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Alexander A. Oraevsky
Lihong V. Wang
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Alexander A. Oraevsky, Fairway Medical Technologies, Inc. (USA)
- 9 Signal Processing and Image Reconstruction I
Mark A. Anastasio, Illinois Institute of Technology (USA)
- 10 Signal Processing and Image Reconstruction II
Mark A. Anastasio, Illinois Institute of Technology (USA)
- 11 High Resolution Imaging
Lihong V. Wang, Washington University in St. Louis (USA)
- 12 Ultrasound-Modulated (Acousto) Optical Tomography
Albert-Claude Boccara, École Supérieure de Physique et de Chimie Industrielles (France)
- 13 Functional Imaging
Martin Frenz, Universität Bern (Switzerland)

14 Systems Optimization

Günther Paltauf, Karl-Franzens-Universität Graz (Austria)

Hot Topics Open Forum

Alexander A. Oraevsky, Fairway Medical Technologies, Inc. (USA)

Lihong V. Wang, Washington University in St. Louis (USA)

Best Paper Award

Alexander A. Oraevsky, Fairway Medical Technologies, Inc. (USA)

Introduction

Papers presented this year at the conference on Photons Plus Ultrasound: Imaging and Sensing can be characterized as “interesting and mature.” The field of optoacoustic (photoacoustic, thermoacoustic) tomography has come of age, and the conference featured a number of applications that demonstrated both clinical and commercial value. This in turn, stimulated interest from the industry of medical imaging.

This year we saw many researchers representing small companies and large industry among the usual groups from academic institutions. It is noteworthy that the field of optoacoustic imaging and sensing now has its industrial champion, Seno Medical Instruments of San Antonio, Texas, a company fully dedicated to commercializing the technology discussed at our conference.

Congratulations to Edward Z. Zhang and his colleagues from the University College London, recipients of the annual “Best Paper Award” sponsored by Fairway Medical Technologies of Houston, Texas. Their paper entitled “3D photoacoustic imaging system for in vivo studies of small animal models” represents a significant step in high-resolution imaging of tumor microvasculature using an optical interferometer as an ultrawide band ultrasonic detector.

Manuscripts included in this volume of SPIE's *Progress in Biomedical Optics and Imaging* series have been peer-reviewed by the conference Organizing Committee members. This proceedings volume is an invaluable asset to researchers working not only in the field of biomedical optoacoustics, but also in many other interdisciplinary areas of medical physics, such as medical imaging, monitoring of minimally invasive therapy, diagnostic oncology, hematology, dermatology, and many others.

Alexander A. Oraevsky
Lihong V. Wang

