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**Thomas George
Achyut K. Dutta
M. Saif Islam**
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Introduction

The 2017 Micro- and Nanotechnology (MNT) Sensors, Systems, and Applications IX conference within the SPIE Defense and Security Symposium, was held in Anaheim, California, United States, 9–13 April 2017.

Once again, thanks to the extraordinary efforts of our session chairs, a total of 20 conference Sessions were successfully concluded showcasing the exciting breadth and depth of MNT. Cutting-edge sessions captured exciting emerging trends in: Progress in Photonics and Beam Control; Smart Clothing; Smart Sensor and System Design Using Low-Power Nanoscale Information Fabrics; Two-Dimensional Materials-based Optoelectronics; Near-Field Optics and Superlenses for Sub-diffraction Limited Nano-imaging; Micro- and Nanotechnology for Energy Harvesting; Human Interface Sensors and Electronics; Flexible, Stretchable, Reconfigurable Electronics for Vehicular Technology; 3D Printing of Functional Materials and Devices; Brain-Computer Interface: From Restoration to Augmentation and the Critical Challenges Involved; Novel Harsh Environment Sensors for Energy Applications; Advanced Sensor Systems for Human-Machine Teaming; Autonomous C4ISR Systems of the Future; Repurposing Space Sensors and Technologies for Healthcare and Medical Applications; Electrical and Optical Neurotechnologies to Probe Brain Circuits; QCL-based Standoff Detection; THz Standoff Detection; and QCL and THz Standoff Sensing.

Successful joint sessions were conducted with the Unmanned Systems Technology XIX conference (10195), the Open Architecture/Open Business Model Net-Centric Systems and Defense Transformation 2017 conference (10205), the Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE) Sensing XVIII conference (10183), and the Advanced Environmental, Chemical, and Biological Sensing Technologies XIV conference (10215).

It is our sincere hope that the papers within this proceedings volume will provide you, our reader, not only with a snapshot of the programmatic vision behind investments made in each MNT topic area, but also its current state of scientific and technological development. Enjoy!

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