

*Call for Papers*

**ISPEMI 2010**

# 6th International Symposium on Precision Engineering Measurements and Instrumentation

8-11 August 2010 / Hangzhou, China

**Sponsors:**

International Committee on Measurements and Instrumentation (ICMI)  
National Natural Science Foundation of China (NSFC)  
Chinese Society for Measurement (CSM)  
China Instrument and Control Society(CIS)

**Organizers:**

International Committee on Measurements and Instrumentation (ICMI)  
Instrumentation Committee of CSM  
Harbin Institute of Technology (HIT)

**Cooperating Organizations:**

SPIE  
China Jiliang University (CJLU)  
Hefei University of Technology (HFUT)



International Symposium on Precision Engineering Measurements and Instrumentation (ISPEMI) is an international symposium held every other year in different cities of China with English as its official language since 1999. The 6th International Symposium on Precision Engineering Measurements and Instrumentation (ISPEMI 2010) will be held 8-11 August 2010 in Hangzhou, China. Prior to ISPEMI 2010, there were two international symposia held separately, one was International Symposium on Instrumentation Science and Technology (ISIST), and the other was International Symposium on Precision Mechanical Measurement (ISPMM). In order to make the subject areas of these two international symposia more precise, specific and interdisciplinary, the organizing committees decided to combine them into one, and refer it as International Symposium on Precision Engineering Measurements and Instrumentation (ISPEMI) from the 6th session onward.

ISPEMI 2010 aims at providing an opportunity for both young and senior professionals working in the field of precision engineering measurements and instrumentation both inside and outside China to present and share their work, and serves the purposes of promoting academic exchanges between Chinese and overseas research workers, advancing cooperation programs between Chinese and foreign universities and research institutes, and helping its attendees develop their knowledge of the most recent advances in this particular field.

The 5 international symposia on instrumentation science and technology (ISIST) held prior to ISPEMI 2010 are ISIST 1999 in Luoyang, ISIST 2002 in Jinan, ISIST 2004 in Xi'an, ISIST 2006 in Harbin and ISIST 2008 in Shenyang, and they covered subjects essentially similar to those of ISPEMI 2010.

Similarly, the 4 international symposia on Precision Mechanic Measurement (ISPMM) held prior to ISPMM 2010 are ISPMM 2002 in Hefei, ISPMM 2004 in Beijing, ISPMM 2006 in Xinjiang and ISPMM 2008 in Hefei.

### ***Oral and post sessions are planned for ISPEMI 2010 in the following subject areas:***

- 1. Instrumentation Theory and Methodology***
- 2. Accuracy Theory and Uncertainty Analysis***
- 3. Instrument and Measurement System Calibration***
- 4. Sensors, Converters, and Control System***
- 5. Signal Processing and Image Processing***
- 6. Novel Instrument and Measurement System***
- 7. Optoelectronic System and Optical Instruments Design,***
- 8. Modern Optics and Instruments for Precision Measurement***
- 9. Measurement for Advanced Optic Machining***
- 10. Measurement for Precision and Ultra-Precision Machining***
- 11. Measurement for Extremely Large Scale Integrated Circuit Manufacturing***
- 12. Measurement for Flat Display and Solar Cell Manufacturing***
- 13. Measurement during Precision Assembly***
- 14. Multi-axial Precision Position and Movement Technology***
- 15. In-Process, Online, and On-Machine Measurement***
- 16. Precision Manufacturing - Measurement Integration Technology and System***
- 17. Stress and Thermal Measurement and Compensation***
- 18. Vibration Measurement and Isolation Technology***
- 19. Length, Angle and Geometrical Parameter Measurement***
- 20. Multi-axial Coordinate Measurement Technology***
- 21. Laser Measurement Techniques and Instruments***
- 22. MEMS and Nanometer Measurement***
- 23. Quality Engineering Theory and Technology***

It is also worth mentioning that all the papers contained in the SPIE published Proceedings of Previous meeting are indexed by EI and other overseas indexing services.

### ***General requirements for papers :***

In order to help with the publication of papers, ISPEMI 2010 has officially signed an agreement with SPIE to appoint SPIE as the publisher for publication of the proceedings of ISPEMI 2010.

It is clearly stated in the agreement signed that the proceedings shall be in English and the papers shall be six to ten pages long, single line spaced and single columned.

According to the agreement reached,

1) The organizing committee for ISPEMI 2010 shall select and referee all material submitted by authors and ensure that the technical quality of the final manuscripts is strong and that they conform to the SPIE guidelines for style and clarity of language;

2) SPIE shall perform quality assurance on the meta-data and submitted manuscripts to ensure that they meet all the formatting standards and requirements;

3) Authors shall be responsible for correcting problems and submitting a revised manuscript via My SPIE in a timely manner. Any manuscript that is not formatted according to SPIE written specifications, is not written in clear English or does not reach SPIE on time may not be included in the proceedings.

### ***Important Note: PEER REVIEW:***

All submissions will be peer reviewed by the full program committee. In order to facilitate the evaluation of your submission, please submit both a short 200-words abstract that will be normally with a full-length paper, and a 500-words structured extended abstract by the Abstract and Extended Abstract Due Date. The structured extended abstract can be up to three pages in length and should have figures, and sufficient data to permit review of the paper. To accommodate the peer review process, abstracts and extended abstracts will not be accepted after 15, Mar. 2010.

### ***Critical Dates :***

Abstract Due Date

15 Mar. 2010

Manuscript Due Date

15 Jul. 2010

Please Note: Submissions imply the intent of at least one author to register, attend the symposium, present the paper as scheduled, and a full-length manuscript for publication in the conference proceedings.

Submit your abstract today!

### ***SPIE Offers Best Student Paper Awards for ISPEMI 2010***

1st Place - \$ 250 cash, 50 SPIE Digital Library downloads, 1-year Student Membership

2nd Place - \$ 200 cash, 25 SPIE Digital Library downloads, 1-year Student Membership

3rd Place - \$ 50 cash, 15 SPIE Digital Library downloads, 1-year Student Membership

### ***Registration Fee:***

Before 1 July, 2010:

330 Euro per delegate

270 Euro for the student

After 1 July, 2010:

370 Euro per delegate

310 Euro for the student

### ***Further Information***

For further information , please use the following information to contact us:

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## ***Honorary Chairmans:***

Academician Guofan Jin, Tsinghua University, China;  
Academician Tongbao Li, Tongji University, China;  
Academician Zhonghua Zhang, NIM, China;  
Academician Jie Gao, Sichuan University, China;  
Academician Shenghua Ye, Tianjin University, China;  
Prof. Zhu Li, Huangzhong University of Science and Technology, China  
Prof. Chao-Kuang Chen, National Cheng Kung University, China  
Prof. Guoxiong Zhang, Tianjin University, China  
Prof. Peter Rolfe, The University of Genova, Italy,  
Dr. Konrad Herrmann, Physikalisch-Technische Bundesanstalt (PTB), Germany  
Prof. Yuri V. Chugui, TDI SIE, Siberian Branch of the Russian Academy of Sciences

## ***Chairman:***

Prof. Jiubin Tan, Harbin Institute of Technology (HIT), China

## ***Co-chairmans***

Prof. Yetai Fei, Hefei University of Technology, China  
Prof. Tony Wilson . Fellow of the Royal Academy of Engineering, the University of Oxford U.K.  
Dr. Harald Bosse, Physikalisch-Technische Bundesanstalt (PTB), Germany  
Prof. Min Gu, Fellow of the Australian Academy of Science and the Australian Academy of Technological Sciences and Engineering, Swinburne University of Technology. Australia  
Prof. Kuang-Chao Fan, the National Taiwan University, China  
Prof. Seung-Woo Kim, KAIST Korea.  
Prof. Wei Gao, Tohoku University. Japan

## ***Chairman of Programme Committee:***

Prof. Jiubin Tan, Harbin Institute of Technology (HIT), China

## ***Chairman of Organising Committee :***

Prof. Jianzhong Lin, China Jiliang University, China

## ***Plenary Speakers***

The organizer will invite the following famous scientists to speak at the plenary session of the conference reviewing the front-edge development in the field of Precision Engineering Measurements .

Dr. Harald Bosse, PTB, Germany, Measurement in Precision Engineering  
Prof. James Burge, University of Arizona, USA, Large Optics fabrication and testing  
Prof. Wei Gao, Tohoku University. Japan, Precision Nanometrology for Nanoscale Manufacturing  
Prof. Min Gu, Swinburne University of Technology. Australia, Photonic crystals and devices  
Prof. Alexander Poleshchuk, Institute of Automation and Electrometry SB RAS, Russia, Fabrication and application of Diffractive optics elements  
Prof. Xiang Zhang, University of California at Berkeley, USA, “Super-lens” and “Hyper-lens”  
Prof. Tim Watson, King's College London, U.K., Optical and confocal techniques for hard tissue imaging  
Prof. Shengyi Li, National University of Defense Technology, China, Precision Engineering and Measurement.

## Host City

Hangzhou is in Zhejiang Province, China. It is one of the most important tourism cities in China, famous for its natural beauty and historical and cultural heritages. It is the political, economic and cultural center of the Zhejiang province as well.

Famed for its natural scenery, Hangzhou and its West Lake (Xihu) have been immortalized by countless poets and artists. The city was the capital of the Southern Song Dynasty from 1127 until the Mongol invasion of 1276, during that time the city's population is estimated to have been as high as one million, making it the largest city in the world. Even Marco Polo claimed to have passed through, calling it "beyond dispute the finest and the noblest in the world".

With the gradual silting up of its harbor, much of the city's trade and industry passed to nearby Shanghai, but the city still has a bustling population of 1.7 million and ranks as one of China's most popular tourist attractions

World Expo 2010 Shanghai China is the occasion for China to bring the world at home, and for the world to feel at home in China. By dedicating a 5.28-square-kilometer area at the core of the city to exhibitions, events and forums on the Expo theme, "Better City, Better Life," Shanghai hopes to build a powerful and lasting pilot example of sustainable and harmonious urban living. The Duration of World Expo 2010 is from May 1 to Oct 31, 2010. And it is just 80 mins from Hangzhou to Shanghai by Chinese high speed train.



The China Pavilion was designed with the concept of "Oriental Crown" to boasts a diverse range of traditional Chinese elements.



## Sight-seeing

### • West Lake

Hangzhou's most famous scenic sight. Technically, there are "10 Scenes of the West Lake" and "10 New Scenes," but they are overrated, and often seasonal (Snowfall Over Broken Bridge, etc). Rather than make a checklist and walking back and forth looking for them, simply spend a clear day wandering the circumference of the lake and the causeways, take a ferry to the islands, and you will probably cover most of the sites anyway. The "West Lake" itself can be divided into countless smaller sites, from Mr. Guo's villa to "Orioles Singing in the Willows".

### • Temples and pagodas

- Six Harmonies Pagoda, (Liu He Ta)
- Lingyin Temple, (Ling Yin Si)
- Leifeng Pagoda (Lei Feng Ta)
- Baochu Pagoda, (Bao Chu Ta)
- Jingci Temple
- Jade Emperor Hill, (Yuhuang Shan Gong Yuan)

### • Gardens, forests, nature

Longjing (Dragon Well) Tea Fields, These are best visited during the harvest period, usually from the first week of March till after May Holiday, when everyone is out in the field picking tea and the tea that you can purchase is of the best quality (tea crops from later in the year have had their leaves damaged by the rain).

Dreaming of the Tiger Spring, (Hu Pao Meng Quan), is a spring as well as a scenic and historic destination. The area includes wooded pathways, streams, bamboo groves, tea houses, historic structures, as well as the spring itself and other sights.

## Foods:

Hangzhou is one of the premier places to eat in China, and its food consists more of pork and seafood rather than the beef and lamb of the north and west. If you do not like Hangzhou food, you can find plenty of Sichuan, Shaanxi, and Xinjiang restaurants throughout the city. Typical Hangzhou specialties include dongpo rou, an extremely fatty chunk of pork in a syrupy sauce, and cuyu, which is fish with a vinegar sauce.



West lake Cuyu

## Shopping:

### • Silk:

Along with Suzhou, Hangzhou silk is the best in the world and has been since the Tang and Song Dynasties, a period of over 1,000 years. Between Hangzhou and Suzhou, Suzhou's embroidery is the best in China, and Hangzhou is known for producing excellent silks and satins. In Hangzhou, the variety of silks available seems endless. Hangzhou satin is famous and one of the area's most successful export products. The layered weaving process is very labor intensive and produces fabulously luxurious fabric that feels great next on the skin.



### • Tea:

Longjing of Dragon Well tea from the West Lake region of Hangzhou, China, is one of the highest quality green teas prized for drinking and cooking. Outside the famous West Lake region, this world-renowned tea growing area situated in the village of Longjing- literally meaning "Dragon Well"- takes its name from a dragon who was said to have taken up residence in the dense waters of the well and controlled the rainfall in the area.

