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**Marija Strojnik
Gonzalo Paez**
Editors

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Introduction

Once again, the conference on Infrared Remote Sensing and Instrumentation was held in San Diego, California, August 20 to 25, 2011, forming a part of the annual meeting of SPIE, a technical society dedicated to advancing science and engineering through the use of light. This was an especially important meeting for the chairs; with its completion we are approaching the twentieth in the series of these conferences. The next meeting, the twentieth, will be held again in San Diego during the third week of August 2012. San Diego has become established as our favorite place: international visitors from Europe like it for the famed southern California location, and the participants from far East are actually not very distant from it—just a short hop across the Pacific.

On behalf of the authors, participants, readers of the proceedings, and especially on own behalf of the chairs, I wish to express our profoundest appreciation to the chairs of the smoothly run sessions. Dr. Stanley J. Wellard from the Space Dynamics Laboratory put together an informative session on remote sensing concepts and experiments. Despite the session starting bright and early at eight o'clock, many interested participants came with numerous questions.

This was followed by a traditional session on remote sensing and calibration, composed of two parts, conducted by the conference chairs to allow some participants to take Sunday afternoon off with their family. Interestingly, this year we had no participation from the NIST, because the austerity measures in this institution severely restricted the travel budgets. We are happy for our friends at NIST that their management is looking out to preserve funds for employment; however, we are looking forward to their active return to our conference. There can be no calibration session without the wisdom that only the scientists from NIST may contribute effectively. Nevertheless, we had very productive calibration sessions.

No infrared remote sensing may be effective without incorporating modern infrared detectors. Session 4, Focal Plane and Detector Development from 1 Micron to LWIR, was managed effectively by Dr. Gail J. Brown from Air Force Research Laboratory. The second chair, Gonzalo Paez from the Optical Research Center in Mexico, chose to run Session 5 on Infrared Spaceborne Missions.

The sixth session was dedicated to the focal plane development at Raytheon, generating a large number of very interesting questions. Both the session organization and the challenge of dealing with some very difficult questions fell on Mr. Neil R. Malone of Raytheon Company.

The highlight of the conference was Session 7 on the spectroscopy in solar system exploration. Prof. Gabriele Arnold, from the German Center for the Space research, chaired the session on solar system exploration from the European perspective. Dr. Arnold was also a plenary speaker for the remote sensing group of conferences.

Nearly fifty papers were presented in this conference, with the international scientific participation. A great majority of presenters submitted their work for inclusion in the proceedings for future reference. We wish to express our appreciation to the participants, both the authors and the active audience who makes the discussion so lively.

Special thanks are due to the SPIE staff for providing friendly guidance and organizational support to meet all the deadlines. Organizing a technical conference and publishing proceedings involves hard work of a team of dedicated and knowledgeable people whose unobtrusive advice and guidance makes a conference a success. We thank them for quiet assistance.

Marija Strojnik
Gonzalo Paez