

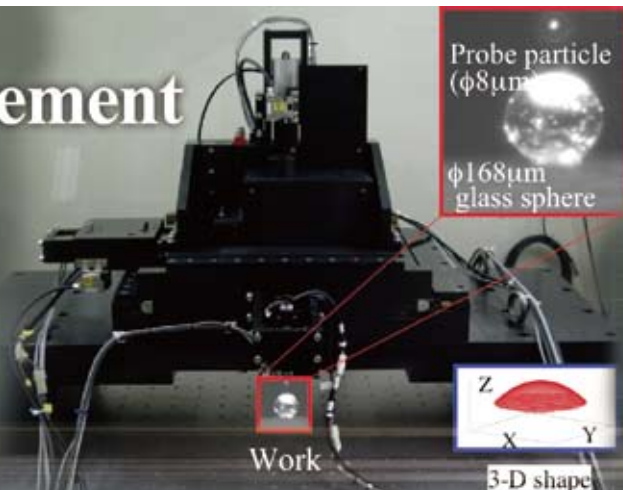
ISMQC2010

10th International Symposium
on Measurement and Quality Control

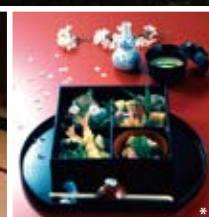
September 5-9, 2010
Convention Center,
Osaka University, Osaka, Japan



Measurement



Quality Control



Organized by

Technical Committee for Intelligent Nano-Measure, JSPE
Department of Mechanical Engineering,
Graduate School of Engineering, Osaka University

In association with

International Measurement Confederation (IMEKO)
Technical Committee TC14 Measurement of Geometrical
Quantities, IMEKO

In cooperation with

The Japan Society for Precision Engineering (JSPE)
Korean Society for Precision Engineering (KSPE)
Chinese Precision Machine Society (CPMS)

* Photos: Osaka Convention & Tourism Bureau

Conference website <http://www.ismqc2010.mech.eng.osaka-u.ac.jp/>

Scope

International Symposium on Measurement and Quality Control (ISMQC) is one of the most important scientific events that is normally held once in every two or four years in the field of measurements and quality control. The aim of the symposium is to present the evolution of manufacturing metrology & quality management, to spot their implication for science, industry & engineering and to highlight new techniques of measurement at the international level. The purpose is also to bring together researchers and specialists from science and industry and to discuss the new trends, applications and developments in Metrology and Quality Management.

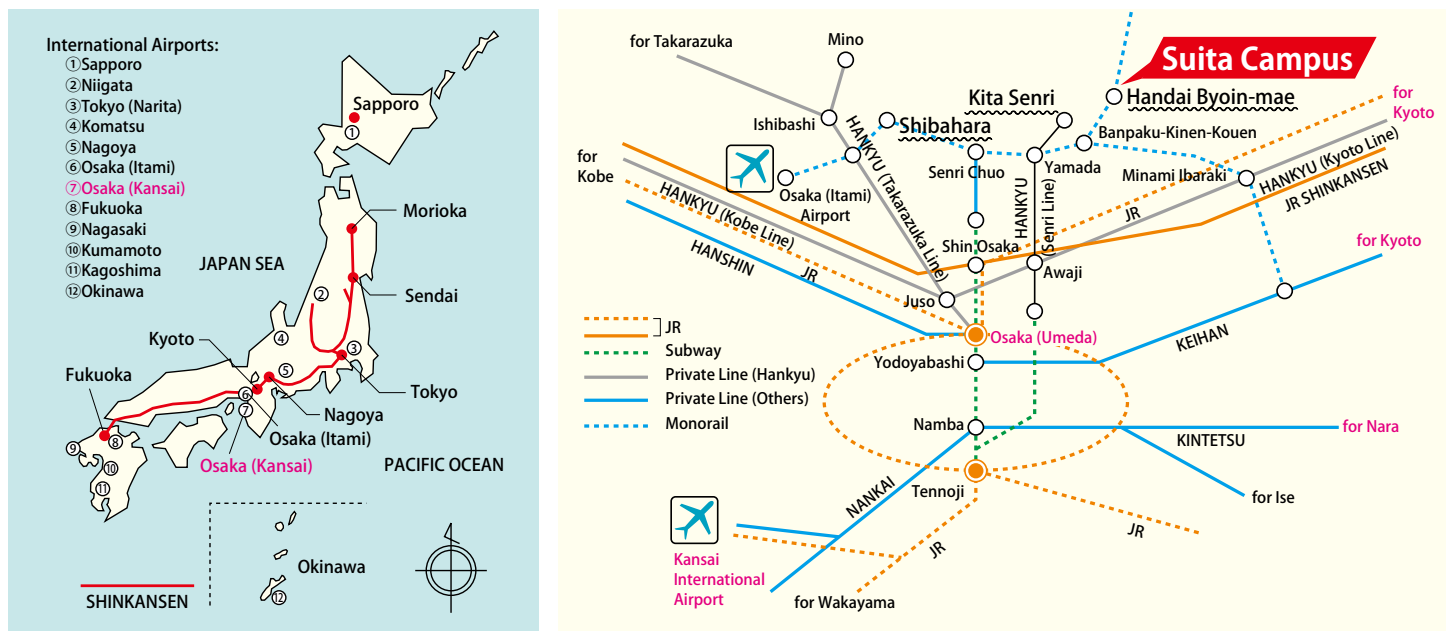
ISMQC is supported by IMEKO–Technical Committee (TC14) on Measurement of Geometrical Quantities. The ISMQC series has been organized successfully eight times since its inception. The 10th ISMQC will be held at Osaka University, Suita, Osaka, Japan, in September 2010. Special emphasis will be on innovative and quality research work and applied scientific results. Novel methods and technologies, intelligent measuring techniques in various fields of application, including Engineering, Science, Medicine, Biology etc. will also be covered. The symposium will provide an excellent opportunity for the presentation of the achievements and also provide a forum for interaction and exchange of ideas among participants from universities, leading research institutions, and industries from various parts of the globe. The symposium will provide a chance to share the 21st century technology and to develop effective cooperation between countries.

Conference Venue

ISMQC2010 will be held at convention center in the Suita campus, one of the main areas of Osaka University. Osaka University is one of the leading universities in Japan, which has 11 faculties/schools, 15 graduate schools, 5 research institutes, 28 facilities affiliated with the faculties/schools, graduate schools or research institutes, libraries with three branches, two hospitals, 20 campus-wide and 3 nationwide joint-use facilities.

Osaka Prefecture, located at the approximate center of Japan, has a population of 8.8 million, making it the third most populous prefecture after Tokyo and Kanagawa prefectures. Reaching Osaka is easy from Kansai International Airport (KIX), which provides direct services to 68 cities in 27 countries throughout the world. The airport, which acts as an Asian hub, and serves a large number of flights to the Asia-Pacific region, is conveniently located within 30 minutes by trains of downtown Osaka.

Having been the center of economic and cultural development for many centuries, Osaka has many traditional and modern sightseeing attractions. One of Osaka's greatest advantages is its proximity to the many sites that are scattering through the cities of Kyoto, Nara, Kobe and Wakayama, some no more than 30 minutes away. ("Osaka Mice Guide, Osaka Convention and Tourism Bureau")



Topics

Papers, posters, and exhibitions are invited on the following aspects:

A Measurements for Dimensional, Geometrical and Mechanical Quantities in Manufacturing

A 1 Sensors, Components and Systems

- A 1.1 Machine Vision and Image Processing
- A 1.2 3D–Surface Texture and its Micro Characteristics
- A 1.3 CMM–Metrology
- A 1.4 Form Tester
- A 1.5 Gear Metrology
- A 1.6 Measurement of Motion Parameters
- A 1.7 Advanced Optoelectronic Sensors and Instruments
- A 1.8 Nonlinear Optical Instruments Applied for Industry

A 2 Metrology Fields

- A 2.1 Macrogeometric Features and Characteristics
- A 2.2 Test Planning
- A 2.3 Machine Tool Metrology
- A 2.4 Webbased Metrology Services

A 3 Strategies and Methods

- A 3.1 Measurement Equipment Monitoring and Metrological Self–Diagnostics
- A 3.2 Accreditation of Calibration Laboratories
- A 3.3 New Education and Training Methods

A 4 Measurement Evaluation and Verification

- A 4.1 Uncertainty Evaluation and Traceability
- A 4.2 Metrology Software and Software Evaluation
- A 4.3 Geometrical Product Specifications and Verification (GPS)
- A 4.4 Tolerancing, Testing, Evaluation

A 5 Intelligent Measurement

- A 5.1 Intelligent Micro– and Nano–Metrology
- A 5.2 Intelligent Measurement Algorithm and Simulation
- A 5.3 Intelligent Nano Positioning
- A 5.4 Intelligent Calibration and Testing Methods for Measurement Equipment
- A 5.5 Pre–, In– and Post–Process Measurement
- A 5.6 Optical Measurement for Geometrical Quantity Evaluation
- A 5.7 X–ray Application for 3–D Measurement
- A 5.8 Nano Photonics for Intelligent Measurement
- A 5.9 Novel Methods for Medical and Biological Measurement
- A 5.10 MEMS/MOEMS Application in Measurement Field

B Quality Control for Geometrical Quantities

B 1 Quality Control Strategies and Methods

- B 1.1 Quality Planning
- B 1.2 Quality Control Loops
- B 1.3 Quality–databased Systems, Quality–data–Exchange
- B 1.4 Knowledge Based Quality–Methods

B 2 Managing Quality Control

- B 2.1 Measurement of Quality, Quality Gates
- B 2.2 Audits and Certification
- B 2.3 Quality Management in Distributed Manufacturing Systems
- B 2.4 Networks for Quality Management
- B 2.5 Quality–Improvement
- B 2.6 Education and Training

Symposium Chairman

Y. Takaya, Osaka University, Japan

Vice–Chairman

K. Takamasu, The University of Tokyo, Japan
K. Sasajima, Tokyo Institute of Technology, Japan

Honory Chair

T. Pfeifer, The honorary chairman of TC14, Germany
A. A. Weckenmann, University Erlangen–Nuremberg, Germany
A. Shimokobe, Tokyo Institute of Technology, Japan
M. Sawabe, Mitutoyo Corporation, Japan
S. Kiyono, Emeritus Professor of Tohoku University, Japan

International Program Committee

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Habil. Vytautas Giniotis, Lithuania
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Marcel Sabin Popa, Romania
Sorin Popescu, Romania
Yuri V. Chugui, Russia
V.D. Majstorovic, Serbia
Karol Karovic, Slovakia
Igor Brezina, Slovakia
Ales Krsek, Slovakia
Edita Hekelová, Slovakia
Bojan Acko, Slovenia
Eugen Trapet, Spain
Fernando Torres–Leza, Spain
Wolfgang Knapp, Swiss
Claus P. Keferstein, Swiss
Kuang–Chao Fan, Taiwan
M.E. Yurci, Turkey
K.T.V. Grattan, UK
Liam Blunt, UK
Richard Leach, UK
Derek G. Chetwynd, UK
Jay Raja, USA

Important Dates/ Paper Deadlines

Submission of Abstract:
December 24, 2009

Submission of Full Length Papers:
April 1, 2010

Early Registration:
Due May 1, 2010

Online Registration:
Due June 30, 2010

Early Registration

Ordinary	¥70,000
Student	¥35,000
Accompanying person	¥15,000

Standard Registration

Ordinary	¥80,000
Student	¥45,000
Accompanying person	¥25,000

Conference Schedule

September 5 (Sun.)	Registration and Welcome Reception
September 6 (Mon.)	Opening Address and Plenary Lecture Technical Session Oral/ Poster
September 7 (Tue.)	Keynote Speech Technical Session Oral/ Poster Conference Banquet
September 8 (Wed.)	Keynote Speech Technical Session Oral
September 9 (Thu.)	Technical Tour
September 6 (Mon.) – 8 (Wed.)	Exhibition

National Organizing Committee

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S. Takahashi, The University of Tokyo, Japan
M. Aketagawa, Nagaoka University of Technology, Japan
M. Komori, Kyoto University, Japan
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A. Hayashi, Nano Corporation, Japan
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Publications

Submission of Papers

We invite you to submit original, unpublished papers in the fields mentioned under Topics. The accepted papers will be published as IMEKO proceedings. A number of papers in specific topics will be selected by the Publication Committee for publication of updated versions and it will be encouraged to apply "Measurement", which is IMEKO official publishing journal. The authors of papers/posters are requested to submit a short abstract via the conference website (<http://www.ismqc2010.mech.eng.osaka-u.ac.jp>). Please check the format on the conference website.

Award

Outstanding Paper Award

All accepted manuscripts are evaluated by the reviewer and the national organizing committee selected to the winning papers for the Outstanding paper award.

Young Researcher Award

ISMQC organizing committee support to encourage the young researcher. The selection of the winning papers will be the responsibility of the reviewers.

The paper must be an original unpublished investigation dealing with research in measurement and quality control.

Co-authorship is acceptable provided that the Young Researcher applicant is the primary author.

Please check the detail information from the conference website.

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