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MEMS/NEMS Technology and Applications

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Introduction

These proceedings result from the 2009 International Conference on Optical Instrument and Technology (OIT'09), held in Shanghai, China, 19–21 October 2009. The conference was the second event following the success of OIT'08 and it was sponsored and supported by SPIE, China Instrument and Control Society (CIS), and the Chinese Optical Society (COS).

OIT'09 was a professional conference which was combined with the exhibition of The 20th Fair for Measurement Instrumentation and Automation (MICONEX).

OIT'09 focused on instrument science and related technology involved in many technical aspects such as detection; observation; information collection, transfer and storage; communication; economization on energy; environmental protection; inspection and prevention of food security, traffic safety and mine safety; measure and control for aviation and space engineering, etc.

These proceedings, a collection of eight volumes, contain the accepted oral and poster papers presented at OIT'09. It is truly a great pleasure for me that the most recent progress in optical instrumentation technology is reported in the OIT'09 proceedings. I firmly believe that the papers included in these volumes will provide reference information in up-to-date techniques of optical instrumentation technology.

The OIT'09 conference collected over 630 papers from different countries or regions of the world. Over 400 authors came from more than 14 countries, including Canada, Iran, Japan, Russia, Singapore, USA, Sweden, Switzerland, Pakistan, the Netherlands, Republic of Korea, Slovenia, Germany and China. Published in these eight volumes of the Proceedings of SPIE are close to 455 papers. The technical fields of the presented papers at the conference cover a lot of current advanced technologies. The cutting-edge technologies and applications of optical instruments are discussed. Quite a few invited papers describe exciting achievements in the fields of optical instrument technology. It is evident that the OIT'09 conference has provided an excellent platform for participants and colleagues in research and development to share the technical progress and to develop new partnerships or broaden new markets.

SPIE has given great support to organize this international conference by collaborating with us in the whole organizing process from paper collection to the proceedings publication. COS has provided enough support and assistance.

Finally, on behalf of CIS and conference general chairs, I would like to heartily thank our supporters and committee members for all they have done for this conference. Thanks also go to all authors for their contributions; to all of the

participants and friends for their interest, especially those who have traveled great distances and taken time from their busy schedules to attend the conference. Thanks also go to the staff of COS for their support. I am also grateful to the SPIE staff for their support and collaboration in publishing these eight volumes.

Songlin Zhuang
Chairman, China Instrument and Control Society (CIS)