## The 2011 Asia-Pacific EMC Symposium in Korea

By Prof. Jeong-Ki Pack, Symposium Chair of the 2011 APEMC



he 2011 Asia-Pacific EMC Symposium (2011 APEMC) was held in Jeju Island in Korea from May 16<sup>th</sup> to 19<sup>th</sup>, 2011 at the Ramada Plaza Jeju Hotel. Jeju Island has very beautiful and peculiar landscape with rich cultures and fabulous facilities. We are sure that the 2011 APEMC have provided an excellent opportunity to exchange their expertise and to build up friendship for the members of the EMC community of the Asian-Pacific region as well as other regions of the world.

The symposium chair was Dr. Jeong-Ki Pack, a professor in Chungnam National University, Daejeon, Korea, and the Korean Institute of Electromagnetic Engineering and Science (KIEES) and the Radio Research Agency (RRA) in Korea were the organizers of the symposium. This symposium was sponsored by Korea Communications Commission (KCC), Korea Radio Promotion Association (KRPA), Electronics and Telecommunications Research Institute (ETRI), Automotive Parts Technology Support Center (APTSC), Korea Marine Equipment Research Institute (KMERI), Korea Electric Power Corporation (KEPC), Korea Tourism Organization (KTO), Jeju

Convention & Visitors Bureau, Electromagnetic Compatibility Society (EMCS), Institute of Electrical and Electronics Engineers (IEEE), IEEE Seoul Section EMC Chapter, IEEE Seoul Section AP Chapter, IEEE Seoul Section MTT Chapter, and IEEE Seoul Section GRS Chapter.



The symposium chair of the 2011 APEMC, Prof. Jeong-Ki Pack, presented the welcome address.



The Technical Program Committee Chair, Prof. Joungho Kim from KAIST in Korea presented the summary of the technical program.



Prof. Todd H. Hubing who is from Clemson Univ., USA gave a valuable plenary speech about "Ensuring the Electromagnetic Compatibility of Safety Critical Automotive Systems."

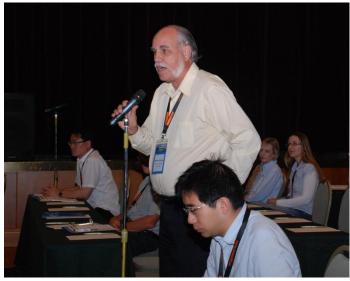


Prof. Masao Taki who is from Tokyo Metropolitan University, Japan gave a valuable plenary speech about "EMF Health Issues: Perspective of Risk Analysis and Risk Management."

Over 375 people from 20 countries from Asia, Europe, Australia, and North Americas attended this symposium. The technical exhibition was held concurrently with the symposium with 16 exhibitors.

The welcome speech took place in the morning of May 17<sup>th</sup>, and more than 200 people attended. During his speech, the Symposium Chair, Prof. Jeong-Ki Pack, welcomed all participants and expressed his appreciation to the organizing committee, technical committee, paper authors, and sponsors for their great efforts and contributions. After the opening speech, the Technical Program Committee (TPC) Chair, Prof. Joungho Kim from KAIST in Korea presented the summary of the TPC activities as well as the technical program of 2011 APEMC.

Two invaluable plenary speeches were presented at the opening ceremony: first by Prof. Todd H. Hubing from Clemson Univ., USA, about "Ensuring the Electromagnetic Compatibility of Safety Critical Automotive Systems," followed by Prof. Masao Taki from Tokyo Metropolitan University, Japan, about "EMF Health Issues: Perspective of Risk Analysis and Risk Management." During the plenary speech session, a lot of experts from all over the world asked numerous questions.



Dr. William A. Radasky from Metatech asked a question in the plenary session and gave kind supports and contributions to technical program.

The Technical Program Committee (TPC), which consists of 36 international TPC members from all over the world and 41 local TPC members specifically from Korea, has diligently worked to ensure the technical quality of the papers, which were presented at the conference. The technical program was divided into 6 categories such as tutorials, plenary speeches, technical paper sessions, special paper sessions, poster paper sessions, and workshops. The 26 tutorials, which covered 10 topics by 27 speakers, took place in May 16<sup>th</sup> and 19<sup>th</sup>. The two outstanding speakers made fantastic presentations during the plenary speech session. While 72 papers were presented in the technical paper sessions, the 50 papers for the 10 special paper sessions were

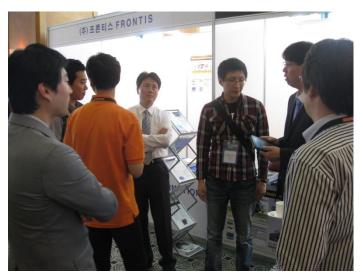
given to many attendees. The 25 posters were introduced on Tuesday and Wednesday. The 4 workshops for 4 topics on current hot topics were held on Thursday, May 19, 2011. Project meeting of IEC SC77C was successful.



Technical and special paper sessions



Sonia Ben Dhia (left) and Hyunho Park (right) were glad to meet each other again and see the beautiful sea of Jeju island through the windows at the lobby during coffee break.



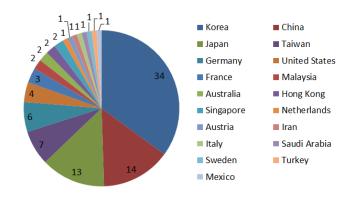
16 Technical exhibitions



Several IEEE EMC Society Board of Directors attended the Symposium, including (from left) Dr. Zhong Chen from ETS-Lindgren, Dr. Janet O'Neil from ETS-Lindgren, and Dr. John Norgard from NASA Houston, USA



The IEEE EMC Society along with several other cooperating societies provided technical co-sponsorship. Takeo Yoshino staffed the IEEE EMC Society membership booth during the symposium to promote the benefits of joining the EMC Society.



Regional distribution of the accepted papers

Total 165 papers from the technical, poster, and special paper sessions on the 23 technical topics were submitted from 20 different countries from Asia, Europe, and North America. The 115 papers for the technical and poster sessions and the invited 50 papers for the 10 special paper sessions were submitted respectively. Each paper was reviewed by the 76 qualified reviewers and the final decisions regarding the technical papers and programs were made at the TPC meeting, which was held in Daejeon last February. Paper submissions of

the 2011 APEMC 2011 Symposium covered a wide range of EMC-related topics. The most popular topics were Sources of Electromagnetic Interference, EMC Management, EMC Measurement Techniques, System-Level EMC and PCB EMC, Antenna and Propagation Issues, Electronic Packaging and Integration EMC, Power Integrity (PI) and Signal Integrity (SI), Computational Electromagnetics, Semiconductor EMC, and Electromagnetic Interference with Medical Devices.



The "Best Student Paper Award" winner, Christian Hoffmann from Technische Universitaet Muenchen, Germany, (right) received the certificate from the Symposium chair, Prof. Jeong-Ki Pack (left) at the banquet.

From the 115 papers submitted, six of them received the "Best Student Paper Award" and the award winners were: Christian Hoffmann from the Technische Universitaet Muenchen, Germany, for his paper "A Time-Domain System for CISPR 16-1-1 compliant Measurements above 1 GHz", Xiaoming Zhang from the Tsinghua University, China, for his paper "Development of a wideband transient electric field sensor", Mi-Na Hong from the Korea Institute of Radiological and Medical Sciences, Korea, for her paper "Effect of extremely low frequency electromagnetic fields on levels of intracellular reactive oxygen species and gene expression profile in MCF10A cells", Feng-Chang Chuang from the National Chung Hsing University, Taiwan, for his paper "Magnetoresistive Sensor Readout Circuit and Field Canceling System in Next Generation Nano-Fab", Koji Sakuma from the Shibaura Institute of Technology, Japan, for his paper "Chip-Package-Board Modelling for LCD Driver IC", and Bo Pu from the Sungkyunkwan University, Korea, for his paper "Modeling of FBGA Package for High Performance Digital System."

The Symposium banquet took place on May 17<sup>th</sup> at the Ramada Plaza Jeju Hotel and the Best Student paper awards were presented during the banquet. Also, two primary organizers received the plaques of appreciation while the Symposium Chair, Prof. Jeong-Ki Pack, appreciated the organizing committee and the 2011 APEMC secretariats, the members of the Sejong Convention Services Ltd.



The participants watched Nong-ak and fanning dance, Korean traditional music performance, at the banquet.

The next Asia-Pacific EMC Symposium will take place in 2012 in Singapore, and everyone is invited to attend. Additionally, the 2013 Asia-Pacific EMC Symposium will be held in Australia.

For more information on the 2011 Asia-Pacific EMC Symposium (APEMC), please contact: Prof. Jeong-Ki Pack (jkpack@cnu.ac.kr) and Dr. Erping Li (erpingli@ieee.org) for the 2012 APEMC Symposium.