

Also the following CPMT-associated new Fellows who were evaluated by other Societies:

Charvaka Duvvury
Texas Instruments, Inc.
Dallas, TX, USA

for contributions to electrostatic discharge devices and design protection methods for integrated circuit applications

Flavio Canavero
Electronics Department
Politecnico di Torino
Torino, Italy

for contributions to the modeling of circuit and electronic interconnects

Leslie Thomas Falkingham
Vacuum Interrupters Limited
Rugby, Warwickshire, United Kingdom

for contribution to the development and commercialization of vacuum interrupter technology

Antonio Orlandi
University of L'Aquila
L'Aquila, Italy

for contributions to high-speed digital systems

Member Recognition:

Dr. Johan Liu Received Prestigious 2006 Magnolia Silver Award

Dr. Johan Liu received the 2006 Magnolia Silver Award from the Shanghai Municipal People's Government, China for his outstanding contribution to the development of Shanghai City.

Dr Liu is a professor at Chalmers University of Technology, Sweden and a special recruited professor at Shanghai University, China and a fellow of IEEE. He serves as a member-at-large of the Board-of Governors and as a region 8 strategic director for IEEE CPMT Society. In 2003 he set up the Sino-Swedish Microsystem Integration Technology (SMIT) Center with the support of Gothenburg City Government of Sweden and Shanghai City Government of China. Today he serves as the director for the SMIT Center as well as the director for the Key State Laboratory of New Displays and System Applications (Chinese Ministry of Education), Shanghai University, China. The Center is actively involved in building up exchange between Sweden and China and conducting application-driven research within the field of microsystems packaging and manufacturing for a number of global players including Intel, Hitachi, Sumitomo and Flextronics.

He was honoured with this award together with a number of top management level personalities from multi-national



companies active in China including: Meiwei Cheng, CEO, China, Ford Co Ltd., USA; Christian Augsten, CEO, Siemens International Trade Co Ltd., Germany; Ding Yi Jin, CEO China Co Ltd, Philips, The Netherlands; William Molim Siu, VP, Intel, USA. For the whole list of the recipients, please the website

at: www.shfao.gov.cn/wsb/node87/node94/node97/

Conference Reviews:

International Conference in Ukraine “Microwave & Telecommunication Technology” (CriMiCo-2006)

Yuri Poplavk

Central Ukraine ED/MTT/SSCS/CPMT/ComSoc Chapter Chair

Pavel Yermolov

CriMiCo-2006 Chair

At September 11-15 in Sevastopol National Technical University (Crimea, Black Sea) took place big annual international conference CriMiCo-2006. The Conference was supported by IEEE, and represented a wide spectrum of interests in various directions of modern electronics, including components, packaging and technology.

Approximate 350 scientists, engineers and students discussed different topics of modern electronics, Photo 1 and 2. More than 300 reports were presented at 4 plenary and 36 technical sessions by scientists and specialists from 161 universities and companies of Byelorussia, China, Germany, Great Britain, Ireland, Israel, Moldavia, Netherlands, Poland, Russia, Spain, Ukraine and USA, Photos 3 and 4. Among them there were such sessions as: “Nanostructures physics and simulation” (10 reports); “Nanoelectronics and nanotechnology application” (6 reports); “Devices based on advanced physical properties” (24 reports); “Technology of materials” (11 reports); “Solid state devices CAD/CAM” (11 reports); “Monolithic integrated circuits” (12 reports); “Passive elements design techniques” (22 reports), and many others sessions devoted to microwave and telecommunication active and passive components as well as to their technology.

Two workshops “Training of radio engineers and specialists in the field of telecommunications” and “Common problems of high school pedagogics” as well as round-table discussion “Biophysical mechanisms of low-intensive mm-waves influence on human organism” will be held simultaneously with the conference. Two large volumes of technical digest (1025 pages in sum) were edited just before conference started that was great advantage for effective discussions. Conference Proceeding (books and CDs) were sent to the leading foreign libraries.

Among the approximately 100 reports, related to the direction “Components, packaging and manufacturing technology”, it makes sense to note following reports: “New elementary base of Belorussian Institute INTEGRAL for modern digital automatic telephone stations” (V. Emelyanov), “Q-band low noise receiver module protected against incident signals” (P. Gamuletskaya), “Frequency-selective TV- channel amplifiers based on SAW-filters” (E. Semenov); “Ultra-low small signal insertion loss coplanar MMIC broadband power limiter” (I. Abolduev); “Superconductor single-proton detector for near- and middle IR waves”

(K. Smirnov), "Semi-optical hot electrons bolometer mixers based on thin NBN films for terahertz region" (Y. Vachtomin), "X-band MMIC low noise amplifiers" (A. Krutov), "Full-scale family of discrete GaAs steering circuits" (Y. Bogdanov), "Microwave microelectronic devices based on artificial transmission lines with negative dispersion" (P. Kapitanova), and many others.

CriMiCo-2006 Organizing Committee set up prizes for young scientists and post-graduates for the best papers presented at the Conference, Photo 5.

The Organizing Committee is glad to welcome interested scientists and engineers to next CriMiCo-2007 that will be conducted in September 10-14, 2007 in the same place.

31st International Electronics Manufacturing Technology Conference, Kuala Lumpur, Malaysia

Submitted by Annette Teng Cheung, Vice-Chair, CPMT Society Santa Clara Valley Chapter

The 31st IEMT conference was held in Kuala Lumpur, appropriately in the heart of electronic manufacturing activities in Southeast Asia. Previously this conference alternated between Texas and California. IEMT2006 was a bonanza for networking and knowledge advancement amongst the packaging and assembly professionals in South East Asia. The conference opened on November 9th with great fanfare as excitement filled the conference hall with drum rolls and fog pumped onto the stage. The Malaysian Deputy Minister of International Trade and Industry, Mr. L.Y. Ng was present with Bill Chen and executives from local Semiconductor companies during the official opening of IEMT2006.

Mr. C. H. Chew who is the current Malaysian CPMT Chapter Chair and his dedicated colleagues from OnSemi, Freescale, Intel, Infineon, STMicro and Malaysian Universities put on a world-class conference. The team, including Ms. L.C. Tan, Mr. Azhar Aripin, Prof. Ibrahim Ahmad, Dr. C.K. Chee, Ms. Siti Ahmad and Ms. Fuaida Harun, worked non-stop to ensure a successful conference. They made incredible efforts to ensure that there were no hitches in the conference logistics. Their hard work and enthusiasm were rewarded by the number of quality papers and satisfied attendees. Over 350 attendees showed up as well as over 50 presenters from all over the world. They actually had to turn away last-minute registrants due to the lack of seating space. What an excellent outcome for the budding Malaysian CPMT Chapter since this is the first conference they have organized. The positive response is evidence that Malaysia is an ideal locale for IEMT. It also showed that there is a high demand for Malaysian packaging professionals to get together to learn more about packaging technology and to network with others on the regional level as well as the international level.

IEMT2006 featured 3 parallel sessions for 2 full days. There was a nice blend of papers from corporate and academia. Needless to say, the sessions were full and in most cases standing room only. What was amazing was the number of representatives from nations that are not known for elec-

tronic manufacturing. There was a paper from University of Tehran in Iran on "Creep of Lead-free Solder". Countries like Algeria and Bangladesh were represented by their citizens doing research and development work in electronics packaging in Malaysia. This conference revealed the high caliber of packaging research work in Malaysia in both the corporate sector and the academic sector. Surprisingly, more than five Malaysian universities/colleges from various Peninsula Malaysian cities contributed high caliber research work in packaging and testing technologies. An outstanding student from University Kebangsaan Malaysia who works for Prof. I. Ahmad won the best student paper prize and received a RM\$2500 prize. And yes, my home state of Sarawak on the Borneo side of Malaysia was represented by Ms. H. M. Tang who is Reliability Section Manager at First Silicon, Borneo's one and only foundry. And may I add that Borneo takes pride in its historical headhunters who cut heads off, as well as modern-day headhunters who can place jobs for you in Borneo.

As an attendee, the hospitality shown by the Malaysian Chapter was very heart warming. We were fed with delightful Malaysian cuisine, entertained by ethnic Malaysian dancers and given a tour of Putrajaya (the equivalent to The Capitol Hill Mall in Washington DC). Representatives from the sister chapter of the one in the Santa Clara Valley included Bill Chen, Bernie Siegal, Dongkai Shangguan and myself. Thank you to Bill Chen for coming up with the idea of a CPMT sister chapter program. Next year's conference, IEMT2007 will be held in San Jose, October 2007 in conjunction with APM. The IEMT conference will then return to Kuala Lumpur in 2008 and alternating between Kuala Lumpur and San Jose. An abstract for IEMT2007 can be done by accessing www.cpmt.org/iemt/.



Time-out from the technical meetings so that the IEMT attendees can be entertained by Malaysian dancers, great food, and music

IMPACT 2006

Frank Shi, CPMT Liaison

According to a Research and Markets report released last month, if ranking are based on profit scale, nine Taiwan package and test companies are in the top 10, positioning Taiwan as pivotal player in the test and packaging industry. The global market scale of outsourced IC packaging is estimated to reach \$13.1 billion this year, and for 2006, growth is forecast to reach 31.1%, 32% in 2007 and 33% in 2008.

Just like the well known role played by ITRI (the Industrial Technology and Research Institute) in developing Taiwan as the global

center for IC wafer foundry, the emerging of Taiwan as the global IC packaging center cannot happen without ITRI.

Thus it is surprising that the International Microsystems, Packaging, Assembly Conference Taiwan (IMPACT 2006), is the first IC packaging-related international conference organized by ITRI.

IMPACT 2006 took place in Taipei from October 18-20, 2006. The Executive Vice President and Director of Electronics and Optoelectronics Research Laboratories of ITRI, Dr. Jyuo-Min Shyu, presented the opening remarks. In addition to 48 presentations, four keynote speakers invited included Dr. Rolf Aschenbrenner, FhG-IZM, Germany, addressed the topic of Innovative Substrate Technologies for New Products; Professor Avram Bar-Cohen, University of Maryland, U.S.A., addressed the issue of Thermal Packaging Challenges and Opportunities at the Micro and Nano Scales; Professor Masayoshi Esashi, Tohoku University, Japan discussed the topic of MEMS for Practical Applications with Attention to Packaging; Dr. Douglas C.H. Yu., of TSMC, Taiwan, presented his views on The 3rd dimension—More Life for Moore's Law.

The conference attracted many industrial sponsors including LINGSEN, ASE, TSMC, SPIL, SIPO, KYEC, Winbond, Cadence, Cadman, SUSS, IST and others.

Packaging accounts for five to 25 percent of the total cost of a complete semiconductor product, and such proportion may increase as technology advances. It is expected, as pointed out by Dr. Shyu, Taiwan's packaging industry will need to focus their attention to core advantages and to increase in R&D and international cooperation to cope with competition from rapid product updates and to keep its position as the world's packaging center.



Keynote Speaker Dr. Douglas C.H. Yu giving a presentation at IMPACT 2006



Keynote Speaker Dr. Masayoshi Esashi giving a presentation at IMPACT 2006



Keynote Speaker Dr. Avram Bar-Cohen giving a presentation at IMPACT 2006



Keynote Speaker Dr. Rolf Aschenbrenner giving a presentation at IMPACT 2006

**SUPPORT THE CPMT SOCIETY
RECRUIT A NEW MEMBER
ADDITIONAL INFORMATION AT
WWW.CPMT.ORG and
WWW.IEEE.ORG/mgm/**



Keynote Speakers Dr. Tohru Ogawa giving a presentation at IMPACT 2006

Chapter Reports:

**IEEE CPMT Society
Regional 8 Chapters**

Johan Liu, Strategic Director for IEEE CPMT Region 8

IEEE CPMT Society Region 8 Chapters held a meeting on September 6th, 2006, at Dresden Congress Center where ESTC Conference is held. The following are the highlights:

- 23 CPMT chapter chairs in region 8 and key CPMT active persons and CPMT officers participated in the meeting.
- William Chen, the IEEE CPMT Society president gave an introductory speech and he also presented the IEEE CPMT Society Officers:
 - Rao Bonda, VP Technical
 - Rolf Aschenbrenner, VP Conference
 - Paul Wesling VP Publications
 - Al Puttlitz, VP Education
 - Marsha Tickman, Executive Director
 - William Brown, Strategic director for student chapter development
 - Johan Liu, Strategic Director for region 8
 - Current Board of Governors representatives (BOGs) from Region 8
 - Klaus-Wolter, Eric Beyne and Johan Liu

Johan Liu gave a presentation on the CPMT Chapter situation in Region 8, a vision statement for the IEEE CPMT Region 8 network, a summary report of IEEE CPMT Region 8 activities during the last year, discussed the budget for Region 8 and he also proposed and suggested some activities in Region 8. The idea is to have a chapter chair meeting in Oulu, Finland during June 17-20, 2007 in connection with a jointly sponsored IEEE CPMT and IMAPS Europe Conference (EMPC). He also asked for candidates for IEEE Fellow, Senior member nomination and suggestions of Distinguished Lecturers from the region and he will contact chapter chairs for this.

There is a discussion about the Germany CPMT chapter. William Chen will contact the chapter leader Elke Zakel for further discussion.

Otto Andersen from West Norwegian Research Institute and Knut Aasmundtveit from University College in Vestfold, Norway will try to set up the Norwegian CPMT Chapter.

William Brown mentioned that he is interested in helping to set up new student chapters in the region.

**2006 Accomplishment of IEEE CPMT Society
Phoenix Chapter 2006 Accomplishments**

Submitted by Dr. Daniel D. Lu, Chair, CPMT Phoenix Chapter

CPMT society Phoenix Chapter has been very active especially in 2006. We organized 10 monthly seminars, 2 technical tutorials and one annual workshop. A variety of interesting topics including electronic packaging, optoelectronics, and nanotechnology were covered in the seminars. The average number of attendees was about 30 people. The two technical tutorials (Thermal Design and Management in Electronics; and Failure Analyses for Electronic Packaging) had high-quality presenters and were well received by the audience. About 120 people attended the one-day workshop entitled as “Convergence of Communications & Computing” and the feedback received was very positive. The workshop was well organized and quality of talks was excellent. In summary, CPMT society at Phoenix chapter had a very successful year.

Membership & Chapters Update

Submitted by Ralph W. Russell, II

Strategic Director for Membership & Chapter Development, IEEE CPMT Society

Thank you for your support of the CPMT Society. Thanks for renewing your membership each year. Thanks for serving on the various committees. Thanks for subscribing to CPMT publications. Thanks for attending CPMT conferences. Thanks for being a CPMT Chapter leader. Thanks! Thanks! Thanks!

Each year the CPMT Society recognizes an outstanding Chapter. If you are a Chapter leader, please let us know about the great work your Chapter has done during 2005 and nominate your group for the Chapter of the Year Award.

**ACCESS A WEALTH OF KNOWLEDGE AT
WWW.CPMT.ORG
JOIN THE IEEE CPMT SOCIETY**