring multifaceted design principles and new applications of imaging that would lead ultimately to novel devices and technologies, standards and metrology with unsurpassable image quality, scalability, reconfigurability, high throughput, and miniaturization capabilities.

The objectives of the IEEE International Conference on Imaging Systems and Techniques is to explore physical, engineering, molecular, biochemical and imaging principles, aimed to the advancement and generation of new knowledge related to the design, development, and applications of a range of topics, including but not limited to:

- Aerospace imaging
- Remote sensing, passive and active sensing
- Ladars and lidars
- Polarimetric imaging
- Multi-spectral polarimetric imaging and lasers
- Medical Imaging
- Computer Tomography (CT), Single Photon Emission Tomography (SPECT)
- Positron Emission Tomography (PET), Magnetic Resonance Imaging (MRI)
- Molecular and metabolic imaging
- Cancer detection and imaging of margins
- Electric impedance tomography
- Environmental monitoring, energy resources
- Real-time imaging and video processing
- Subsurface inspection, corrosion imaging
- Airport security and cargo inspection
- Electromagnetic imaging and inverse scattering
- Image analysis and processing
- Pattern recognition and feature extraction
- Image transformations
- Statistical description of images
- Wavelets and fractals
- Image enhancement and restoration
- Image segmentation and edge detection
- Image processing for multispectral images
- Detector design principles and image formation
- Imaging system design and instrumentation
- Signal and image analysis
- Pre-processing and post-processing
- Multi-functional and multi-fusion imaging
- Emerging trends on imaging

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Location & Venue

Lying 65 km to the west of Hong Kong, Macau is a city of duality. Its fortresses, churches and the culinary traditions of its former Portuguese colonial masters speak to a unique style on the China coast. These are intermixed with the customs, alleys, temples and shrines of its Chinese heritage. On the other hand, the Special Administrative Region of Macau is the "Vegas of the East," the only place in China where gambling is legal.

While Macau has earned the title of the Oriental Las Vegas as it is a gamblers' paradise, it is also a beautiful city with clear streets, gardens and picturesque hilly landscapes. A wander around the city is a fantastic experience!

The Conference will take place at University of Macau. Founded in 1981, University of Macau is the only public comprehensive university located in Macau, being the leading tertiary institution of the city, which has excellence in teaching, research and service to the community, and is the largest university in the city, according to faculty size and number of programs offered. Its new campus has fantastic facilities for the conference.

A site-seeing tour will be arranged for IST 2015 attendees!

