

R10 Newsletter (2008/9)

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IEEE

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IEEE Taipei Section

2008 EM Education Initiative - Summer Program

The first "2008 EM Education Initiative - Summer Program" seminar was held on 28 July to 1 August 2008 in Barry Lam Hall 101 of National Taiwan University (NTU). It received encouraging responses and the outcomes are fruitful. Although the first day was affected by a typhoon, the seminar still got attendees' great support. The number of the attendees reached to 184 people, and remarkably, the rate of full attendance was 76.6%, to 141 people, setting the best example of "Nothing Can Quench One's Thirst for Knowledge."

The seminar was originated from the IEEE Chapter Chairs meeting on 5 July 2007 held by Section Chair Ruey-Beei Wu, and the follow-up MTT/AP/EMC/GRS Joint Chapters meeting on 21 October 2007 initiated by EMC Chapter Chair Song-Tsuen Peng. Mandated to uplift the research momentum in electromagnetic (EM) field and to attract young talents to do R&D, the joint meeting received enthusiastic participation and constructive comments from the Chapter Chairs and members in EM field in Taiwan. One of its resolutions was to kick off a seminar for the new graduate students to review the primary knowledge and grasp the research trends on EM theory and applications in the summer before they enroll the graduate schools.

With strong financial support from MTT Chapter chaired by Fu-Tsan Tsai, the seminar was held by NTU Communication Research Center, thereby fully utilizing NTU's influence to gather venerable professors as speakers and to set up good holding patterns. The Center Director Huei Wang set up the table and organized the seminar agenda including 1 review and 10 tutorials. The invited speakers are among the best and the brightest, and therefore attracted many graduate students nationwide to participate in the seminar. The number of attendees was impressive and as many as 24 graduate schools have joined the efforts.

Highly involved in the program setup, the Taipei Section also sponsored the propagation and member recruiting activities with the NTU student chapter at the seminar place. 23 seminar attendees were recruited in the seminar, while more got acquainted with the chapter services, the importance of IEEE publications in R&D, and member super value offers. Some difficulties in recruiting new members were also experienced and improvements should be made to facilitate the website applications.



From left to right in the first row, MTT Chair Fu-Tsan Tsai (3rd), EMC Chair Song-Tsuen Peng (4th), AP Chair Dau-Chyrh Chang (5th), Taipei Section Chairman Ruey-Beei Wu (6th), and in the second row, GRS Chair Kun-Shan Chen (1st)

In summary, this seminar has reached many benchmark missions. For the first time, top people and resource in EM were gathered, a complete introduction to EM theory and applications was made in 30 hours within a week, and an omni-bearing concept was introduced to graduate students. It was also the first cooperation opportunity for MTT, AP, EMC, and GRS Chapters in Taiwan. All participants, including seminar organizers, speakers, and attendees, applauded the great success. They not only expected more outstanding outcome of the seminar next year, but also longed for the prosperity of EM field in Taiwan to take the center stage.



2008 National Conference on System Science and Engineering

In 2008 National Conference on System Science and Engineering, 236 papers were presented. During the two conference days, researchers from universities, research organizations, and industrial area proposed many novel ideas with their paper presentation. Moreover, the research directions were fully discussed for the coming important system technologies, such as robot systems, multimedia communication systems. The improvements of the system sciences and engineering would upgrade the characteristics and competition capability of the industrial projects in Taiwan. With this conference, people shared their experiences and research results with each other and made further cooperation possible. Further, four keynote speeches by the area experts (Dr. Philip Chen (IEEE Fellow), Dr. Weng-Tat Chan, Dr. Timothy L. J. Ferris, and Prof. C.Y. Lin made the conference more successful.

Workshop on "Power Semiconductor Devices and Design Criteria"

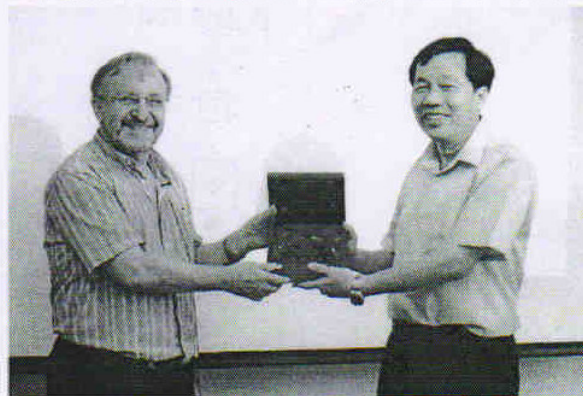
Dr. Leo Lorenz (Infineon Technology, China), an IEEE Distinguished Lecturer and an IEEE Fellow, was invited by Profs. Chih-Fang Huang and Po-Tai Cheng of the Center for Advanced Power Technologies (CAPT), National Tsing Hua University (NTHU), Taiwan to hold a workshop entitled "Power Semiconductor Devices and Design Criteria" during July 7-15, 2008 in Hsinchu, Taiwan. This workshop drew nearly 30 participants from the nearby Hsinchu Science Industry Park, a semiconductor industry power house of Taiwan. The other 30 participants were graduate students in the field of power electronics or semiconductor devices. This 24-hour workshop covers fundamental semiconductor physics, operating principles of main power devices such as power diodes, MOSFETs, and IGBTs, limiting factors, driving and protection of power devices. This workshop offered a unique opportunity for industry/academic of power electronics and power semiconductor devices to share experiences, and opened the channel for future cooperations.

At the end of the workshop, Prof. Chen-Hsin Lien, chairperson of the Department of Electrical Engineering, NTHU, presented a plaque reading "Presented to Dr. Leo Lorenz for the inspiring lectures and persistent dedications"



("启迪新智" in Chinese) for appreciation.

This event was partly sponsored by IEEE Taipei section as a part of its series summer workshop programs. PELS/IES joint chapter, EDS chapter, and Taiwan Power Electronics Association co-organized this workshop with CAPT-NTHU.

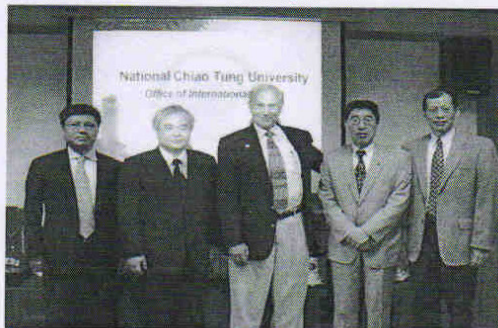


IEEE Reliability Society Delegation visits IEEE RS Taipei/Tainan Chapter

IEEE delegates including Vice President of IEEE Reliability Society Dr. Samuel Keene and the President of City University of Hong Kong Prof. Wey Kuo visited Taiwan on July 21-22 to welcome the new IEEE RS Taipei/Tainan Chapter and to promote IEEE reliability activities in Taiwan.

The Chapter Chair Prof. Shiuhyng Shieh, Vice President Chen, and Dean of International Affairs of National Chiao Tung University (NCTU) hosted their visit in the first morning. They exploited the possibility in hosting the Secure Systems Integration and Reliability Improvement Conference (SSIRI) in Taipei in 2010. Then, meetings were held at Industrial Technology Research Institute (ITRI), hosted by Deputy General Director Yu, and Institute for Information Industry (III), by Vice President Hsu. Two new technology demonstrations were made by ITRI during the visits. Prof. Shieh and Dr. Keene also met with the IEEE Taipei Section Chairman Ruey-Beei Wu. The strong presence and commitment to the IEEE in Taiwan was recognized by Dr. Keene.

While visiting NCTU, Dr. Keene gave a talk entitled "Six Sigma Contributions to Developing Better Products" on assuring reliability and trust in new products.



IEEE delegates visited NCTU. From left to right: Associate Dean of International Affairs, Vice President Chen of NCTU, Vice President Keene of IEEE RS, President Kuo of City University of Hong Kong, and RS Taipei/Tainan Chair Shieh