



# **Call for papers** (First Announcement) 18<sup>th</sup> International Conference on Mechatronics Technology (ICMT2014) October 21-24, 2014, Taipei, Taiwan

#### Organizers:

National Taiwan University of Science and Technology (Taiwan Tech)

#### Co-organizers:

National Taiwan University Chinese Society of Mechanical Engineers

#### Honorable Chairman: Ching-Jong Liao, Taiwan Tech

0 0 1

International Steering Committee:			
Australia			
	Saeid Nahavandi,		
	Bijan Shirinzadeh		
Canada:	Greg Baiden, Yassiah Bissiri		
China:	Zengqi Sun, Guozheng Yan,		
	Xiaotang Hu,		
	Dante J.Dorantes-Gonzalez		
Greece:	Kalogiannakis Michail		
Germany	: Gerd Jager, Bodo Heinmann,		
	Sergej Fatikow, Heinz Woern		
Hungary:	Somlo Janos, Imre J. Rudas		
Japan:	Toshio Fukuda,		
	Katshushita Furuta,		
	Nobuyuki Iwatsuki,		
	Mamoru Mitsuishi,		
	Yoshimi Takeuchi,		
	Shinichi Yokota, Naoki Asakawa		
Korea:	Kyoung Kwan Ahn,		
	Soon Young Yang,		
	Byung Ryong Lee, Sun-Kyu Lee		
Malaysia:			
	Marzuki Khalid		
Mexico:	Jesús Manuel Dorador-González,		
	José Emilio Vargas-Soto		
Philippin	es: Feliciano H. Japitana,		
	Elmer P. Dadios		
Singapore	e: Loke-Chong Lee,		
	Ser Yong Lim,		
	Marcelo H. Ang. Jr.,		
	Danwei Wang		
Taiwan:	Kuang-Chao Fan,		
	Fang-Jung Shiou		
Thailand:	Manukind Parnichkun,		
	Nitin Afzulpurker		
Turkey:	Okyay Kaynak		
UK:	Robert Parkin, Mike Jackson		
USA:	Jay Lee, Masayoshi Tomizuka,		
	Oussama Khatib,		
<b>T</b> 7• 4	Kazuo Yamazaki		
Vietnam:	Nguyen Khoa Son, Dau Si Thai,		
	Pham Thuong Cat, Pham Anh Tuan		
	Pham Ann Tuan		
Conference Chairman:			
	nce Chairman:		
Eano-	Ung Shioli		

Fang-Jung Shiou Kuang-Chao Fan

# Program Committee:

Chairman: Jeng-Ywan Jeng Liang-Chia Chen, Chi-Ying Lin, Fuh-Yu Chang, Chin-Hsing Kuo, Pin-Chuan Chen Local Organizing Committee Members:

Liang-Kuang Chen, Geo-Ry Tang, Dong-Yea Sheu, Chun-Hui Chung, Nate Hsu

#### Date:

October 21(Tuesday) - October 24(Friday), 2014

#### Conference Site:

43, Keelung Road, Section 4, Taipei, Taiwan
Website: <u>http://www.ntust.edu.tw</u>
Access: 50 min. by bus from Taoyuan International Airport to Taipei

# Scope of the Conference:

The technical term, Mechatronics, was coined by Mr. Tetsuro Mori, CEO/President, Seibu Electric and Machinery Co. Ltd., in 1969 when he worked for Yaskawa Electric Corporation in Kitakyushu, Japan. The purpose was to promote the new technology to produce new machine tools by integrating machines and electronics. "Mechatronics" is therefore a means to open up a brighter future through innovation in technology.

The ICMT is an annual international mechatronics and technology conference that has been successfully held for 17 years. ICMT offers a forum to discuss state-of-the-art technologies and emerging application trends, and provides great opportunities for professional interactions and networking in a friendly and hospitable setting. The first ICMT was convened in Santa Clara, USA, in 1996, and subsequently in Yokohama, Hsinchu, Pusan, Singapore, Kitakyushu, Taipei, Hanoi, Kuala Lumpur, Mexico City, Ulsan, Sudbury, Cebu City, Osaka, Melbourne, Tianjin, Jeju Island, and this year at Taipei, Taiwan. The objective of ICMT is to facilitate close dialogues, networking and collaborations among experts on issues related to research and technological development in mechatronics, as well as in human resource development and education.

ICMT2014 continues to follow the rich tradition of ICMT with the following conference theme:

# Innovative Mechatronics Technology

#### Technical Sessions:

In addition to the regular tracks of technical presentations, the technical program will also feature invited sessions with technology and industry specific themes. Special emphasis will be placed on the innovative usage of mechatronics technology. Topics of interest include, but are not limited to the followings:

(1) Advanced Mechatronics Devices

Robotics, Robot factory, Mobile Robots, Motion control, Intelligent Mechanism, Parallel Mechanisms in Machine Tools, Man-Machine Interfaces, Fluid Power Equipment Mechatronics Sensing and Control

 (2) Mechanomics Sensing and Control Sensors, Computer Vision and Recognition, Automated Navigation, Modeling, Tele-operation, Intelligent and Advanced Control, Adaptive Control, Artificial Intelligence, Vehicle Dynamics,
 (3) Smart Actuators and Materials

- Actuators using Functional Fluid, SMA Actuators, Piezo-Electric Actuators, Electro-Static Actuators, Magneto-Strictive Actuators, Smart Materials and Structures.
- MEMS/NEMS and Micro/Nano-Manufacturing Precision Mechatronics, Micro/Nano-Electro Mechanical Systems, Opto-Mechatronics, Ultra High Precision Machining, Focus Ion Beam Manufacturing
- (5) Precision Measurement Technology Dimensional Measurement, Micro/Nano Measurement, Ultra High Precision Positioning, Optical and Laser Technology, Scanning Probe Microscopy Technology, Precision Instrumentation

(6) Production Systems Automation Science and Technology, Intelligent Machine Tools, Flexible Manufacturing Systems, Agile Manufacturing, Production Planning and Control, Fault Monitoring & Diagnosis, e-Manufacturing, Remote Manufacturing with Internet, Free From Surface Machining

- (7) Renewable Energy and Energy Saving Technologies
- Sustainable Energy Resources, Energy Conversion Devices, Control Technologies
   Bioengineering and Mechatronics Applications in Life Sciences
- Biosensors, Biochip Manipulation, Human-Friendly Mechatronics, Human Adaptive Mechatronics, Life Cycle Design, Recycle Technology, Ecological Design and Production
   3D Printing Technologies
- Stereolithography, Fused deposition modeling (FDM), Selective laser sintering (SLS)
- (10) Human Resource Development and Education on Mechatronics Technology Strategy on Mechatronics Technology, Mechatronics Education, Computer-Aided Instruction

#### Sponsors:

Instrument Technology Research Center, others will be added.

# Conference Website:

# http://icmt2014.ntust.edu.tw

Download the call for paper, author's kit, and the registration form of the conference from the Website.

# Conference fees:

The attendee conference fee includes registration, proceedings, welcome reception, lunches, banquet, and tour. Fees are shown in US Dollars.

	Early	Late
All attendee (including speaker)	500 USD	600 USD
Student attendee (including speaker) (not including banquet)	300 USD	400 USD
Banquet fee for an additional quest (including tour)	50 USD	
Conference publication charge (EI-indexed)	100 USD	
Additional paper	250 USD	

**Optional programs:** Available soon.

# Conference Secretariat:

If you have any questions, inquires or proposals on ICMT2014, you can contact the General Secretary:

Dr. Liang-Kuang Chen Department of Mechanical Engineering, National Taiwan University of Science and Technology

43, Keelung Road, Section 4, Taipei, 106 Taiwan

Phone: +886-2-2737-6481 E-mail: ICMT2014@mail.ntust.edu.tw

#### Additional information: Visa applications:

Information about Taiwan and Taipei: http://eng.taiwan.net.tw/ http://www.taipeitravel.net/en/

**Related international conference:** 3M-NANO 2014 http://3m-nano.org/2014/main/index.asp

# **Contributed Papers and Invited** Session Proposals:

The organize committee is soliciting contributed papers and invited session proposals. Review of the contributed papers will be based on full-length papers. Invited session proposals should include a session title, and the abstracts of 4 to 6 papers

together with the contact information of the session proposer.

## **Special Publication in Journals:**

All accepted papers will be published in the Proceedings in Key Engineering Materials (indexed by Ei Compendex).

Selected extended papers will be recommended to the following journals for review and publication: 1. Journal of the Chinese Institute of Engineers (SCI)

2. Journal of Technology (EI)

_			
Pro	ar	n	•
-10	gic	וווג	•

Tue)	Registration and Welcome Party.
Wed)	Opening Ceremony.
	Keynote Speeches and Technical Sessions.
	International Steering Committee Meeting.
Thu)	Keynote Speeches and Technical Sessions.
	Banquet.
Fri)	Tour.
	Wed) Thu)

# Submission Procedure:

Full papers should be submitted by June 30, 2014 via conference WEB site: https://cmt.research.microsoft.com/ICMT2014 Only PDF file with a predefined format is acceptable.

Submission form and paper template files will be available from the Website.

#### **Important Dates**

Proposal for invited sessions	April 30, 2014
Notification of acceptance of invited session proposal	May 31, 2014
Full paper due date	June 30, 2014
Notification of full paper acceptance	August 15, 2014
Submission of camera ready manuscripts	August 31, 2014
Deadline for early registration	September 10, 2014
Conference	October 21-24, 2014











