

IEEE INTERNATIONAL CONFERENCE ON INDUSTRIAL INFORMATICS INDIN'16

18-23 JULY 2016, FUTUROSCOPE-POITIERS, FRANCE

Special Session on

Digital Holography for Industrial Applications

organized by

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Call for Papers

Theme: The emergence of fast computing devices, high resolution display, and the holographic lithographic technology has casted the green light on the integration of Digital Holography in numerous industrial and bio-engineering applications. In fact modern holographic techniques have been successfully applied in many important areas, such as 3-D remote sensing and inspection, holographic microscopy, holographic information encryption, 3-D holographic display, and lens-free holographic image projection. This Special Session reports selected pieces of cutting edge research works on these important areas, ranging from low level acquisition, to the high level analysis, processing and manipulation of digital holographic signals. Most of these works involve meticulous integration of optical systems, high speed computing technology, as well as vigorous signal processing and computational intelligence algorithms. We anticipate that this Special Session will provide a comprehensive review on the existing state-of-the-art in Digital Holography, as well as a broad insight into the application and future development of the discipline.

Papers related to the applications of Digital Holography as enabling technologies, or in enhancing different aspects of the industrial and global environment (such as safety,

security, efficiency, 3-D visualization, and environmental protection, etc.) are particularly welcome.

Topics of interest include, but are not limited to:

Computer Generated Holography
Digital Holographic Microscopy
Optical Scanning Holography
Phase Shifting Holography
Compressive Holography
Optical Metrology
Holographic/Optical Remote Sensing and Inspection Techniques

Processing of Digital Holographic Signals
Holographic Encryption
Holographic Display
Integral and 3D Imaging

Hologram Visualization and Printing Systems
High Speed Hardware and Software in Digital Holography
Electronic and Optical Access Spatial Light Modulators
Femtosecond laser/laser plasma emission 3D image display
Novel and Advance Applications of Digital Holography in Industry and Bio-engineering

Submission procedure, deadlines, and author instructions: [see conference website](#)