



AOMATT 2016 **CALL FOR PAPERS** **2nd Announcement**

The 8th International Symposium on Advanced Optical Manufacturing and Testing Technologies (AOMATT 2016) will be held in April 26-29, 2016 in Suzhou, China, a beautiful city about 50 miles away from Shanghai. AOMATT is a well-known international symposium on the design, manufacturing, and testing of optical components and systems. It features high quality plenary presentations by leading experts, parallel oral sessions, poster sessions, banquet, and tours to local attractions. All accepted papers will be published in SPIE Proceedings and SPIE Digital Library. SPIE Proceeding papers are indexed by major scientific and engineering databases including INSPEC, EI Compendex, International Aerospace Abstracts, etc. AOMATT 2016 is promised to be a very valuable and productive event. We welcome your attendance and look forward to seeing you in Suzhou!

I. Symposium Organization

Approval by:

China Association for Sciences and Technology

Sponsors:

COS - The Chinese Optical Society (COS)

IOE - Institute of Optics and Electronics (IOE),
Chinese Academy of Sciences (CAS)

SPIE - The International Society for Optical Engineering
(Technical Co-sponsor)

Supported by:

Ministry of Science and Technology of China
Institute of Optics and Electronics (IOE),
Chinese Academy of Sciences
National Natural Science Foundation of China

Symposium Honorary Chair:

Guangcan GUO, President of Chinese Optical Society (COS), Academician, Chinese Academy of Sciences

Symposium General Chair:

Liwei ZHOU, President of Beijing Optical Society (BOS), Academician, Chinese Academy of Engineering, Beijing Institute of Technology

Symposium General Co-Chair:

Jianlin CAO, Vice Minister of China Ministry of Science and Technology

David R. Silva, Director of the National Optical Astronomy Observatory (NOAO)

Eric Mazur, Professor of Physics and Applied Physics at Harvard University, Dean of Applied Physics, USA

H. Philip Stahl, SPIE President 2014, USA

Yinnan YUAN, Vice President of Soochow University

Yudong ZHANG, President of Chengdu Branch, Chinese Academy of Sciences, Director of Academic Committee of Institute of Optics and Electronics

Local Supporting Organizer:

Soochow University

Supporting Organization:

National University of Defense Technology
University of Electronic Science and Technology of China
State Key Laboratory of Optical Technologies for Nano-Fabrication and Micro-Engineering
Key Laboratory of Adaptive Optics, Chinese Academy of Sciences

Beijing Institute of Technology

Changchun University of Science and Technology

The Hong Kong Polytechnic University

Zhejiang Quartz Crystal Optoelectronic Technology Co., LTD

Suzhou Association for Sciences and Technology

Optical society of Sichuan Province

Managed by:

Committee of Optical Manufacturing Technology (COMT),
COS (China)

International Advisory Committee:

Wenhan JIANG, Academician of Chinese Academy of Engineering, Institute of Optics and Electronics (IOE)
Chinese Academia of Sciences

Junhua PAN, Academician of Chinese Academy of Engineering, Soochow University

Marc Cayrel, Project Manager for E-ELT Optomechanics
Liangchi ZHANG, Professorial Fellow of Australian,
University of New South Wales Australia

Ralf D. Geckeler, Head of the Length and Angle Graduations Group, Physikalisch-Technische Bundesanstalt, Germany

Oltmann Riemer, Head of the Laboratory for Precision Machining co-ordinating and administrating the entire R&D work of LFM

Organizing Committee:

Enhai LIU, Vice President of Institute of Optics and Electronics (IOE) Chinese Academy of Sciences (Chair)
Jinghua CAO, Deputy Director-general of CAS Bureau of International Cooperation (Co-chair)
Libin XIANG, President of Shanghai Engineering Center for Microsatellites (Co-chair)
Yadong JIANG, Director of School of Optoelectronic Information, University of Electronic Science and Technology of China (Co-chair)
Shinan QIAN, Brookhaven National Laboratory (USA)
Myung K. Cho, NOAO (USA)
Qinhua WANG, Executive Director of College of Physics, Optoelectronics and Energy

Program Committee:

Xiangang LUO, Vice Present of Institute of Optics and Electronics, CAS (Chair)
Yuwen QIN, Director of Information Department, National Natural Science Foundation of China (Co-chair)
Jingchi YU, Professor of Soochow University (Co-chair)

Symposium General Secretary:

Li YANG, Committee of Optical Manufacturing Technology (COMT), COS (China)
Jinxue WANG, SPIE (USA)

II. Important Dates

Abstract Due: January 30, 2016
Manuscript Due: April 20, 2016
Registration Date: April 25, 2016
Symposium Date: April 26-29, 2016
SPIE Proceeding Publish Date: Before September 30, 2016

III. Conference Location

Suzhou International Conference Center, Daoqian Road 100, Suzhou

IV. Conference Program

2014.4.25		8:00-20:00 Registration Location: Lobby of Suzhou International Conference Center
4.26	All Day	8:30-9:00 Opening Ceremony 9:00-12:00; 13:00-17:00 Plenary Presentation
	Evening	18:30-20:30 Buffet Reception
4.27	All Day	8:30-12:00/13:00-17:00 Conference Report Location: Suzhou International Conference Center

	Evening	Welcome Party Location: Suzhou International Conference Center
4.28	Morning	8:30-12:00: WORKSHOP Foreign manufacturers technical seminar Location: Room Fengle Preparation of Poster: Showroom of Suzhou Conference Center
	Afternoon	13:00-17:00: Poster Room: Showroom of Suzhou International Conference Center
2016.4.29		Visiting of Local Research Labs

V. Plenary Presentations

April 26: 9:00-12:00, 13:00-17:00
 Suzhou International Conference Center



Less is More: Extreme Optics with Zero Refractive Index
Dr. Eric Mazur, Harvard University
 Balkanski Professor of Physics and Applied Physics at Harvard University and Area Dean of Applied Physics



Large Optical Telescopes in the Era of Large Wide-field
Dr. David R. Silva,
 Director, National Optical Astronomy Observatory (NOAO)



The European Extremely Large Telescope (E-ELT) Revolution is under construction
Dr. Marc Cayrel, European Southern Observatory (ESO)
 Project Manager, E-ELT Optomechanics



Ultra-precision Lens Fabrication via Moulding: Advances and Challenges
Dr. Liangchi ZHANG
 University of New South Wales
 Professorial Fellow of Australian, Head of Lab for Precision & Nano Processing Technologies, UNSW Australia



Advancing Ultra Precision Machining to High Performance
Dr.-Ing. Oltmann Riemer
 University of Bremen Head of the Laboratory for Precision Machining co-ordinating and administrating the entire R&D work of LFM



Micro/nano Optics for Flexible Functional Devices: Today and Future
Dr. Linsen CHEN

Soochow University, Chief of National United Engineering Research Center of Digital Optical Imaging and Display, and Director of Holography & Optical Information Processing Committee of Chinese Optical Society



New Angles on Angle Metrology: Approaching Fundamental Limits
Dr. Ralf D. Geckeler

Geckeler, Physikalisch-Technische Bundesanstalt, Germany
Head of Length and Angle Graduations Group



Functional Photonic Nanostructures: From Thin Films and Slits to Catenaries

Dr. Xiangang LUO
Vice President of Institute of Optics and Electronics (IOE), CAS
Director of State Key Laboratory of Optical Technologies for Nano-Fabrication and

Micro-Engineering

VI. Conferences and Chairs

Conference 1: Large Mirror and Telescopes

Myung Cho, NOAO (USA)

Bin FAN, Institute of Optics and Electronics, CAS (China)

AOMATT2016 SPIE Proceeding Vol. 9682

We invite you to submit papers on the following and related topics to this conference.

- Mirrors for large astronomical and space telescopes
- Light-weighted mirror technology
- Large deployable mirror and telescopes
- New and innovative mirror and telescope designs
- Advanced testing methods for large mirror
- Support systems and structures
- New material for large mirrors
- Innovative concepts and designs

Conference 2: Advanced Optical Manufacturing Technologies

Wenhan JIANG, Academician, Chinese Academy of Engineering, IOE, CAS (China)

Li YANG, COMT, COS (China)

Oltmann Riemer, IWT Univ. of Bremen (Germany)

Shengyi LI, National Univ. of Defense Technology (China)

Yongjian WAN, Institute of Optics and Electronics, CAS (China)

AOMATT2016 SPIE Proceeding Vol. 9683

Please submit papers on the following and related topics to this conference.

- Advanced optical manufacturing technologies
- Aspheric optics design, manufacturing and testing
- Ultra-precision freeform surfaces design, manufacturing and Testing
- Super-precision optical manufacturing
- Optical thin film coatings
- Advanced Diamond turning technology
- Magnetorheological Optical Processing
- Advanced ion beam finishing and atmospheric plasma technology
- EEM (Elastic Emission Machining) and CVM (Chemical Vaporization Machining) processing technology for super smooth surface with atomic lever
- Optical design and simulation software and tool
- Optoelectronics components and modules integration and manufacturing
- Opto-mechanical components and devices
- Laser manufacturing technology and equipment

Conference 3: Optical Test, Measurement Technology, and Equipment

Yudong ZHANG, Institute of Optics and Electronics, CAS (China)

Fan WU, Institute of Optics and Electronics, CAS (China)

Ming XU, Fudan University (China)

Sandy To, Hong Kong Polytechnic University (China)

AOMATT2016 SPIE Proceeding Vol. 9684

Please submit papers on the following and related topics to this conference.

- Test for optical freeform surface
- Test for aspheric optical surface
- Test for super-precision optical surface
- Measurement for super smooth surface
- Measurement of optical thin film
- Test with infrared technologies
- Optical contamination
- Optical test and measurement for nanometer technology
- New and innovative metrology and equipment
- Analysis and modeling tools and software

Conference 4: Design, Manufacturing and Testing of Micro and Nano Optical Devices and Systems

Tianchun YE, Director of Institute of Microelectronics, CAS (China)

Tingwen XING, Institute of Optics and Electronics (IOE), CAS (China)

Song HU, Institute of Optics and Electronics, CAS (China)

AOMATT2016 SPIE Proceeding Vol. 9685

Papers on the following and related topics should be

submitted to this conference.

- Micro and nano optical system design, manufacturing and testing
- Nano metrology technology and tools
- Nanoscale imaging and sensing technologies
- Nanofluidics device design, fabrication and testing
- Fabrication of MEMS/MOEMS devices
- Testing and Characterization of MEMS/MOEMS
- MEMS/MOEMS reliability
- Packaging of MEMS/MOEMS devices
- Next generation lithography
- EUVL research and development
- Advances in thin film coating for MEMS
- Microfluidics, BioMEMS, and Medical Microsystems

Conference 5: Opto-Electronics Material and Devices for Sensing and Imaging

Yadong JIANG, University of Electronic Science and Technology of China

Bernard Kippelen, Center of Organic Photonics and Electronics, Georgia Institute of Technology (USA)

Junsheng YU, State Key Laboratory of Electronic Thin Films and Integrated Devices (China)

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The primary topics for this conference are as following:

- Properties of optoelectronic materials
- Nano materials for optoelectronic device application
- Properties of sensing materials in detector technology
- Detector design, integration and fusion
- Detector data collection and analysis
- Vision and image processing
- Novel display and processing techniques
- Organic and polymer light emitting device for displays and lighting
- LED and OLED related technologies
- Thin film transistors technology
- Organic and polymer memory devices

Conference 6: Smart Structure and Materials in Advanced Optical Technology

Xiangang LUO, Institute of Optics and Electronics, CAS

Minghui HONG, National University of Singapore (Singapore)

Min GU, Swinburne University of Technology (Australia)

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Papers on the following and related topics are welcome for this conference.

- Smart structures and materials
- Metal-material design, manufacture, characterization and application
- Optical fiber sensors and applications
- Plasmonic devices and sensors
- Directive antenna
- Design, fabrication, and application of nanostructures
- Passive and active vibration isolation systems
- Shape memory alloys

- SMA- and piezo-based materials and systems
- Aircraft, MAV/UAV and morphing systems

Conference 7: Sub-nanometer Accuracy Measurement for Synchrotron Optics and X-ray Optics

Shinan QIAN, Brookhaven National Laboratory (USA)

Mourad Idir, Brookhaven National Laboratory (USA)

Daniele Cocco, SLAC National Accelerator

Laboratory (USA)

Tiqiao XIAO, Shanghai Synchrotron Radiation Facility (China)

Kazuto Yamauchi, University of Osaka (Japan)

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Papers on the following and related topics are welcome for this conference.

- Requirements and specifications for synchrotron radiation and free electron laser mirrors, for wavefront preserving and nano-focusing x-ray mirrors
- Measurement science and technology for sub-nanometer (or sub-50-nrad) accuracy for meter-scale plane, spherical and aspherical-mirrors
- Design and measurement of next-generation surface profilometer with:
 - Sub-nanometer accuracy
 - Easy and fast calibration process
 - Possibility to measure high-spatial-frequency
 - Small aperture autocollimator development with ultra high accuracy
- Calibration methods and devices for sub-nanometer accuracy
- Manufacturing of sub-nanometer accuracy mirrors
- High accuracy in-situ metrology at beam lines

WORKSHOP-Innovation in Emerging Photon Industry

Wanyin DUAN, Fudan University (China)

Wu Fan, Institute of Optics and Electronics (China)

Qiming XIN, Beijing Institute of Technology (China)

VII. Manuscript Submission Information

Please submit your paper online to AOMATT system on <http://www.aomatt.org/>. Authors of accepted papers (oral and poster) will receive notifications and instructions on manuscript submission to mySPIE system following assigned link for each SPIE proceeding volume.

Manuscripts must follow the Format Template from SPIE available for download at www.aomatt.org.

VIII. Hotel Information

Hotel reservation forms are available for download at www.aomatt.org.

Suzhou International Conference Center Hotel **Daoqian Road 100, Suzhou**

Business Single Room: 338 RMB/ Include breakfast
Business Twin Room: 338 RMB/ Include breakfast

Pan Pacific Hotel Suzhou **259 Xinshi Road, Suzhou**

Business Single Room: 500 RMB/ Include one breakfast
Business Twin Room: 500 RMB/ Include one breakfast

Contact: Iris ZHU (Sales manager-corporate)

For updated or more symposium information, registration, hotel, please visit symposium web at <http://www.aomatt.org/> or <http://www.ioe.ac.cn/>

IX. Contact

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