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Design, Manufacturing, and Testing of Micro- and Nano-Optical Devices and Systems

Tianchun Ye
Sen Han
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Editors

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Introduction

The 5th International Symposium on Advanced Optical Manufacturing and Testing technologies (AOMATT) was held 26–29 April 2010 at Dalian World Expo Center in the beautiful city of Dalian, China. This is the same venue where the 2007 World Economy Forum of DAVOS was held. AOMATT was initiated in 2000 to provide a forum for international researchers, designers, managers, and manufacturers to discuss related technologies in this area. The first meeting, AOMATT 2000, was held in Chengdu, China. Since then, AOMATT has increasingly become a must-attend conference for the international optical design, manufacturing, and testing communities. AOMATT has developed a reputation for excellent plenary sessions, quality oral and poster papers, and fun social events.

AOMATT 2010 was opened with a grand opening ceremony and outstanding plenary sessions. About 1,000 delegates attended the opening ceremony and plenary sessions in the multi-functional hall of the Dalian World Expo Center. Honored guests and sponsoring and cooperating organization representatives, including Professor Qing Yu Weng representing the National Science Foundation of China (NSFC), Dr. Jinxue Wang representing SPIE, technical cosponsor of AOMATT, and Dr. James C. Wyant, Dean of Optical Sciences at the University of Arizona and 2010 president of OSA, gave welcome and congratulation speeches at the opening ceremony. Professor Guofan Jin, an academician of the Chinese Academy of Engineering and cochair of the symposium, gave an opening speech in written form on behalf of the Chinese Optical Society (COS). Plenary speakers included Dr. Roland Geyl from REOSC of France, Dr. Hong Minghui from the National University of Singapore, Dr. Yoshiharu Namba from Chubu University of Japan, Dr. James Wyant from the University of Arizona in the USA, Dr. Thomas Franz from the NTG Company in Germany, Professor Fengting Sang, an academician from the Dalian Institute of Chemical Physics, Chinese Academy of Sciences (CAS), and Professor Xiangqun Cui, an academician from the Nanjing Institute of Astronomical Optics and Technology, National Astronomical Observatory, CAS. Other academicians attending AOMATT 2010 included: Wenhan Jiang from IOE of CAS, Can Li from DICP of CAS, Junhua Pan from Suzhou University, Liwei Zhou from Beijing Institute of Technology, and Yijun Zhao from the National University of Defense Technology.

AOMATT 2010 received more than 1,300 abstracts. After careful reviews by the conference chairs and committee members and an invited reviewer, more than 700 papers were accepted for presentation at the conference and publication in the Proceedings of SPIE. The AOMATT 2010 proceedings are divided into six volumes - 7654–7659 - and correspond to the six conferences of the symposium, namely, Large Mirrors and Telescopes; Advanced Optical Manufacturing Technologies; Optical Test and Measurement Technology and Equipment;

Design, Manufacturing, and Testing of Micro- and Nano-Optical Devices and Systems; Optical Materials, Detectors, Imagers, and Energy Conversion Technology; and Smart Structures and Materials in Manufacturing and Testing.

There is continued improvement in paper quality compared to previous AOMATT symposiums. Many papers report cutting-edge research and development. More authors are from well-known universities, research institutions, and corporations around the world. We believe AOMATT 2010 made another important step in establishing itself as an essential international symposium for the international optical design, manufacturing, and testing communities.

We would like to express our sincere appreciation to COS—The Chinese Optical Society, IOE—Institute of Optics and Electronics, the Chinese Academy of Sciences, and to SPIE for supporting AOMATT. We want to thank all the authors and participants for attending the symposium and sharing their research with colleagues around the world. We especially thank IOE and Dr. Yudong Zhang, President of IOE, for their steadfast support of AOMATT since its inception in 2000.

We look forward to your participation and support of the 6th AOMATT in 2012. Location, time, and the call for papers will be posted on SPIE and IOE websites soon.

Li Yang
Secretary General, AOMATT 2010
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