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Reliability, Packaging, Testing, and Characterization of MEMS/MOEMS VI

Allyson L. Hartzell Rajeshuni Ramesham Chairs/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 technologies. The objective of this conference is to provide a technical forum for in depth investigations and interdisciplinary discussions. The response to the call for papers has been overwhelming and rewarding.

The Reliability, Packaging, Testing, and Characterization of MEMS/MOEMS Conference is sponsored by SPIE and organized as part of Photonics West 2007, it is part of the MOEMS-MEMS 2007 Micro-Nano Fabrication Symposium, and an education program on MOEMS-MEMS held January 20–25, 2007 in San Jose Convention Center, San Jose, California, USA. SPIE 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 has been held for several years in row.

In preparing for the conference, 24 high-quality papers were received from researchers in various countries and universities. Nine sessions cover MOEMS-MEMS plenary presentations, applications and reliability methodology, RF MEMS and related failure mechanisms, MEMS materials properties, MEMS reliability, optical MEMS design for reliability and characterization techniques, MEMS/MOEMS reliability methodology, MEMS/MOEMS characterization techniques, and special topics in MEMS. We have put together a technical program with seven invited speakers, three plenary speakers from reputed laboratories around the country/globe, and a keynote speaker from Oak Ridge National Laboratory whose presentation is "Receptor free nanomechanical sensing".

We also arranged a panel discussion on "MEMS reliability" for the first time. The panel will be moderated by Jason Clevenger, Exponent Inc. Panel members Peter Basque, Analog Devices; Bill Cummings, Qualcomm; Charles King, Akustica; Danelle Tanner, Sandia National Labs., and Jim Aberson, Colibrys, are highly recognized in this research field.

We would like to personally thank Dr. Danelle Tanner (past reliability conference chair) of Sandia National Labs. and Dr. Al Henning (symposium co-chair) for their unstinting timely support and encouragement. Finally, we would like to thank all the session chairs, co-chairs, and program committee members for their support in organizing this conference so successfully.

Allyson L. Hartzell Rajeshuni Ramesham