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Reliability, Packaging, Testing, and Characterization of MEMS/MOEMS and Nanodevices X

**Sonia Garcia-Blanco
Rajeshuni Ramesham**
Editors

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Introduction

The reliability, packaging, testing, and characterization of MEMS/MOEMS are of significant importance to the commercialization of these advanced and useful emerging technologies. This is the International Reliability Conference and the contributors at this conference attended from around the world. The main objective of this one and only premier reliability conference was to provide a technical forum for in depth investigations and interdisciplinary discussions involving reliability, packaging, testing, and characterization of MEMS/MOEMS. The response to the call for papers was excellent and technically rewarding to the MEMS/MOEMS and Nanodevices community. The Reliability, Packaging, Testing, and Characterization of MEMS/MOEMS and Nanodevices conference was sponsored by SPIE, and was organized as part of the Photonics West 2011's MOEMS-MEMS symposium. The conference was held 24–25 January 2011 in San Francisco, Moscone Center, California, USA. SPIE Photonics West is the premier international forum for presentation of the latest developments associated with MEMS and MOEMS including reliability, testing, packaging, materials, surfaces, and characterization. This conference on the topic of Reliability, Packaging, Testing, and Characterization has been held for over 10 consecutive years.

In preparing for this year's conference, 24 high-quality papers were received from various countries. This year, the technical program covered novel advances on Packaging and Integration Technologies of MOEMS/MEMS/NEMS I and II, Test Methodology and Reliability, Reliability of MEMS for Space Applications, Devices for Space Applications I and II and a poster session. A panel discussion on Tuesday evening, "Does Space need MEMS? Qualification of MEMS for Space," brought together world leaders from both industry and government institutions working towards the development and implementation of MEMS in space. The technical program also had three plenary speakers (symposium level) and eight invited/one keynote speakers from various reputed laboratories around the globe. We had a joint session on "MEMS Devices for Space Applications" with two other MOEMS-MEMS conferences, "MOEMS and Miniaturized Systems X" and "MEMS Adaptive Optics."

We would like to personally thank Dr. Thomas Suleski and Dr. Harald Schenk (symposium chair and co-chair) and the SPIE staff for their unstinted timely support and encouragement. We would like to thank Dr. Herbert R. Shea and Dr. Wilfried Noell of Ecole Polytechnique Fédérale de Lausanne (Switzerland) in supporting as moderators for the panel discussion. We would like to thank the members of the panel discussion for their invaluable views on the direction of the MEMS for space field. We would also like to thank all the session chairs and co-chairs, and the program committee members for their work and support in successfully organizing this conference and reviewing the abstract and proceedings articles. Finally, we would like to thank all the attendees and

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Sonia Garcia-Blanco
Rajeshuni Ramesham