



Light Conference on Advanced Optical Manufacturing Opening Soon!

The first Light Conference on Advanced Optical Manufacturing aims to gather top entrepreneurs, scientists, professionals, suppliers, investors, and policymakers from around the world in this field, to create an international high-level exchange platform for optical manufacturing. It seeks to discuss the future development trends of optical manufacturing, promote technological innovation, and facilitate industrial upgrading. This forum will adhere to the important idea of enterprises being the main body of technological innovation, address real needs, explore real problems, connect industry-academia-research networks, discover business opportunities, expand business, and promote international cooperation and exchange.

All details can be found at the conference website: <https://aomlightconference.cn/en/>.

- **Honorary chair**



Jianlin Cao
Ji Hua Laboratory



Shengli Sun
Shanghai Institute
of Technical
Physics of the
Chinese Academy
of Sciences

- **General Chair**



Dame Jane Jiang
University of
Huddersfield



Xuejun Zhang
Changchun Institute
of Optics, Fine
Mechanics and
Physics, Chinese
Academy of
Sciences



Wolfgang Osten
University of
Stuttgart



Matt Davies
Moore
Nanotechnology
Systems

- **Plenary Talk (Sort by initials of last names)**



Matt Davies
Moore
Nanotechnology
Systems



Rainer Gadow
University of
Stuttgart



Kazuhiko Hidaka
Mitutoyo



Xuejun Zhang
Changchun Institute
of Optics, Fine
Mechanics and
Physics, Chinese
Academy of
Sciences

• **Invited Talk (Sort by initials of last names)**



Fang Cheng
SIMTech



Gengliang Chen
Shenzhen
Technology
University



Yuanliu Chen
Zhejiang University



Hui Deng
South University of
Science and
Technology of China



Paul Dumas
QED Technologies



Ralf Dupont
Levicron GmbH



Kuang-Chao Fan
Dalian University of
Technology/Taiwan
University



Yingchun Guan
Beihang University



Sen Han
University of
Shanghai for
Science and
Technology



Chao He
University of
Oxford



Chengwei Kang
Xi'an Jiaotong
University



Renke Kang
Dalian University of
Technology



Jeff Kuhn
University of
Hawaii



Xinyi Le
Shanghai Jiao
Tong University



Ser Yong Lim
Singapore Institute
of Technology/
ASTAR



Yuanzhi Liu
Ji Hua Laboratory



Donglin Ma
Huazhong
University of
Science and
Technology



**Tomofumi
Morishita**
Panasonic



Xiang Peng
Shenzhen
University



Nikolay V. Petrov
Harbin Engineering
University



Paul Scott
University of
Huddersfield



Elena Stoykova
Institute of Optical
Materials and
Technologies,
Bulgarian
Academy of
Sciences



Xiaoxi Tian
Changchun
Champion Optics
Co. Ltd



Valery V. Tuchin
Saratov State
University (National
Research University
of Russia)



Xinwei Wang
Iowa State
University



Zhanshan Wang
Tongji University



Fulin Wu
HighMark Optics



Xianzhe Xu
FANUC



Hong Yan
Shanghai
Advanced Institute of
Finance (SAIF),
Shanghai Jiao
Tong University



Yuan Yang
Taylor Hobson



Junjie Zhang
Harbin Institute of
Technology



Lei Zhang
ZYGO



Xiangchao Zhang
Fudan University



Zibei Zhang
Precitech



Chunyu Zhao
Arizona Optical
Metrology



Lixun Zhou
Changchun
Changguang
KingCera Composites
Co. Ltd

- Industry Technical Report



- Committee



- Participants



- Registration Now

Attendee within mainland China	2500 RMB
Student within mainland China	1500 RMB
Attendee outside mainland China	350 USD
Student outside mainland China	210 USD

• Program

Date	Start Time	End Time	Content	Remarks	负责人
16 April	9:00	11:00	Conference Registration	Leading Optics Rugao Factory	
	11:00	12:00	Welcome Lunch		
	12:00	12:30	Admission		
	12:30	12:40	Welcome Address by the Chair	Prof. Dame Jane Jiang (University of Huddersfield)	
	12:40	12:50	Welcome Address by the Editor-in-Chief of "Light: Advanced Manufacturing"	Prof. Wolfgang Osten (University of Stuttgart)	
	12:50	13:20	Welcome Speech	Rugao Government; Changchun Institute of Optics, Fine Mechanics and Physics; Shanghai Jiao Tong University; Leading Optics Ltd.	
	13:20	13:30	Group Photo		
	13:30	14:00	Plenary I: Ultraprecision Polishing Asphere and Freedom Optics Using Robot Based CCOS & MRF	Prof. Xuejun Zhang (Changchun Institute of Optics, Fine Mechanics and Physics, Chinese Academy of Sciences)	
	14:00	14:30	Plenary II: Advanced Thermal Spraying for Ceramic Coatings as Enabling Technologies in Pproduct Engineering - 25 Years of Scientific and Technological Cooperation in Process and Product Development Between IFKB and Important Industries	Prof. Rainer Gadow (University of Stuttgart)	
	14:30	15:00	Plenary III: Ultra-Precision Grinding of Ceramics for Optical Molds and Reflective Optics	Dr. Matt Davies (Moore Nanotech)	
	15:00	15:20	Tea Break		
	15:20	15:30	Introduction to Rugao	Mr. Minghao Wang (Rugao City)	
	15:30	15:40	Signing Ceremony		
	15:40	16:00	Keynote: Metrology to Support Nanomanufacturing	Dr. Kazuhiko Hidaka (Deputy Head of R&D Division, Mitutoyo)	
	16:00	16:20	Keynote: Title TBC	Dr. Zhe Zhang (CEO of Leading Optics), Dr. Xinquan Zhang (CTO of Leading Optics, Associate Prof. of Shanghai Jiao Tong University)	
	16:20	16:50	Keynote: Chinese Capital Market and Optoelectronic Industry Investment	Prof. Hong Yan (Shanghai Jiao Tong University)	
16:50	17:10	Tea Break			
17:10	18:00	Roundtable Discussion (Chaired by Prof. Dame Jane Jiang)	Participants:		
18:00	18:30	Shuttle Bus to Dinner Venue			
18:30	20:30	Banquet			
Date	Start Time	End Time	Content	Speakers	Session Chair
17 April	9:00	9:20	Laser Thin Film Components Technology	Prof. Zhanshan Wang (Tongji University)	Prof. Julong Yuan (Zhejiang University of Technology)
	9:20	9:40	Fabricating Ultra-large Optical Telescopes	Prof. Jeff Kuhn (University of Hawaii)	
	9:40	9:55	Subaperture Stitching Interferometry Brings Enhanced Accuracy and Lateral Resolution to Sphere, Asphere and Freeform Surface Metrology	Paul Dumas (QED Technologies)	
	9:55	10:10	Nano Measurement Accuracy in Asphere and Freeform Surfaces	Tomofumi Morishita (Panasonic)	
	10:10	10:30	Overview of Ji Hua Laboratory	Prof. Yuanzhi Liu (Ji Hua Laboratory)	
	10:30	10:50	Tea Break		
	10:50	11:10	Ultra-precision Machining Technology and Equipment of Semiconductor Substrate	Prof. Renke Kang (Dalian University of Technology)	Prof. Sen Han (University of Shanghai for Science and Technology/HL-instruments)
	11:10	11:30	The CGH Combined with Precision Mechanics and Special Data Processing Offers A Complete Solution to Asphere Metrology	Dr. Chunyu Zhao (Arizona Optical Metrology)	
	11:30	11:45	Genetic Code and Population Based Multi-Objective Optimization for AI Decision Basis	Dr. Ralf Dupont (Levicron GmbH)	
	11:45	12:00	3DPlus Imaging Technologies	Prof. Fang Cheng (SIMTech)	
12:00	13:00	Lunch			

Manufacturing Forum	Start Time	End Time	Content	Speakers	Session Chair
17 April	13:00	13:20	Tissue Optical Clearing Technologies: Perspectives for in Vivo Biomedical Applications	Prof. Valery Tuchin (Saratov State University)	Prof. Yifan Dai (The National University of Defense Technology)
	13:20	13:40	Thermal and Mechanical Responses in Laser-assisted Near-field Nonmanufacturing	Prof. Xinwei Wang (Iowa State University)	
	13:40	14:00	Highly Efficient Figuring of X-Ray Mirrors Using a Jet Type Atmosphere Plasma	Prof. Hui Deng (Southern University of Science and Technology)	
	14:00	14:20	Vectorial Adaptive Optics	Dr. Chao He (University of Oxford)	
	14:20	14:40	Tea Break		
	14:40	15:00	In-Process Measurement and Control for Ultra-Precision Cutting	Prof. Yuanliu Chen (Zhejiang University)	Prof. Hui Deng (Southern University of Science and Technology)
	15:00	15:20	7-Axis+ Synchronization-Based High Performance Laser Micromachining of Large Area Curved Surface	Prof. Junjie Zhang (Harbin Institute of Technology)	
	15:20	15:40	Recent Development on Engineering Functional Surfaces by Laser Microprocessing	Prof. Yingchun Guan (Beihang University)	
15:40	16:00	Mechanism and Process of Ultra-precision Machining on Complex Structural Parts	Prof. Chengwei Kang (Xi'an Jiaotong University)		
Metrology Forum	Start Time	End Time	Content	Speakers	Session Chair
17 April	13:00	13:20	Large Aperture Laser Interferometer: Technology and Applications	Prof. Sen Han (University of Shanghai for Science and Technology/HL-instruments)	Prof. Xiangchao Zhang (Fudan University)
	13:20	13:40	Reconfigurable Multi-Degree-Of-Freedom Laser Measuring Systems for The Accuracy Assessment of Precision Machines	Prof. Guangzhao Fan (Dalian University of Technology/Taiwan University)	
	13:40	14:00	3D Imaging Based on TI-DLP®	Prof. Xiang Peng (Shenzhen University/Anhua Optoelectronics)	
	14:00	14:20	In situ Nano Metrology of Large Lens/Mirrors based on Atomic Force Microscopy	Prof. Gengliang Chen (Shenzhen Technology University)	
	14:20	14:40	Tea Break		
	14:40	15:00	Non-Imaging Freeform Optics Design for Beam Shaping	Prof. Donglin Ma (Huazhong University of Science and Technology)	Prof. Guangzhao Fan (Dalian University of Technology / Taiwan University)
	15:00	15:20	Laser Speckle Photometry as A Tool for Non-Destructive Testing	Prof. Elena Stoykova (Institute of Optical Materials and Technologies, Bulgarian Academy of Sciences)	
	15:20	15:40	Deterministic Form-Position Measurement of Freeform Optics Using Deflectometry	Prof. Xiangchao Zhang (Fudan University)	
	15:40	16:00	Multifunctional Spiral Zone Plates for Generation of Vortex THz Beams Based on Single-Walled Carbon Nanotubes	Prof. Nikolay V. Petrov (Harbin Engineering University)	
Industrial Forum	Start Time	End Time	Content	Speakers	Session Chair
17 April	13:00	13:20	Qualifire - A New Generation of Phase Shifting Interferometry	Dr. Lei Zhang (Application Engineer, ZYGO)	Dr. Duo Li (Shanghai Jiao Tong University)
	13:20	13:40	Manufacturing Technology and Application of Precision Silicon Carbide Ceramics	Lixun Zhou (Manager, Changchun Changguang KingCera Composites Co. Ltd)	
	13:40	14:00	Application of Three-Dimensional Non-Contact Measurement Technology in Surface Form Error Measurement of Optical Freeform Surface	Dr. Yuan Yang (Senior Application Specialist, Taylor Hobson)	
	14:00	14:20	LLM driven Agile Design and Development for Manufacturing	Prof. Xinyi Le (Shanghai Jiao Tong University)	
	14:20	14:40	Tea Break		
	14:40	15:00	Innovative Patterned Coating Technology: Exploration From Laboratory to Market Application	Dr. Xiaoxi Tian (CTO, Changchun Champion Optics Co. Ltd)	Dr. Cheng Chen (Shanghai Institute of Optics and Fine Mechanics)
	15:00	15:20	FANUC ROBOSHOT in the Optics Industry	Xianzhe Xu (FANUC)	
	15:20	15:40	Introduction of FTS5000 and Its Progress in Machining Lenslet Arrays and HUD Molds	Zibei Zhang (China Sales manager, Precitech)	
	15:40	16:00	The Application of Robot in Ultra-Precision Optical Machining	Fulin Wu (CEO, HighMark Optics Precision Machinery (Hangzhou) Co. Ltd.)	
17 April	16:00	16:30	Closing Ceremony		