

## CALL FOR *Papers*

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*Presented by Laser Institute of America in cooperation with  
Laser Processing Committee of China Optical Society (LPC-COS)  
and Huazhong University of Science & Technology.*



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*Laser Applications and Safety*



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## Invitation from the General Conference Chair

**Xiaoyan Zeng, Huazhong Univ. of Science & Technology  
Wuhan, People's Republic of China**

Welcome to *PICALO 2010 in Wuhan, China's Optical Valley*. PICALO is the bridge connecting researchers, engineers, equipment suppliers, end-users and industry personnel, bringing them face-to-face to share knowledge, experiences and visions. Laser experts and entrepreneurs with fresh results and the latest progress will converge with end-users in China and Asia to form valuable professional relationships. PICALO 2010 includes two separate conferences, the Laser Materials Processing Conference and the Laser Micro, Nano and Ultrafast Fabrication Conference, in addition to the International Enterprise Summit, a business-focused forum highlighting laser industry development during the current global financial crisis. Your contributions are crucial to the success of these exciting events!

I invite you to come and enjoy the stimulating and beneficial academic environment and exciting technical program while making new friends from laser engineering and business circles. Plan to arrive early and stay late for various sightseeing opportunities in and around Wuhan.

PICALO 2010 is organized by Laser Institute of America (LIA) in cooperation with Laser Processing Committee of China Optical Society (LPC-COS) and Huazhong University of Science & Technology. On behalf of the organizing committee and conference chairs, I would like to formally invite you to attend PICALO, March 23-25, 2010 in Wuhan.



### About PICALO

Pacific International Conference on Applications of Lasers and Optics (PICALO) focuses on the growth and application of lasers and optics in the Pacific region. PICALO brings together researchers, engineers, equipment suppliers and industry personnel to hear the latest developments and progress in lasers and applications and to share knowledge, experiences and visions. PICALO offers an exciting technical and social program in cities that represent laser growth in the Pacific region. PICALO features sessions on Laser Materials Processing and Laser Micro, Nano and Ultrafast Fabrication as well as the International Enterprise Summit.

### Who Should Attend PICALO?

Anyone interested in lasers and materials processing from the basic understanding of the interaction between a laser beam and a material to those interested in how a process can be integrated and optimized for an application should attend PICALO. The organizing committee's goal for PICALO is to bring both academic and industry people together who may benefit from laser technology. This includes researchers and end-users as well as engineers and technicians engaged in developing laser technology. The conference will provide a face-to-face platform for scholars, experts and entrepreneurs worldwide as well as management personnel, technicians, and end-users in China, especially in Wuhan. At the same time, PICALO will demonstrate the development and achievements in the field of laser processing in recent years and thus bridge China's companies and enterprise to the world.

### International Advisory Board

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## Laser Materials Processing Conference Co-Chairs:

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**Wenwu Zhang**, GE Global Research, Schenectady, NY, USA

**Hongyu Zheng**, Singapore Institute of Manufacturing  
Technology, Singapore

**Norman Zhou**, Univ. of Waterloo, Waterloo, Ontario, Canada

The Laser Materials Processing Conference features the latest developments across the world in laser cutting, machining, surface modification, welding, additive manufacturing, laser modeling and simulation, drilling and forming and industrial applications. Technical sessions will include oral and poster presentations. In most subject areas, invited speakers from leading research groups and companies worldwide will present their recent findings and future prospects.

### INDUSTRY SECTORS

Aerospace  
Automotive  
Biotechnology  
Defense  
Education  
Electronics  
Manufacturing  
Mining/Material Handling  
Nuclear  
Petrochemical, Oil and Gas  
Plant Infrastructure  
Process Industry  
Renewable Energy  
Shipbuilding Research

### LASERS & SYSTEMS

Diode Lasers  
Diode-pumped Lasers  
Fibre Lasers  
Hybrid Systems  
Laser Sources  
Sensing and Monitoring  
Software  
Ultra-fast Lasers

### TECHNICAL TOPICS

Green and Sustainable Manufacturing Using Lasers  
Hybrid Laser / Non-laser Processing  
Laser Cutting and Drilling  
Laser Joining (Welding, Soldering, Brazing)  
Laser Processing of Light Weight Metals  
Laser Rapid Prototyping, Forming & Additive Manufacturing  
Laser Surface Conditioning (Cleaning, Polishing, Hardening and Peening)  
Laser Surface Coating (Alloying, Cladding, Deposition)  
Laser Synthesis of Novel Materials (Novel Microstructure and Novel Properties)  
Novel Processing Technologies & Applications  
Process Simulation & Modeling  
Ultra-fast Laser Materials Processing

## Laser Micro, Nano and Ultrafast Fabrication Conference Co-Chairs:

**Yongfeng Lu**, University of Nebraska-Lincoln, Lincoln, Nebraska, USA

**Henry Peng**, GE (China) Research & Development Center Co. Ltd., Shanghai, People's Republic of China

## Laser Micro, Nano and Ultrafast Fabrication Committee

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Guangzhou, People's Republic of China

**Ming Zhou**, Jiangsu University, Zhenjiang, People's Republic of China

The Laser Micro, Nano and Ultrafast Fabrication Conference is a global forum for engineers and scientists from a variety of industry segments and institutes to meet and discuss the use of laser micro, nano and ultrafast fabrication and diagnosis as a key technology for various applications. Attendees will find innovative ideas and solutions for laser micro, nano and ultrafast fabrication in opto- and microelectronics, electronics, microsystems, material processing and biomedical industries.

### INDUSTRY SECTORS

Aerospace  
Automotive  
Biotechnology  
Defense  
Education  
Electronics  
Manufacturing  
Medical  
Photonics Research

### LASERS & SYSTEMS

Laser Sources  
Lasers & Synchrotron  
Radiation  
Optical Components  
Precision Laser Machines  
Sensing & Monitoring

### TECHNICAL TOPICS

Laser Applications in Nanophotonics, Nanoelectronics & Microelectronics  
Laser-assisted Packaging  
Laser Lithography  
Lasers Machining of Photonic Components  
Medical Device Fabrication  
MEMS & MOEMS Fabrication & Lasers in Microsystems  
Micro / Nano Processing by Lasers & Laser / Other Tool Hybrid Methods  
Process Control and Process Modeling  
Ultrafast (Picosecond & Femtosecond) and UV Fabrication

## International Enterprise Summit Co-Chairs:

**Bo Gu**, IPG Photonics Corporation, Oxford, Massachusetts, USA

**Rangda Wu**, Chutian laser group, Wuhan, People's Republic of China

Executives from the Chinese laser industry and leading world-class laser, optics and system integration companies will come together to discuss the impact of the global financial crisis on the laser industry and how to break through the bad economic environment. CEOs of laser companies in Wuhan's Optical Valley will join this summit.

# Abstract Submission and Notification Schedule

Preferred method of submission is via the website [www.laserinstitute.org/conferences/picalo](http://www.laserinstitute.org/conferences/picalo)

OCTOBER						
S	M	T	W	R	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

NOVEMBER						
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**October 23**  
Abstract Submission Deadline

**November 23**  
Acceptance Notice with Instructions to Authors

# 2009

JANUARY						
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MARCH						
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28	29	30	31			

**January 7**  
Speaker Final Manuscript Due, PDF Format

**January 21**  
Speaker Registration and Payment Due

**March 23-25**  
PICALO 2010

# 2010

## How to Present

- Submitted abstracts should contain original, recent, unpublished results of application research, development, or implementation. Authors are encouraged to indicate the current phase of their work. Commercial papers will not be accepted.
- Authors are asked to secure company and/or government security clearance to present and publish as early as possible. This enables LIA to ensure the quality of the conference and to minimize last minute withdrawn papers.
- Please secure travel and accommodation funding through sponsoring organizations prior to submitting abstracts. We regret that travel and accommodation funding is not available through LIA.

## Final Manuscript Submission

Manuscript deadlines must be strictly observed. Late manuscripts run the risk of not being published in the proceedings. This policy enables LIA to better serve congress participants by publishing the proceedings before the congress and distributing them onsite. Your cooperation is appreciated by all.

For program information please contact [conferences@laserinstitute.org](mailto:conferences@laserinstitute.org)

## About Laser Institute of America

Laser Institute of America (LIA), founded in 1968, is the international society dedicated to fostering lasers, laser applications and laser safety worldwide. LIA has grown to represent hundreds of corporate and individual members in the laser industry. **Visit [www.laserinstitute.org](http://www.laserinstitute.org) for more information!**

### Join the LIA!

To take advantage of member registration rates, please go to the LIA website at [www.laserinstitute.org](http://www.laserinstitute.org) for membership information and an application, or call +1.407.380.1553.

## About Wuhan

Wuhan, capital of the Hubei province, is known as China's Optical Valley. Wuhan is an important central city in China and is the political, economic, scientific, technological and financial center in inland China. It is the largest base for the optical electronics and photoelectronics industries in China. The Optical Valley is located in the Wuhan East Lake High-Tech Development Zone. Wuhan's optical electronics industry encompasses optical communication, power and consumer optical electronics, as well as relevant software. The industry is on an upswing, with the production value growing by an average of 30 percent a year since 2001. Wuhan, one of the biggest commercial centers in inland China, is ranked third in the country for its comprehensive technology research and educational strengths and its fiber-optic cable sector is currently third in the world in terms of manufacturing capability.

### Hotel Information

Shangri-La Hotel  
700 Jianshe Avenue  
Hankou, Wuhan 430015  
People's Republic of China  
Website: [www.shangri-la.com](http://www.shangri-la.com)  
Tel: (86 27) 8580 6868

PICALO 2010 will be held at the Shangri-La Hotel, Wuhan, located in the heart of the Hankou business district, just 25 minutes from Tianhe International Airport and 10 minutes from the Hankou Railway Station. The hotel's guestrooms and suites are the city's finest, with every guest receiving the gracious service for which Shangri-La is known around the world. Each room is elegantly appointed with luxurious bedding, modern bathrooms and the fine touches that make guests feel welcome and at home. The Shangri-La Hotel is a preferred destination for the world's most discriminating business and leisure traveler.

### Pre-Conference and Post-Conference Tours

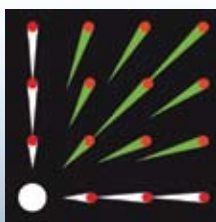
Optional Pre-Conference and Post-Conference tours in the Wuhan area will be available.

### Sponsorship Opportunities

Sponsorship at PICALO gives your organization a unique opportunity to showcase your capabilities to both Chinese and International decision makers via networking opportunities, advertisements in the program guide, recognition during the event and a tabletop at the Wednesday sponsor reception. This is the only scheduled event during this time slot and all of the attendees will be present to learn about your company and to explain their needs to you. Attendees are researchers and executives from China, the Pacific Rim, Europe and North America.

PICALO offers various level sponsorship opportunities to give your company or organization added promotional exposure. The Sponsorship Program is open to all companies and institutions (industrial, medical and educational) within the laser industry.

For further information, please contact Kim Truelove or David Evans by phone: +1.407.380.1553, 800.34.LASER; or e-mail: [ktruelove@laserinstitute.org](mailto:ktruelove@laserinstitute.org), [devans@laserinstitute.org](mailto:devans@laserinstitute.org)



### Important Planning Information

While planning for your trip to Wuhan to attend PICALO 2010, please note that LASER WORLD of Photonics China will be held a week prior in Shanghai, March 16-18, 2010 at Shanghai's New International Expo Centre. Find out more at [www.world-of-photonics.net/en/laser-china/start](http://www.world-of-photonics.net/en/laser-china/start)

