

2010 Asia-Pacific Symposium on Electromagnetic Compatibility & Technical Exhibition on EMC RF/Microwave Measurement & Instrumentation

APEMC 2010
April 12 - 16, 2010
Beijing, China

Report on APEMC 2010, IEEE EMC Society Newsletter, Issue 226, Summer 2010

The 2010 Asia-Pacific International Symposium on Electromagnetic Compatibility (APEMC) was held from April 12 to 16, 2010 at the Beijing International Convention Center with the theme of "EMC Harmonizes the World." This event addressed the needs of a rapidly rising EMC community in the Asia-Pacific region while promoting excellence and warm relationships amongst the EMC community. The 2010 APEMC Symposium was lead by the president, Professor Jinliang He, an IEEE Fellow from Tsinghua University in Beijing. Professor He also received the IEEE EMC Society's Technical Achievement Award at the recent 2010 IEEE International Symposium on EMC held in Fort Lauderdale, Florida. With the fabulous Chinese organizing team, APEMC 2010 was a resounding success. APEMC 2010 has further strengthened the Asia-Pacific EMC foundation and extended its influence worldwide. The Symposium has been the largest EMC event in China, which provided an opportunity to bridge the EMC community in China and the World.

Over 700 delegates from 43 countries and regions, including 300 foreign delegates outside Mainland China, attended this event, which makes the APEMC a truly global conference. In addition, 68 exhibitors were co-located with the APEMC 2010.

The opening ceremony took place in the morning of April 13, attended by over 700 delegates and invited guests. The Symposium was officially declared "open" by the Guest-of-Honor, Professor Zhuan Li-jun, Deputy President of Tsinghua University. Professor Jinliang He gave a welcome address as did the President of the IEEE EMC Society, Professor Francesca Maradei. The General Chair, Professor



Erping Li, outlined the APEMC history and future, and the Technical Program Chair, Professor Todd Hubing, outlined the technical program of the Symposium.

The Symposium committee invited the former President of the IEEE Electromagnetic Compatibility Society, Professor Todd Hubing of Clemson University in the USA, to be the Chairman of the Technical Program Committee (TPC), and another 67 global well-known experts to be TPC members.

The general organization of the Symposium had a focus on high quality technical papers by speakers from all over the world. A total of 578 papers were received; of these, 432 papers were selected for oral and poster presentations. Spanning over three days (April 13–15), the Symposium offered a total of 61 well attended oral technical sessions, based on six parallel technical tracks and six Open Forum poster sessions. On top of these high quality technical sessions, there were four plenary talks by renowned experts on the morning of April 13 and 14. The first was given by Dr. Wang Jing, from the China TD Forum, who spoke on “Opportunities and Challenges of TD-SCDMA and TD-LTE,” followed by Professor Niels Kuster, from the Swiss Federal Institute of Technology Zurich, on “The Past, Present and Future of SAR Assessments and Human Safety of Electromagnetic Radiation”, Dr. Bruce Archambeault, from IBM, on “The Future of EMC Requirements, Design and Tools”, and Professor Wang Zhihua, from Tsinghua University, China, on “Industry Status and Technology Trends of Integrated Circuit Design in China.”

In conjunction with the technical sessions, a total of 11 workshops and seven tutorials sessions were conducted on Monday, April 12 and Friday, April 16, which were organized by 44 internationally renowned EMC specialists.

Eighteen Special Sessions were organized by famous EMC experts, including “EMC Test and Measurement” by Dr. Wen Lie Liang of QuieTek Corporation and Professor Han-Nien Lin of Feng Chia University, Chinese Taipei; “Recent Progress in EMC Numerical Modeling” by Dr. Qingsheng ZENG of the Communications Research Centre Canada; “EMC Computer Modeling and Simulation” by Professor Junwei Lu of Griffith University, Australia; “Recent Progress in Modeling and Simulation for EMC” by Professor Francesca Maradei of Sapienza University of Rome, Italy; “Numerical Modeling for Complex EMC Systems” by Professor Ji Chen of the University of Houston, USA, and Dr. Bruce Archambeault of IBM, USA; “Effects and Protection of Intentional Electromagnetic Interference” by Dr. William Radasky of Metatech Corporation, Goleta, California, USA and Professor Wen-Yan Yin of Zhejiang University, China; “EMC in Mobile Phones” by Dr. Huang Jingyu of Nokia Mobile Phone Device R&D Beijing, China; “Automotive EMC – EMC Solutions for New Automotive Technologies” by Professor Stephan Frei of the Technische Universität Dortmund, Germany; “Modeling and Analysis of Packaging Structures for EM Reliability” by Dr. Ivan Ndip of Fraunhofer IZM, Germany; “Biomedical EMC” by Dr. C.-K. Chou of Motorola Inc. USA, Professor Ji Chen of the University of Houston, USA, and Professors Osamu Fujiwara and Jianqing Wang of the Nagoya Institute of Technology, Japan; “ESD and Transients” by Professors David Pommerenke of the Missouri University of Science and Technology, USA, Osamu Fujiwara of the Nagoya Institute of Technology, Japan, and Dr. Ken Kawamata of the Hachinohe Institute of Technology, Japan; “Signal and Power Integrity for Multi-Gbps Digital Circuits” by Professor Jun Fan of the Missouri University of Science and Technology, USA, Professor Antonio Orlandi of the University of L’Aquila, Italy, and Dr. Bill Chen of Cisco, USA; “EMC Research and Development” in Taiwan by Professor

Ching-Wen Hsue of the National Taiwan University of Science and Technology, Chinese Taipei; "Overview of EMC in Europe" by Professor Marcello D'Amore of the University of Rome La Sapienza, Italy; "Model Validation for EMC Simulations" by Professor Franz Schlagenhauser of the University of Western Australia, Australia; "EMC and Solution of Power Electronics" by Professor Zhengming Zhao of Tsinghua University, China; "Electromagnetic Environment of Power System" by Professor Xiang Cui of North China Electric Power University, China, Dr. W. H. Siew of University of Strathclyde, UK, and Professor A.P.J. van Deursen of Eindhoven University of Technology, Netherlands; and "Advances in Radiated Measurements" by Zhong Chen of ETS-Lindgren, USA. One Industry Forum "Emission Measurements – Novel and Alternative Methods" was organized by Dr. Stephan Braun of GAUSS Instruments GmbH, Germany. Two topical meetings were presented, including a "Topical Meeting on Lightning Protection" by Professor Vladimir A. Rakov of the University of Florida, USA, Dr. S. Yokoyama of the Central Research Institute of Electric Power Industry (CRIEP), Japan, and Professor Farhad Rachidi of Swiss Federal Institute of Technology – Lausanne, Switzerland. The second presentation was "Topical Meeting on Advanced Research in EMC of ICs" by Dr. Sonia Ben Dhia of INSA de Toulouse, France, and Dr. Thomas Steinecke of Infineon, France.



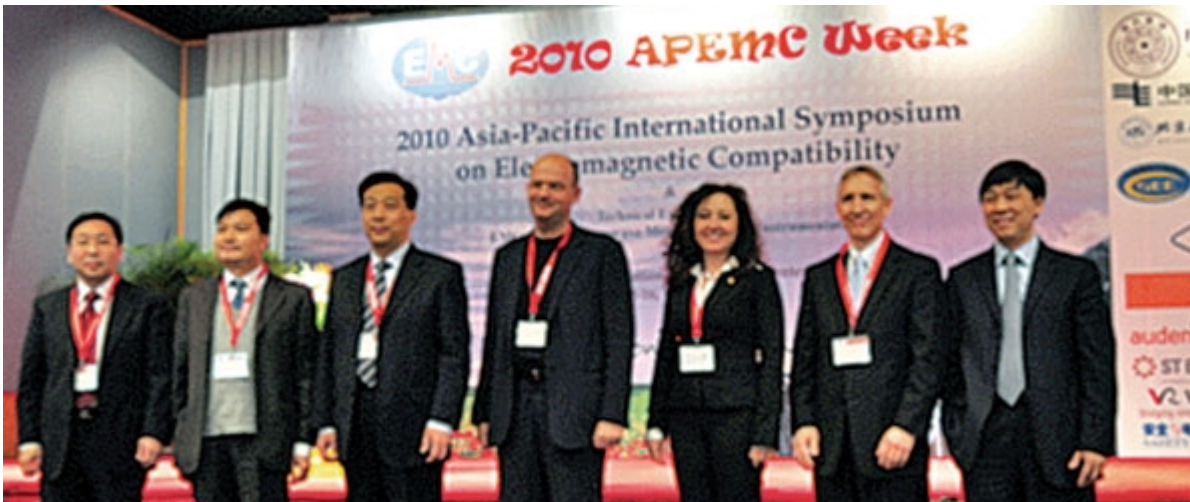




The Symposium dinner banquet took place on April 14 at the Beijing International Convention Center. The Best Symposium Paper and Best Symposium Student Papers were presented at the dinner, and a two-hour Chinese traditional performance was presented. The performance included three different Chinese folk dances, Jiangnan opera, magic, acrobatics, folk music, Kung Fu, Sichuan opera-changing faces, and Peking Opera. Every attendee deeply enjoyed the performances.

The Best Symposium Paper Award, selected by the Symposium Paper Committee chaired by Professor Todd Hubing, was given to Takahiro Yoshida, Hiroshi Yoshihara, Kentaro Kawasaki, and Noriaki Masui from the Tokyo University of Science, Japan for their paper entitled "Effect of the Shapes of Metal Electrodes on ESD Current and Radiation Noise."

Three Best Student Papers were selected by the Student Papers Committee chaired by Professor Erping Li. Besides their oral presentations, the students were required to present their papers in the poster session. The first prize was awarded to Ashok Narayanan from Carleton University, Ottawa, Ontario, Canada, for his paper "Fast EMI Analysis of Massively Coupled Interconnects with Long Delay"; the second prize was awarded to Anqi Hu from the Naval University of Engineering Wuhan, China for his paper "Common-Mode Interference Suppressor for Chopper Circuit Based on Negative Capacitance: Applications and Improvements"; the third prize went to Fayu Wan of Avenue Galilée, Saint Etienne du Rouvray, France for his paper "Study of Susceptibility of an MCU Control System in the Automotive Field."



The IEEE EMC Society, together with several other cooperating Societies, provided technical co-sponsorship. The Symposium also received sponsorship from China EPRI, China Southern Power Grid Technology Research Center (CSG TRC), China NSFC, Henan

Pinggao Electric Co., AR RF/MICROWAVE INSTRUMENTATION, China State Grid Electric Power Research Institute, Lightning Protection Center of Guangdong Province, Chinese Society for Electrical Engineering (CSEE), and the IEEE Singapore EMC Chapter.

The next Asia-Pacific EMC Symposium will take place in 2011 in Cheju, Korea. On behalf of the organising committee, we invite everyone to attend.