

# PROCEEDINGS OF SPIE

## ***Smart Sensors, Actuators, and MEMS III***

**Thomas Becker**  
**Carles Cané**  
**N. Scott Barker**  
*Editors*

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## Introduction

The conference Smart Sensors, Actuators and MEMS was held in Maspalomas, Gran Canaria, Spain, from May 2 to 4, 2007. About 60 contributions from Europe, America, and Asia were presented during 12 sessions including a poster session. A wide range of topics within the MEMS research and development area was covered. Starting from simulation and materials research, the spectrum was broadened by fabrication and process technologies, as well as sensor research for physical, biological, and chemical devices. Moreover, optical and RF MEMS were presented. Related to applications, work on smart system integration, microfluidic systems, actuators, energy scavenging, and low-power architectures was discussed. Finally, applications — mainly in the field of aerospace and logistics — were treated. The broad range of topics shows the highly interdisciplinary work done in the field of MEMS. Moreover, the variety of themes within the conference enabled discussions between researchers with different backgrounds.

The high quality of the oral and poster presentations has to be mentioned in general; however, I would like to highlight the three invited presentations of this conference. Liv Furuberg from SINTEF, Norway, gave a talk entitled “The MicroActive project: automatic detection of disease-related molecular cell activity.” Ulrich Schmid from Saarland University, Germany, gave a presentation entitled “LTCC: a fascinating technology platform for miniaturized devices.” And last but not least, Daniel Lopez from Bell Labs., USA, delivered a presentation on “Two-dimensional MEMS array for maskless lithography and wavefront modulation.”

Moreover, I appreciated not only the open and fruitful discussions within the sessions, but also discussion outside the conference rooms, inspired by the nice location. I would like to thank all participants for their individual contributions which made the conference a successful event in the international conference calendar.

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**Thomas Becker**

