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Introduction

Welcome to the 2011 proceedings for the SPIE conference Energy-based Treatment of Tissue and Assessment VI. We have been organizing this conference since 1998 and this year has proven to be the best conference yet.

The variety and diversity of papers for the 2011 conference was even greater than in the past. We started with low-energy, non-ablative tissue effects and worked our way through treatment planning, navigation, and assessment into tissue effects and thermal ablation. We also included updates on therapeutic ultrasound sensors and radiometry. There were two complete sessions on nanoparticles, encompassing the biochemistry of nanoparticle construction, delivery, tissue effects, success in tumor treatment, and imaging. This year we also had a panel discussion on nanoparticles with a strong group of experts to review the challenges.

Our goal for this conference has always been to attract a diversity of participants, including physicists, engineers, scientists, and physicians from a variety of disciplines including pathology, since our goal has always been specific tissue effects, especially that of cancer treatment. The diversity is seen clearly in our participants, but also extends to the presentations and the papers. The international gathering at the conference was very fruitful for networking, scientific exchanges, and collaboration. Many participants walked away with potential collaborators whom they newly met at the meeting. So enjoy these proceedings and its relevance to the topics of thermal therapy and tissue assessment.

Thomas P. Ryan

