



# 2014 IEEE International Conference on Imaging Systems and Techniques (IST 2014)

Fall 2014, Island of Santorini, Greece



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



## In conjunction with the IEEE International School of Imaging (ISI)

Following the success of events in Stresa, Italy 2004, Niagara Falls in Canada 2005, Minori in Italy 2006, Krakow in Poland 2007, Chania in Greece 2008, Shenzhen in China 2009, Thessaloniki in Greece 2010, Penang in Malaysia 2011, Manchester in the UK 2012, and the anticipated success in Beijing in China 2013, the 2014 IEEE International Conference on Imaging Systems and Techniques (IST 2014) and the IEEE International School of Imaging (ISI) will take place in Santorini island, Greece.

**Engineers, scientists and medical professionals from Industry, Government, Academia, and Medical Laboratories who would like to maximize their technical and clinical skills in challenging areas and emerging frontiers of imaging and diagnostic device industry, can attend the IST 2014 and the School (ISI) and interact with major worldwide experts.**

The IST 2014 Conference and the International School of Imaging are two distinct events, taking place consecutively, and both addressing the following four areas:

### MEDICAL DIAGNOSTICS AND THERANOSTICS

- Clinical diagnostics and theranostics devices and techniques
- Miniaturization of diagnostic devices and mass spectroscopy systems
- Electroluminescence, bioluminescence, and amplification fluorescence
- Biomarkers, proteomics, Imaging genomics, sequencing, and microfluidic chips
- Nanoscale materials, polymer nanostructures, nanophotonics, and nanomedicine
- Image processing and pattern recognition

### SPACE DEFENSE

- Defense and space surveillance imaging technologies
- Advanced space instruments and satellite imaging
- Multilayered imaging technologies
- Bioinspired imaging, robotics, guidance and control
- Image processing and pattern recognition

### MATERIAL INSPECTION AND MANUFACTURING

- Semiconductor wafers, nanomaterials, composites, and corrosion
- Illumination architectures
- In-line /off-line inspection for defect review and failure analysis
- Techniques for critical dimension (CD) and overlay metrology
- Automatic defect classification
- Pharmaceutical and food processing vision inspection systems
- Image processing and pattern recognition

### IMAGING MODALITIES

- Cameras, microscopy and displays
- Polarimetry, multispectral imaging
- Tomography (MRI, CT, SPECT, PET, ECT)
- Ultrasound and laser acoustics
- Multimodality imaging
- Energy harvesting and imaging technologies

### About Santorini island:

Santorini is one of the 3,000 Greek islands located in the southern Aegean Sea. It is the largest island of a small, circular archipelago which bears the same name and is the remnant of a volcanic caldera. Santorini is the most popular and hottest destination for the visitors with so many attracting things to do and see, which can't be found anywhere. Santorini is famous for its fabulous beaches of all shapes, sizes and colors, calm and quite villages, wineries, calderas, museums and breath taking sun sets, and its famous weddings.

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