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# Unmanned/Unattended Sensors and Sensor Networks V

Edward M. Carapezza *Editor* 

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#### Introduction

The interest in unmanned and unattended sensor and sensor networks has continued to increase over the past several years. Related systems are being developed in support of military, homeland security, intelligence, law enforcement, physical security, and environmental monitoring applications around the world. Government agencies around the world are making significant investments to develop improved unattended and unmanned sensor systems and sensor networks. This SPIE conference series is devoted to papers on recent technological advancements in systems, technologies, and applications in this challenging area.

The conference included three keynote/invited presentations and 38 technical paper presentations organized into 10 sessions covering recent advances in sensor networks; advanced free-space optical communications, active and passive imagers, image sensing, and processing; security and perimeter detection; unattended sensor technologies; sniper and mortar fire; and unmanned system technology.

The following three keynote/invited talks were given and we sincerely thank all of these speakers for very stimulating and relevant presentations:

- 1. "Super hard problems in realizing MANETs," by Dr. John A. Parmentola (Office of the Secretary of the Army)
- 2. "Realistic acquisition and 3D display of human characters," by Dr. Paul Debevec (University of Southern California)
- 3. "Science and technology roadmap for electro-optic and electronic warfare," by Dr. Robert Winston (Naval Air Systems Command), presented by Dr. Tariq Mansur (Naval Undersea Warfare Center).

Thanks to those who prepared and presented the technical papers and for their contributions to a very successful meeting. The success of this conference is attributed to the participation of the commercial, university, and government research-and-development communities as well as the organizing efforts of the diverse and talented program committee.

Thanks to our program committee members for their dedication, time, and assistance in conference planning and organizing and especially to those members who were able to participate as session chairs including: Grant R. Gerhart (U.S. Army Tank Automotive Research Development and Engineering Center), Vincent A. Handerek (BAE Systems plc), Todd M. Hintz (Space and Naval

Warfare Systems Command), Leslie C. Laycock (BAE Systems plc), and Tariq Mansur (Naval Undersea Warfare Center).

Finally, an extra special thanks to all of the conference attendees this year for your interest and enthusiasm. The conference was well attended with a lot of interest in all the sessions. We hope the interest in this technology continues to grow, and that this conference will expand with even greater technical content and significance in future years.

Edward M. Carapezza