

# The 2008 Asia-Pacific EMC Symposium in Singapore

*By Mark Montrose, IEEE EMC Society Board of Directors Member, and Erping Li, President of the 2008 APEMC Symposium*

The 2008 Asia-Pacific EMC Symposium (APEMC) was held in conjunction with the 19th International Zurich Symposium and Technical Exhibition on Electromagnetic Compatibility (EMC-in-Singapore 2008), under the theme "The Gateway to Emerging Technology," from May 19 to 22, 2008 at the Singapore SUNTEC International Convention and Exhibition Center. This event addressed the needs of a rapidly rising EMC community in the region while promoting excellence and warm relationships amongst the EMC community and members. The conference chair was Dr. Erping Li from the Singapore National Research Institute of High Performance Computing (IHPC). Dr. Li recently was awarded the designation of IEEE Fellow. With the Singapore fabulous organizing team, the conference was a resounding success - the same as an identical conference in 2006 hosted at the same venue in conjunction with EMC Zurich. The 2008 APEMC established the Asia-Pacific EMC foundation and identity, and it will continue from this point onwards.

The Symposium attendance was over 370 delegates from 31 countries making this a truly global conference. An increased number of delegates attended from the Asia-Pacific region as compared to the last edition of this conference in 2006. A technical exhibition was held concurrently with the Symposium with 34 exhibitors within 1,000 square meters of floor space.

The opening ceremony took place in the morning of May 20,

attended by over 400 delegates and invited guests. In his opening speech, the President of the Symposium, Dr. Erping Li, welcomed all delegates and expressed his appreciation to the organising committee, technical committee, paper authors, and sponsors for their great effort and contribution in making the Symposium a success. The General Co-Chair, Professor Ruediger Vahldieck, took the stage next, giving his opening address for the Symposium, complimenting the organising committee for a job well done and announcing the 20th International EMC Zurich Symposium January 12-16, 2009 at ETH Zurich, Switzerland. Following Professor Vahldieck's opening remarks was an address by Elya Joffe, President of IEEE EMC Society.

The Guest of Honor, Professor Tan Chorn Chuan, Senior Deputy President of the National University of Singapore



*The President of the IEEE EMC Society, Mr. Elya Joffe, gave his address at the opening ceremony.*



*The President of the 2008 APEMC Symposium, Dr. Erping Li, presented the welcome address.*



*Guest of Honor, Professor Tan Chorn Chuan, addressed the audience at the opening ceremony.*

and the Deputy Chairman of A-STAR, officially declared the Symposium open. Two keynote speeches were then presented, first by Dr. Raj Thampuran, Director of A-STAR on the topic of "R&D Holds the Key for Singapore's 21st Century Economic Development," followed by Dr. Albert Ruehli of the IBM T. J. Watson Research Center, USA, on "Electromagnetic EMC Modeling Techniques: Past, Present and Future."

The general organization of the Symposium had a focus on high quality technical papers by authors from all over the world. A total of 320 papers were received and 194 papers were selected for oral presentations. Spanning over three days (May 20-22), the Symposium offered a total of 39 well-attended oral technical sessions (including three topical meetings on integrated circuit EMC), using four parallel tracks and three open forum poster sessions. On top of these high quality technical sessions, there were two plenary presentations by renowned experts on the morning of May 21. The first was by Professor Dr.-Ing Thomas Weiland of the Technical University of Darmstadt, Germany who spoke on "EMC Simulations in Time and Frequency Domain," followed by Professor Raj. Mittra from Penn State University, USA, on "Challenges in Real-World EMI/EMC Problems and Some Novel Techniques."

In the evening following the first technical session on May 20, the Symposium held its welcome reception in the exhibi-

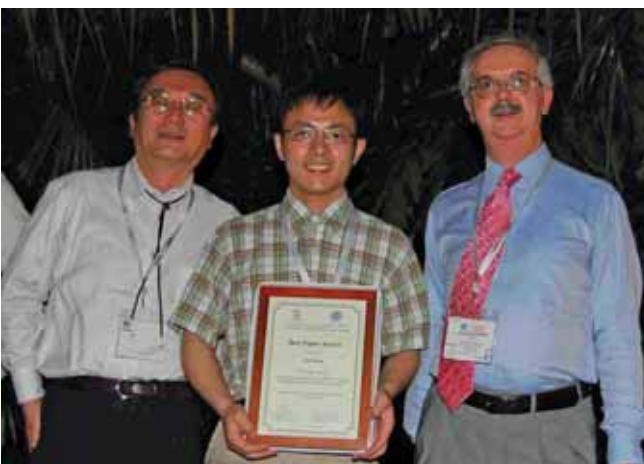


*Professor Thomas Weiland gave a plenary speech.*

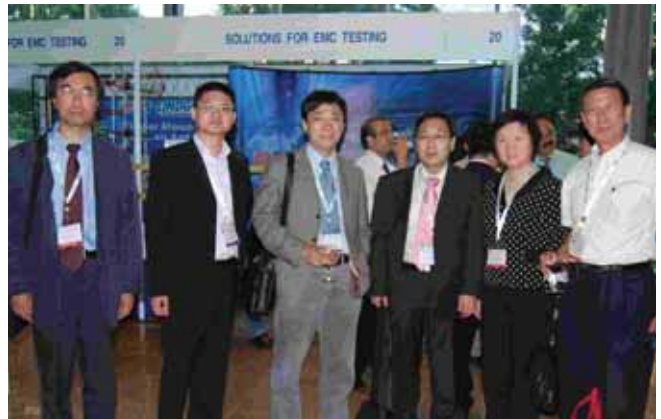
tion area. The Symposium banquet took place on May 21 at the Rasa Sentosa Resort on the island of Sentosa. On the beach under the rustling palm trees, the delegates enjoyed the view of a sandy white beach and listened to the waves while a great selection of Asian-based meats and fresh seafood dishes and exotic desserts were offered, especially selected for the international guests. During the banquet, awards were presented for the “Best Symposium” and “Best Student Paper”, while plaques of appreciation were presented to the three primary sponsors, TESEQ, EM TEST and CST. The organizing committee received certificates of appreciation from the General Co-Chair, Professor Vahldieck.

The “Best Symposium Paper” Award was given to Jian Wang, Qifeng Liu, Wen-Yan Yin, and Junfa Mao from Shanghai Jiao Tong University, China for their paper entitled “A New Conformal Technique for FDTD (2,4) Scheme for Modeling Perfectly Conducting Composites.”

Three “Best Student Papers” were selected from the 59 student papers submitted. Besides their oral presentations, the students were required to present their papers in the poster session. The first prize was a difficult choice for the judges and in the end, they decided to award two first prizes to Nico Godel from Helmut-Schmidt-University, Germany, for his paper “Time Domain Discontinuous Galerkin Method with Efficient Modeling of Boundary Conditions for Simulations of Electromagnetic Wave Propagation” and to Anne Roc’h from the University of Twente, Netherlands for her paper “Performance Optimization Aspects of



*The “Best Symposium Paper Award” winner, Jian Wang from Tsinghua University, China, (center) received the certificate from the Technical Program Chairs, Professor Flavio Canavero (right) and Professor Osamu Fujiwara (left) at the opening ceremony.*



*Asia-Pacific Delegates, from left, included Professor Jian-qing Wang from Japan; Dr. Tian Jian from Huawei, China; Professor Jinliang He from Tsinghua University, China; Dr. Erping Li from Singapore; Professor Donglin Su from Beijing, China; and Dr C. K. Chou from Motorola, USA.*

Common Mode Chokes.” The third prize went to Zhangqing Yu of Tsinghua University, China for his paper “Analysis on Switching Transient EMI in +/- 500kV HVDC Converter Stations.”

A total of seven workshops and tutorials sessions were conducted one day prior to the Symposium. These workshops and tutorials were hosted by 26 international specialists who introduced participants to the latest developments in the fields of “EMC and Signal Integrity,” “Circuit Board EMC Design,” “Reverberation Chambers, EMC and Modern Power Electronic Systems,” “RF Biological Effects,” as well as “System Level EMC Design and Control.” These workshops and tutorials were well attended with 228 participants and provided some groundwork for the three days of regular EMC technical sessions that were to follow.

The IEEE EMC Society together with several other cooperating societies provided technical co-sponsorship. The Symposium also received sponsorship from TESEQ, EM TEST and Comput-



*Several IEEE EMC Society Board of Directors attended the Symposium, including (from left) Todd Hubing of Clemson University, Kimball Williams of Denso International America, Mark Montrose of Montrose Compliance Services, Takeo Yoshino of the University Electro Communications in Tokyo, Elya Joffe of KTM Project Engineering, Francesca Maradei of the University of Rome “La Sapienza” and John Norgard from the University of Colorado.*





*The welcome reception was well attended and held in the expansive exhibition area.*

er Simulation Technology (CST). The IEEE EMC Society had eight members of its Board of Directors in attendance, including Elya Joffe, Todd Hubing, John Norgard, Francesca Maradei, Kimball Williams, Takeo Yoshino, Don Heirman and Mark Montrose. The IEEE EMC Society booth in the exhibit hall received 10 new members, all from Asia. As a result of the conference, it is hoped several new chapters will be created in Asia.

The Symposium closed with an IEC ACEC EMC Workshop organized by the IEC Asia-Pacific Regional Center (IEC-APRC) on the evening of May 22. Speakers included Dr. William Radasky, Donald Heirman, and Professor Michel Ianoz.

The next Asia-Pacific EMC Symposium will take place in 2010 in Beijing ([www.apemc2010.org](http://www.apemc2010.org)). On behalf of the organizing committee, everyone is invited to attend.

For more information on the Asia-Pacific EMC Symposium, please contact: Dr. Erping Li at [erpingli@ieee.org](mailto:erpingli@ieee.org). **EMC**



*A banquet dinner was held during the Symposium at the Rasa Sentosa Resort.*



*Takeo Yoshino staffed the IEEE EMC Society membership booth during the symposium to promote the benefits of joining the EMC Society and attendance at its 2008 IEEE International Symposium on EMC.*



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