

KAIST-NMIJ Joint Workshop 2006 on Precision Metrology

Date : December 21 (Thr) ~ 22 (Fri), 2006

Venue : Korea Advanced Institute of Science
& Technology, Science Town, Daejeon, Korea



Campus map

한국과학기술원 건물안내도



Seminar room E1 in Dept. of
Mechanical Eng. Building

Registration

Registration Type	Description
* Regular	KRW 100,000 / USD 105
** Student	KRW 70,000 / USD 70

Please download the registration form and fill out this form to mail your registration & reservation to Dr. Jonghan Jin (jinjong@kaist.ac.kr). The confirmation notices are sent within 72 hours by e-mail. Please return the filled form to the conference secretariat by e-mail before November 30, otherwise 20% of the registration fee will be added.

Home page – <http://pem.kaist.ac.kr/knjw2006>

Greetings!

I am very pleased to welcome you to participate in the KAIST-NMIJ Joint Workshop on Precision Metrology, which will be hosted on the KAIST campus during the period of December 21-22, 2006. The Joint Workshop is being organized by the PEM (Precision Engineering & Metrology) group of KAIST with aim of promoting more understanding and collaborations between NMIJ and KAIST in the field of length & dimensional metrology. The two-day event will be focused on technical exchange of the current state-of-the-art and future perspectives of laser-based optical measurement technology for timely applications to industrial demands. I look forward to your participation and hope to see you enjoy the workshop together the best season of Korea's winter right before Christmas time!

Best Regards,

Seung-Woo Kim, Professor
Director, Precision Engineering & Metrology
Group
Korea Advanced Institute of Science and
Technology



Workshop Time schedule

Thursday, December 21

08:30 ~ 08:50	Opening ceremony
08:50 ~ 10:20	Session I (4 papers)
10:20 ~ 10:40	Coffee break
10:40 ~ 11:50	Session II (3 papers)
11:50 ~ 12:40	Lunch
12:40 ~ 14:20	Session III (4 papers)
14:20 ~ 14:40	Coffee break
14:40 ~ 16:00	Session IV (3 papers)
16:00 ~ 16:20	Coffee break
16:20 ~ 18:00	Session V (4 papers)
19:00 ~	Banquet

Friday, December 22

08:30 ~ 10:00	Round table for research collaboration
10:00 ~ 12:00	Science Town Tour
12:00 ~	Lunch & Excursion

(Total: 18 Papers)

10:00 ~ 10:20

Optical frequency synthesizer based on a femtosecond pulse laser

Mr. Yunseok Kim (KAIST, Korea)

Session II

Chair: Dr. Kaoru Minoshima

10:40 ~ 11:10

Accurate and wide range displacement measurement using a tunable diode laser and an optical frequency comb generator

Dr. Youichi Bitou (NMIJ, Japan)

11:10 ~ 11:30

Dispersive interferometry using a femtosecond pulse laser

Mr. Ki-nam Joo (KAIST, Korea)

11:30 ~ 11:50

Femtosecond laser pulses for surface-profile metrology

Dr. JeongSeok Oh (KIMM, Korea)

Session III

Chair: Dr. Jonghan Jin

12:40 ~ 13:10

Phase-shifting Interferometric Microscope Designed for Calibration of the Step Height Standards

Mr. Takuma Doi (NMIJ, Japan)

13:10 ~ 13:30

Gauge block calibration in KRISS

Dr. Chu-Shik Kang (KRISS, Korea)

13:30 ~ 14:00

Measurement of DUV laser wavelength in a laser diffractometry system for an absolute calibration of 100 nanometer pitch standards

Dr. Satoshi Gonda (NMIJ, Japan)

14:00 ~ 14:20

Sharper Edge Image in Confocal Self-Interference Microscopy

Dr. Dong-kyun Kang (KAIST, Korea)

Session IV

Chair: Dr. Dong-kyun Kang

14:40 ~ 15:10

Development of nanometric lateral scales with sub-hundred-nanometer-pitch

Dr. Ichiko Misumi (NMIJ, Japan)

15:10 ~ 15:30

Dispersive white-light interferometry for thin film thickness profile measurement

Mr. Young-sik Ghim (KAIST, Korea)

15:30 ~ 16:00

Angle standard in Japan

Dr. Tsukasa Watanabe (NMIJ, Japan)

Session V

Chair: Dr. Ichiko Misumi

16:20 ~ 16:50

Activities on the consortium of standardization for evaluating non-contact type coordinate measuring machines

Dr. Sonko Osawa (NMIJ, Japan)

16:50 ~ 17:10

KRISS laser writer

Dr. Hyug-Gyo Rhee (KRISS, Korea)

17:10 ~ 17:40

Coordinate Measuring System for Large Size Artifacts -A laser tracking interferometer system based on trilateration-

Dr. Osamu Sato (NMIJ, Japan)

17:40 ~ 18:00

Point diffraction interferometer with vibration desensitizing capability

Mr. Joonho You (KAIST, Korea)

Contact

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Technical Program

Opening ceremony

08:30 ~ 08:50

Overview of BUPE

Prof. Seung-Woo Kim (KAIST, Korea)

Session I

Chair: Dr. JeongSeok Oh

08:50 ~ 09:20

Ultrahigh dynamic-range distance meter using an optical frequency comb

Dr. Kaoru Minoshima (NMIJ, Japan)

09:20 ~ 09:40

Absolute length metrology using a femtosecond pulse laser (I)

Dr. Jonghan Jin (KAIST, Korea)

09:40 ~ 10:00

Absolute length metrology using a femtosecond pulse laser (II)

Mr. Young-jin Kim (KAIST, Korea)