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Yongtian Wang Yunlong Sheng Kimio Tatsuno Editors

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# Contents

# Part One

- xiii Symposium Committees
- xv Conference Committee
- xvii Introduction

# SESSION 1 MICRO- AND NANO-OPTICS

- 7506 02 **Diffractive optics with plasmonics and metamaterials (Invited Paper)** [7506-34] I.-M. Lee, H. Kim, J. Park, D. Choi, B. Lee, Seoul National Univ. (Korea, Republic of)
- Brightness field and luminance distribution of light guiding plate using micro molding
  [7506-31]
   C.-F. Huang, Taipei Medical Univ. (Taiwan, China) and Taipei Medical Univ. Hospital (Taiwan, China); J.-L. Lee, Lunghwa Univ. of Science and Technology (Taiwan, China); Y.-K. Shen, Taipei Medical Univ. (Taiwan, China); Y. Lin, Takming Univ. of Science and Technology (Taiwan, China); C.-K. Wu, National Taiwan Ocean Univ. (Taiwan, China)

# SESSION 2 OPTICAL MEASUREMENT AND INSTRUMENT

- Activity at Instrument Technology Research Center (ITRC) (Invited Paper) [7506-150]
   S. W. Li, F. Z. Chen, D. Y. Chiang, D. P. Tsai, Instrument Technology Research Ctr. (Taiwan, China)
- Analog mean delay method (AMD) for real-time fluorescence lifetime microscopy (FLIM) (Invited Paper) [7506-147]
   S. Moon, Y. Won, D. Y. Kim, Gwangju Institute of Science and Technology (Korea, Republic of)
- 7506 06 Zooming effect of three-dimensional shape measurement system using projection method [7506-137]
   S. Uchida, H. Zhu, A. K. Yang, J.-N. Liu, Southeast Univ. (China); Y. Uchida, Aichi Institute of Technology (Japan)
- 7506 07 Study on the effects of noises on the measurement results of nanoparticles' effective diameter and polydispersity using PCS [7506-136]
   G. Wu, J. Xiang, G. Yang, P. Han, South China Normal Univ. (China)
- 7506 08 **Principle and application of portable NIR tea drinks analyzer** [7506-98] L. Jiang, H. Chen, F. Liu, China Jiliang Univ. (China)

# SESSION 3 OCT AND SPECTROMETRY

7506 09 **Progress of OCT and its applications (Invited Paper)** [7506-20] M. Ohmi, M. Haruna, Osaka Univ. (Japan)

- 7506 0A Time-frequency distributions in spectroscopic Fourier-domain optical coherence tomography [7506-84]
   L. Wang, M. Guan, Y. Yang, Hangzhou Dianzi Univ. (China); M. Chen, Zhejiang Univ. (China)
- 7506 0B **Design of a continual zoom system with high speed for hyperspectral imagers** [7506-100] Q. Lu, Y. Ji, W. Shen, Soochow Univ. (China)

#### SESSION 4 OPTICAL SYSTEM DESIGN

- 7506 0C Information technologies in CAD system for lens design (Invited Paper) [7506-19] I. L. Livshits, I. G. Bronchtein, V. N. Vasiliev, Saint-Petersburg State Univ. of Information Technologies, Mechanics and Optics (Russian Federation)
- 7506 0D An optical design of partitioning the lens surface area [7506-94] N. Sakagami, K. Hatade, Nalux Co., Ltd. (Japan)
- 7506 OE **Design of visual optical system for eye and vision examination** [7506-108] X. Cheng, J. Ma, H. Liao, L. Chen, Tsinghua Univ. (China)
- 7506 OF Design of optical system for autonomous APS star sensors [7506-06]
   F. Wu, Soochow Univ. (China) and Changzhou Institute of Technology (China); W. Shen, Soochow Univ. (China)
- 7506 0G Impact of the temperature gradient on optical system parameters: modeling and analysis [7506-75] H. Chang, Z. Fan, S. Chen, Y. Cao, Harbin Institute of Technology (China)

#### SESSION 5 DISPLAY SYSTEMS

- 7506 0H Integral floating system: new approach of autostereoscopic display (Invited Paper) [7506-97] S.-W. Min, Kyung Hee Univ. (Korea, Republic of)
- 7506 0I Real-time correction and fusion for optical distortions in head-mounted displays (Invited Paper) [7506-131]
   D. Weng, Y. Liu, Y. Wang, Beijing Institute of Technology (China)
- 7506 0J Novel speckle suppression in LCoS based laser projection [7506-23] M. Sun, Z. Lu, Zhejiang Univ. (China)

#### SESSION 6 NOVEL OPTICAL ELEMENTS AND OPTICAL COMMUNICATION

- 7506 0K Holographic optical elements and devices based on polyfunctional photo-thermorefractive glass [7506-117] N. Nikonorov, V. Aseev, Saint-Petersburg State Univ. of Information Technologies, Mechanics and Optics (Russian Federation)
- 7506 OL **Optical properties of liquid prism and its application** [7506-44] J. Wan, Z. Liang, Nanjing Univ. of Posts and Telecommunications (China)

An integrated optical control and communication system for free-space environments
 [7506-77]
 X. Jin, J. E. Barg, J. F. Holzman, Univ. of British Columbia Okanagan (Canada)

7506 0N The design of scanning fiber optical system [7506-125]

- Y. Bai, W. Xiang, P. Zu, Tianjin Univ. (China); X. Li, Tianjin Jinhang Institute of Technical Physics (China); F. Ren, X. Shi, X. Xu, Tianjin Univ. (China)
- An investigation on multiwavelength laser using a semiconductor optical amplifier
   [7506-119]
   Y. Bai, W. Xiang, X. Xu, Z. Wang, F. Ren, X. Shi, Tianjin Univ. (China)
- 7506 OP **Design of laser beam divergence angle program control system** [7506-102] C. Zhang, Y. Jiao, S. Yang, X. Sun, Electronic Engineering Institute (China)

# SESSION 7 OPTICAL TESTING

- 7506 0Q Optimization of the computer-generated hologram in null test of sculptured surface (Invited Paper) [7506-121]
   P. Su, G. Kang, Q. Tan, G. Jin, Tsinghua Univ. (China)
- 7506 OR Lens decenter and tilt measurement by interferogram [7506-114] M.-W. Hung, W.-H. Wu, K.-C. Huang, National Applied Research Labs. (Taiwan, China)
- 7506 0T Stray light analysis and baffle design of remote sensing camera for microsatellite [7506-101] R. Shi, J. Zhou, Y. Ji, W. Shen, Soochow Univ. (China)
- 7506 0U Laser beam collimation testing with defocus grating [7506-88]
   H. Ma, F. Xi, P. Zhou, X. Wang, Y. Ma, X. Xu, Z. Liu, National Univ. of Defense Technology (China)

#### SESSION 8 OTHER DESIGN ISSUES

- 7506 0V On maximum field components in the focal point of a lens (Invited Paper) [7506-151] H. P. Urbach, S. F. Pereira, Delft Univ. of Technology (Netherlands); D. J. Broer, Eindhoven Univ. of Technology (Netherlands)
- 7506 0W Study about AFS swerve mode [7506-104] H. Liu, L. Jiang, Q. Zhao, L. Wang, Zhejiang Univ. of Technology (China)
- 7506 0X **The optimized calculation of driving points distribution in large segmented mirrors** [7506-133] M. Hui, L.-Q. Dong, Y. Zou, F. Yu, Y. Zhao, Beijing Institute of Technology (China)
- 7506 0Y Study on the wavefront coding characteristics by ray tracing method [7506-85] H. Cai, T. Lei, L. Fan, Z. Huang, Tianjin Univ. (China)
- 7506 0Z Design of H-PDLC grating array chopper applied in frequency division multiplexed integrated confocal microscopy [7506-139]
   K. Wen, J. Zheng, G. Sun, D. Liu, L. Chen, S. Zhuang, Univ. of Shanghai for Science and Technology (China)

#### POSTER SESSION: SPECTROMETRY, MICRO, AND PHYSICAL OPTICS

- 7506 10 **Study on infrared imaging spectrometer with large aperture static interferometer** [7506-18] L. Ma, W. Zheng, J. Su, Kunming Institute of Physics (China)
- 7506 11 The development of monitoring system on water polluters by UV/VIS spectroscopy
   [7506-141]
   M. Chang, X. Zhang, L. Xing, Univ. of Shanghai for Science and Technology (China)
- Near-infrared spectroscopy and pattern recognition techniques applied to the identification of Jinhua ham [7506-142]
   H. Li, Z. Zhao, Y. Pang, G. Wu, Hebei Univ. (China); Y. Wang, China National Institute of Standardization (China); X. Li, Hebei Univ. (China)
- 7506 13 Surface plasmon resonance optical sensing for simultaneous multi-channel biological monitoring [7506-08]
   W. Peng, Dalian Univ. of Technology (China); S. Banerji, Y.-C. Kim, K. S. Booksh, Univ. of Delaware (United States)
- 7506 14 Rigorous vector analysis of diffractive microlens by using the finite-difference time-domain method [7506-51]
   Y. Liu, Zhejiang Univ. of Technology (China); H. Liu, Changchun Institute of Optics, Fine Mechanics and Physics (China)
- 7506 15 Realization of Fourier transform imaging spectrometer based on all-reflective optics [7506-148]
   N. Liao, W. Wu, D. Cui, L. Tian, B. Tan, Beijing Institute of Technology (China)

#### POSTER SESSION: PHOTOELECTRONICS AND LASER OPTICS

- 7506 16 **Design of a highly stable LD power supply and a highly reliable protection circuit** [7506-11] M. Zhou, A. Zhang, Z. Cai, H. Xu, Xiamen Univ. (China)
- 7506 17 Impact of lamp instability on rotating compensator based ellipsometry [7506-14]
   C. Hu, Tianjin Univ. (China) and Johannes Kepler Univ. Linz (Austria); L. Sun, P. Zeppenfeld, Johannes Kepler Univ. Linz (Austria); X. Hu, Tianjin Univ. (China)
- 7506 18 **Beam profile of laser pointer (VFL-350) after launching in telecommunication fiber optic** [7506-17]

M. S. Sarollahi, Zanjan (Iran) Telecommunication Co. (Iran, Islamic Republic of)

- 7506 19 High-power blue LED light source system [7506-33] P. Liang, Y. Zheng, Q. Liu, Shijiazhuang Univ. of Economics (China)
- A new polarization multiplexing method for the micro LCOS projector optical system
   [7506-50]
   Q. Liu, W. Zhang, H. Gao, F. Yu, Zhejiang Univ. (China)
- 7506 1B **The design of data acquisition system of the NIRS instrument based on USB** [7506-65] X. Guo, D. Chu, P. Liu, F. Yu, Zhejiang Univ. (China)

7506 1C
 Study and experiment of ship movement simulation for free space laser communication [7506-93]
 T. Wang, Jiangsu Maritime Institute (China); S. Zhuang, Shanghai Univ. for Science and

 Wang, Jiangsu Maritime Institute (China); S. Zhuang, Shanghai Univ. for Science and Technology (China)

- 7506 1D **Demonstration of 80Gbit/s all-optical SOA-based wavelength conversion** [7506-130] N. Jia, K. Zhong, T. Li, Beijing Jiaotong Univ. (China)
- 7506 1E Laser diode end-pumped efficient coupling system based on microlens arrays [7506-12] F. Huang, W. Jia, Y. Wang, J. Hou, W. Dong, Ordnance Engineering College (China)
- 7506 1F A kind of detection method for laser warning annunciators based on tunable laser source in hemisphere space [7506-27]
   H. Shen, G. Li, S. Mao, Y. Wang, J. Liu, Mechanical Engineering College (China)
- 7506 1G **Temperature distribution of laser crystal in end-pumped DPSSL** [7506-29] Y. Zheng, L. Jia, L. Zhang, J. Wen, J. Kang, Shijiazhuang Univ. of Economics (China)
- 7506 1H Laser-diode double-end pumped Tm<sup>3+</sup>:GdVO₄ laser using three-mirror folded cavity [7506-90]
   J. Lin, C. Huang, G. Cai, Xiamen Univ. (China)
- 7506 11 Far field description of laser diode arrays [7506-120] Q. Xu, Y. Han, X. Zeng, Xidian Univ. (China)
- High diffraction efficiency for ultra-short laser pulse by superposed reflection volume phase gratings [7506-124]
   G. Zheng, National Univ. of Defense Technology (China) and Air Force Engineering Univ. (China); J. Tan, Y. He, H. Zheng, National Univ. of Defense Technology (China)
- 7506 1K
   Simulation and analysis of laser coherent combining system based on adaptive fiber optic collimator array [7506-122]
   C. Geng, Key Lab. on Adaptive Optics (China) and Graduate Univ. of the Chinese Academy of Sciences (China); X. Li, Key Lab. on Adaptive Optics (China)
- 7506 1L **The research and design of novel free-space optical communication** [7506-144] J. Wang, Beijing Institute of Graphic Communication (China); X. Yu, Beijing Institute of Technology (China); Y. Li, Beijing Institute of Graphic Communication (China)

# Part Two

# POSTER SESSION: OPTICAL AND ILLUMINATION DESIGN

- 7506 1 M Optical design of a long range dual field of view thermal imaging camera in 3-5μm waveband [7506-04]
   R. Khoei, Islamic Azad Univ. (Iran, Islamic Republic of)
- 7506 1N The optical modeling tool and a simulation method for air turbulence in large opto-mechanical systems [7506-16]
   J. Shi, Institute of Optics and Electronics (China) and Graduate School of the Chinese Academy of Sciences (China); G. Ren, Institute of Optics and Electronics (China)

- 7506 10 **Design and simulation of the surface shape control system for membrane mirror** [7506-35] G. Zhang, M. Tang, Soochow Univ. (China)
- 7506 1P Research and application on imaging technology of line structure light based on confocal microscopy [7506-43] W. Han, Z. Xiao, X. Wang, Guilin Univ. of Electronic Technology (China)
- 7506 1Q **Dome design and coupled thermal-mechanical analysis of supersonic missile** [7506-60] X. Ai, Q. Wei, Graduate Univ. of Chinese Academy of Sciences (China) and Changchun Institute of Optics, Fine Mechanics and Physics (China); H. Jia, Changchun Institute of Optics, Fine Mechanics and Physics (China)
- 7506 1R **Design of signal reception and processing system of embedded ultrasonic endoscope** [7506-86] M. Li, F. Yu, R. Zhang, Y. Li, X. Chen, D. Yu, Tianjin Univ. (China)
- 7506 1S **Baffle design for a Cassegrain telescope** [7506-92] C.-F. Ho, S.-T. Chang, Instrument Technology Research Ctr. (Taiwan, China)
- 7506 1T The design and application of laser triangulation ranging system based on virtual instruments [7506-135] T. Wang, Q. Wang, Beijing Institute of Technology (China)
- Research and hardware implementation of image enhancement algorithm in OLED system [7506-22]
   M. Xu, Shanghai Univ. (China) and Key Lab. of Advanced Displays and System Application (China); K. Li, Y. Fan, Shanghai Univ. (China)
- 7506 1V Analysis and optimization of the stereo system with a biprism adapter [7506-53] X. Li, China Jiliang Univ. (China); R. Wang, The Univ. of Manchester (United Kingdom)
- 7506 1W Fly-eyes illumination analysis [7506-55] W. Zhang, Q. Liu, H. Gao, F. Yu, Zhejiang Univ. (China)
- 7506 1X Monitoring of a small top lighting solar light pipe system [7506-107] Y. Wu, Z. Yue, R. Jin, L. Liu, Univ. of Science and Technology Beijing (China)
- 7506 1Y Compact LED based LCOS optical engine for mobile projection [7506-54] W. Zhang, X. Li, Q. Liu, F. Yu, Zhejiang Univ. (China)
- 7506 1Z **Optical design of optical transfer function instrument** [7506-68] L. Zhang, X. Chen, Y. Chen, Y. Ji, C. Xiang, W. Shen, Soochow Univ. (China) and Jiangsu Key Lab. of Modern Optical Technology (China)

### POSTER SESSION: OPTICAL MEASUREMENT

7506 20 Determination of zero incident angle by optical feedback effect and its applications in the measurement of refractive indices [7506-03] X.-K. Zhang, R.-H. Li, South China Univ. of Technology (China)

- 7506 21 **Distortion measurement of push-broom imaging spectrometer** [7506-26] Y. Chen, Y. Ji, J. Zhou, X. Chen, X. Wei, W. Shen, Soochow Univ. (China)
- 7506 22 Measurement accuracy analysis and error correction of CCD light-projection diameter measurement system [7506-58]
   Q. Song, C. Zhang, J. Huang, D. Wu, J. Liu, Beijing Univ. of Posts and Telecommunications (China)
- The measurement of refractive index homogeneity of the large diameter Ge plate using interferometry [7506-95]
   J. He, Nanjing Univ. of Science and Technology (China) and Nanjing North Information Industrialization Group Corp. (China); L. Chen, Nanjing Univ. of Science and Technology (China)
- Modeling and simulation of an optical system for surface roughness measurement [7506-110]
   X. Xu, S. Liu, H. Hu, Harbin Institute of Technology (China)
- Laser scanning system for large diameter measurement [7506-111]
   L. Chen, Nanjing Univ. of Science and Technology (China) and China Jiliang Univ. (China);
   S. Zhang, S. Ji, China Jiliang Univ. (China);
   B. Chang, Nanjing Univ. of Science and Technology (China);
   J. Yu, China Jiliang Univ. (China)
- 7506 26 **Co-phase error correction of the optical sparse aperture system** [7506-89] D. Wang, J. Zhao, Z. Zhou, Y. Wang, Beijing Univ. of Technology (China)

#### POSTER SESSION: OPTICAL GRATING AND OPTICAL FILM

- 7506 27 Near-field diffraction of a hexagonal array at fractional Talbot planes [7506-79] W. Wang, H. Zhu, Shandong Jiaotong Univ. (China)
- Study on image acquisition in 3-D sensor system of arc welding pool surface shape using grating projection [7506-113]
   X. Ai, N. Liu, Y. Wei, X. Hu, S. Wei, X. Liu, Nanchang Univ. (China)
- 7506 29 Research on projection grating pitch in GTAW surface sensing based on Fourier transform profilometry [7506-115]
   X. Hu, N. Liu, X. Ai, Y. Wei, X. Liu, S. Wei, Nanchang Univ. (China)
- 7506 2A Spatial filtering for high power laser beam by volume Bragg grating [7506-127]
   H. Zheng, Y. He, J. Tan, G. Zheng, National Univ. of Defense Technology (China); X. Wang,
   X. Wang, China Academy of Engineering Physics (China); D. Ding, National Univ. of Defense Technology (China)
- Analysis of film thickness for magnetron sputtering system with more than one workbench [7506-49]
   T. Wang, H. Yu, Z. Wu, Y. Jiang, J. Jiang, H. Jing, Univ. of Electronic Science and Technology of China (China)
- 7506 2C Genetic algorithm used in interference filter's design [7506-57] J. Li, Y. Fang, China Jiliang Univ. (China); X. Gao, Hangzhou Dianzi Univ. (China)

7506 2D Study on the optical property of P-C doped a-Si:H thin films [7506-106] H. Cai, Univ. of Electronic Science and Technology of China (China); W. Li, Y. Jiang, State Key Lab. of Electronic Thin Films and Integrated Devices (China); Y. Gong, Z. Li, Univ. of Electronic Science and Technology of China (China)

#### POSTER SESSION: OTHER DESIGN ISSUES

- 7506 2E Surface defects detection based on anisotropy of local fractal dimensions [7506-07] Y. Zeng, South China Univ. of Technology (China)
- 7506 2F Application comparison of horizontal photoelectric system with x-y double-axis gimbal photoelectric system fixed on soft-rope hanged platform [7506-28] W. Yu, Institute of Optics and Electronics (China), Key Lab. of Beam Control (China), Graduate Univ. of the Chinese Academy of Sciences (China), and XuZhou Air Force College (China); Q. Bao, X. Liu, Institute of Optics and Electronics (China) and Key Lab. of Beam Control (China); J. Xiao, XuZhou Air Force College (China); J. Ma, Institute of Optics and Electronics (China) and Key Lab. of Beam Control (China)
- 7506 2G Efficient regularization parameter estimation based incomplete orthogonalization method [7506-40]

K. Xie, Beijing Institute of Graphic Communication (China)

- 7506 2H Design of autotrack detecting instrument for solar UV radiation [7506-41] J. Xia, X. Mao, J. Zhao, Nanjing Univ. of Information Science and Technology (China)
- 7506 21 Variable-step-size LMS adaptive filter for digital chromatic dispersion compensation in PDM-QPSK coherent transmission system [7506-46] T. Xu, Royal Institute of Technology (Sweden) and Acreo AB (Sweden); G. Jacobsen, Acreo AB (Sweden); S. Popov, Royal Institute of Technology (Sweden); J. Li, Acreo AB (Sweden); K. Wang, Royal Institute of Technology (Sweden) and Acreo AB (Sweden); A. T. Friberg, Royal Institute of Technology (Sweden)
- CCD based digital optical transfer function testing instrument [7506-59] 7506 2J X. Chen, Y. Chen, L. Zhang, W. Zhou, W. Shen, Soochow Univ. (China) and Jiangsu Key Lab. of Modern Optical Technology (China)
- 7506 2K Software for analysis of existing lens to discover starting point [7506-61] M. A. Pashkovskiy, I. L. Livshits, S. C. Stafeev, D. Culagin, Y. L. Kolesnikov, Saint-Petersburg State Univ. of Information Technologies, Mechanics and Optics (Russian Federation)
- 7506 2L Analysis of optical field distribution of the super-Gaussian beam passing through continuous phase plate [7506-62] H. Yan, C. Yang, S. Wen, J. Hou, Chengdu Fine Optical Engineering Research Ctr. (China)
- 7506 2M Design and laboratory calibration of the compact pushbroom hyperspectral imaging system [7506-99] J. Zhou, Y. Ji, Y. Chen, X. Chen, W. Shen, Soochow Univ. (China)

- 7506 2N **Feature points detection and tracking based on SIFT combining with KLT method** [7506-118] H. Wang, Z. Peng, Univ. of Electronic Science and Technology of China (China); J. Liu, Sonix (Chengdu) Technology Co., Ltd. (China); Y. Zheng, B. Liao, Y. Wang, Univ. of Electronic Science and Technology of China (China)
- 7506 20 **Double-threshold image segmentation method based on gray gradient** [7506-123] Z. Fan, Institute of Optics and Electronics (China), Key Lab. on Adaptive Optics (China), and Graduate School of the Chinese Academy of Sciences (China); C. Wang, Institute of Optics and Electronics (China) and Key Lab. on Adaptive Optics (China); X. Ma, Institute of Optics and Electronics (China), Key Lab. on Adaptive Optics (China), and Graduate School of the Chinese Academy of Sciences (China)
- 7506 2P An optical scan-calibration system in scanning near-field optical microscopy [7506-128] Y. Wu, H. Zhang, K. Wang, Univ. of Science and Technology of China (China)
- 7506 2Q **Exponential increased partitions method for three-dimensional active imaging** [7506-32] X. Zhang, H. Yan, J. Yao, W. Shangguan, Zhejiang Univ. (China)

Author Index

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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)