



MMS 2012

Program at a Glance

Topics of Special Interest for MMS 2012:

- (1) Eco-systems for Microsystems and Micro Technologies
- (2) Commercialization of Microsystems – Current Status and Future Perspective

Sunday, April 22, 2012

TIME	WORLD MICROMACHINE SUMMIT
18:00-21:00	Registration (at Lakeshore Hotel - Chalucet Castle 1F)

Monday, April 23, 2012

Technical Tour I – National Labs and ITRI

TIME	TOUR ARRANGEMENT
07:00-18:00	Registration (at Lakeshore Hotel – Chalucet Castle 1F)
08:30-09:00	Bus from Lakeshore Hotel to NDL
09:00-10:30	Nano Devices Laboratory (NDL)
10:30-11:30	Chip Implementation Center (CIC)
11:30-12:00	Bus from CIC to ITRI (via Science Park)
12:00-12:20	Bus tour in ITRI
12:20-13:40	Lunch in ITRI
13:40-15:30	Industrial Technology Research Institute (ITRI)
15:30-16:00	Bus from ITRI to ITRC
16:00-17:00	Instrument Technology Research Center (ITRC)
17:00-17:30	Bus from ITRC to Lakeshore Hotel
18:00-21:00	Reception – Lake House



Tuesday, April 24, 2012 Morning Session

TIME	WORLD MICROMACHINE SUMMIT	
07:00-14:00	Registration (at Lakeshore Hotel - Leith Castle B1)	
08:00	Opening	Dr. Kuan-Hsiu Hsiao, Deputy Director-general, Hsinchu Sci. Park Dr. Min-Shyong Lin, Founder and Honorary Chairman, APM Inc., Chairman, SEMI Taiwan MEMS Committee Prof. Weileun Fang, General Chair of MMS'12
SESSION 1: COUNTRY AND REGION REVIEWS		
SESSION CHAIR : WEILEUN FANG		
TIME	COUNTRY/REGION	CHIEF DELEGATE
08:30	Benelux	Albert van den Berg
08:40	Canada	Dan Gale
08:50	China	Zhaoying Zhou
09:00	European Commission	Erastos Filos
09:10	France	Nicolas Chaillet
09:20	Germany	Thomas Gessner
09:30	Break	
SESSION 2: COUNTRY AND REGION REVIEWS		
SESSION CHAIR: PHILIPPE FISCHER		
TIME	COUNTRY/REGION	CHIEF DELEGATE
10:00	Iberian	Carles Cané
10:10	Italy	Paolo Dario
10:20	Japan	Isao Shimoyama
10:30	Korea	Jun-Bo Yoon
10:40	Latin America	Jacobus Swart
10:50	Nordic	Per Ohlckers
11:00	Break	
SESSION 3: COUNTRY AND REGION REVIEWS		
SESSION CHAIR: ROLAND ZENGERLE		
TIME	COUNTRY/REGION	CHIEF DELEGATE
11:20	Romania	Dan Dascalu
11:30	Singapore	Dim-Lee Kwong
11:40	Switzerland	Philippe Fischer
11:50	Taiwan	Weileun Fang
12:00	UK	Ron Lawes
12:10	USA	Yogesh Gianchandani
12:20	Lunch at Lakeshore	



Tuesday, April 24, 2012 Afternoon Session

SESSION 4: Eco-systems for Micro Technologies

SESSION CHAIR: DAN GALE

TIME	TOPIC AND SPEAKER
14:00~14:15	Status of the MEMS Industry <i>Mr. Pascal Viaud, Yole, France</i>
14:15~14:30	The Microsystem technology Ecosystem in Germany – Funding, Players, Projects <i>Dr. Thomas Koehler, VDIVDE-IT, Germany</i>
14:30~14:45	Introduction of MNOIC (MicroNano open innovation Center)-8/12 inch MEMS open platform in Japan <i>Dr. Koichi Imanaka, Micromachine Center, Japan</i>
14:45~15:00	Emerging Research in Microsystems: Opportunities at the Crossroads of Environmental Sensing and Healthcare Applications <i>Prof. Yogesh Gianchandani, U. of Michigan, USA</i>
15:00~15:15	Disruptive technologies for the future generation of smart systems <i>Mr. Peter Lemmens, IMEC, Belgium</i>
15:15~16:15	Break

SESSION 5: Eco-systems for Micro Technologies

SESSION CHAIR: THOMAS GESSNER

TIME	TOPIC AND SPEAKER
16:15~16:30	Foundry service for MEMS products <i>Mr. Uwe Schwarz, X-FAB Semiconductor Foundries, Germany</i>
16:30~16:45	Manufacturing trends for MEMS <i>Dr. Jerwei Hsieh, Asia Pacific Microsystems Inc., Taiwan</i>
16:45~17:00	MEMS are limited only by imagination <i>Dr. Nunzio Abbate (presented by Dr. Adriano Basile), ST Microelectronics, Italy</i>
17:00~17:15	Ecosystem for MEMS Sensor <i>Prof. Wendong Zhang, Taiyuan University of Technology, China</i>
17:15~17:30	MIMOMEMS Center: From scientific excellence, to cooperation with industry and education <i>Dr. Alexandru Muller (presented by Dr. Dan Dascalu), IMT-Bucharest, Romania</i>
18:00~21:00	Banquet at Lakeshore



Wednesday, April 25, 2012 Morning Session

SESSION 6: Commercialization of Microsystems – Current Status and Future Perspective SESSION CHAIR: ISAO SHIMOYAMA

TIME	TOPIC AND SPEAKER
08:30~08:45	Infineon – supplier of semiconductors for Microsystems <i>Dr. Wolfgang Dettmann, Infineon Tech. AG, European Commission</i>
08:45~09:00	High precision acceleration sensors - from patent to product <i>Dr. Torsten Thieme, memsfab GmbH, Germany</i>
09:00~09:15	Micro/MEMS emerging technologies for future society in Japan <i>Mr. Koichi Karaki, OLYMPUS Co.Ltd, Japan</i>
09:15~09:30	MEMS Packaging Update – experience sharing from Tong Hsing <i>Mr. Heinz Shao-Pin Ru, Tong Hsing Electronic Ind. Ltd., Taiwan</i>
09:30~09:45	Recent Developments in Microfluidics Commercialization <i>Dr. Henne van Heeren, enablingMNT, the Netherlands</i>
09:45~10:45	Break

SESSION 7: Commercialization of Microsystems – Current Status and Future Perspective SESSION CHAIR: PAOLO DARIO

TIME	TOPIC AND SPEAKER
10:45~11:00	Microsystems Increasing Energy- and Materials Efficiency <i>Dr. Harry Hedler, Siemens AG, European Commission</i>
11:00~11:15	MST innovations need market access <i>Dr. Frank Bartels, IVAM, Germany</i>
11:15~11:30	Color Barcoded Microparticles for Multiplexed Bioassay : Academic Development and Commercialization Aspects <i>Prof. Sunghoon Kwon, Seoul National University, Korea</i>
11:30~11:45	MicroMachining and Sensor Activities in Brazil <i>Prof. Jacobus Swart, St. University of Campinas (UNICAMP), Brazil</i>
11:45~12:00	Technological approaches to BioMEMS at FBK-Center for Materials and Microsystems <i>Dr. Leandro Lorenzelli, FBK, Italy</i>
12:00~12:15	MEMS for consumer electronics and beyond, our effort in helping local players <i>Dr. Peter Chang, ITRI, Taiwan</i>
12:15~	Lunch at Lakeshore



Wednesday, April 25, 2012 Afternoon Session

SESSION 8: Others

SESSION CHAIR: RON LAWES

TIME	TOPIC AND SPEAKER
14:00~14:15	Technology Push AND Market Pull: Challenges and Perspectives of the cluster MicroTEC Südwest <i>Dr. Klaus Funk, MST BW, Germany</i>
14:15~14:30	Development of Actuators for Microsystems Applications <i>Prof. Ridha Ben Mrad, University of Toronto, Canada</i>
14:30~14:45	First Step Toward Blood On a Chip Commercialization; blood viscometer and micro hemocytometer <i>Prof. Sung Yang, Department of Mechatronics, Korea</i>
14:45~15:00	Review: The future of energy storage systems using micro- and nanotechnologies <i>Prof. Per Ohlckers, Vestfold University College, Norway</i>
15:00~15:15	The Landscape of MEMS Academic Research Activities in Singapore <i>Prof. Vincent C. Lee, National Singapore Univ., Singapore</i>
15:15~15:30	Nano-reliability Issues during Micro-/Nano-fabrication <i>Prof. Zhiyu Hu, Shanghai University, China</i>
15:30~16:30	Break

SESSION 9: Panel Discussion

SESSION CHAIR: YOGESH GIANCHANDANI

TIME	TOPIC AND SPEAKER
16:30~17:30	Panel discussion
17:30~18:00	Break
19:00~21:00	Gala Dinner at Nan-Liao Harbor (Hsinchu City)



Thursday, April 26, 2012
Technical Tour II – Industry Tour

TIME	TOUR ARRANGEMENT
08:00-08:30	Bus from Lakeshore Hotel to apm
08:30-09:30	Asiapacific Microsystems Inc. (apm) – Pure MEMS Foundry tour
09:30-09:45	Bus from apm to TSMC
09:45-11:00	Taiwan Semiconductor Manufacturing Co. (TSMC) – CMOS Foundry tour
11:00-11:05	Bus from TSMC to UMC
11:05-12:20	United Microelectronics Corp. (UMC) – CMOS Foundry tour
12:20-13:50	Lunch at UMC Recreation Center
13:50-14:30	Bus from UMC Recreation Center to KYEC
14:30-15:30	King Yuan Electronics Co. (KYEC) – CMOS/MEMS Testing House tour
15:30-16:30	Bus from KYEC to ASE
16:30-17:30	Advanced Semiconductor Eng. (ASE) – CMOS/MEMS Packaging House tour
18:00	Adjourn of the MMS'12, Bus to (1) Airport – 30 minutes, (2) Taipei – 45~60 minutes, or (3) Hsinchu