Download the full Newsletter: www.cpmt.org/newsletter

tirement he continued to represent DuPont and served for four years as the society's Vice President of Finance. Working with the National Academy of Engineering, he was involved in projects of national scope dealing with the reform of engineering education. In 1998 Art served as acting President of the Pennsylvania Institute of Technology. He was an evaluator for the Accreditation Board for Engineering and Technology

(ABET) evaluating engineering programs at numerous schools of engineering, most recently this past spring at Columbia University. Art received the B.E.E. from Syracuse University and the Ph.D. and M.S. degrees in electrical engineering from Carnegie-Mellon University and was a registered professional engineer. He was a member of seven honor societies; Eta Kappa Nu, Tau Beta Pi, Phi Theta Kappa to name just a few.

Art was a loving husband, father, and grandfather, caring friend, mentor, and inspiration to all who came in contact with him. Art passed away peacefully with his family at his side. He is survived by his loving wife of 54 years, Jane, and seven children: son Thomas (wife Karen and son Patrick), Chattanooga, TN; daughter Patricia (partner Kendra), Stockton, NJ; daughter Mary (husband Karl and son Brendan), Albany, NY; son Jack (wife Trina, and sons Connor, Devon, and Mason), Radford, VA; daughter Sheila, Lahaina, HI; daughter Jane Ann, Drexel Hill, PA; and son Joseph (wife Chanda), Memphis, TN and a multitude of friends around the world. Art spent years researching family geneology; however, his greatest pleasure was time spent with his family as they traveled the world creating lasting memories and lifelong friendships.

Art and Jane would have celebrated their 55th anniversary on August 16th, 2007. They recently established a dual endowment Scholarship for Study abroad in Engineering and Music at Syracuse University, where they met. In lieu of flowers, contributions can be made to this fund:

The Arthur T. and Jane M. Murphy Endowed Scholarship at Syracuse University for Study Abroad

c/o Mr. Steve Savage
Senior Director of Development
Syracuse University
LC Smith College of Engineering & Computer Science
223 Link Hall
Syracuse, NY 13244

Chapter Reports:

Contribution to IEEE CPMT Newsletter by Singapore REL/CPMT/ED Chapter August 2007

Submitted by Alastair Trigg, Chair - IEEE Singapore Rel/CPMT/ED Chapter

In June, Chapter organized three technical talks. On 22th June, Drs Chih-Hsun Chu and Yong-Fen Hsieh a husband and wife team from Taiwan who started, and now run, the company Materials Analysis Technology which specializes in providing failure analysis service to the semiconductor industry gave two talks. In his talk on "Non-Planar Oxidation of Silicon" Dr Chu discussed different scenarios and

gave many examples that he has seen over the course of his career. Dr Hsieh spoke on "Ion Implantation and Related Defect Formation by Latent Stress".

On 25th June, an EDS Distinguished lecturer, Prof. Vijay K. Arora of Wilkes University USA, gave a talk entitled "Performance Evaluation of Nano Circuits and Systems with Ballistic Carriers.

In July the Rel/CPMP/ED Singapore Chapter and ED/SSC Hong Kong Chapter jointly organized the 13th Workshop and IEEE EDS Mini-colloquium on NAnometer CMOS Technology (WIMNACT) which was held in Hong Kong on 23rd July and Singapore on 25th. The workshops were co-sponsored by the EDS Distinguished Lecturer (DL) Program.

The Singapore workshop, attracted about 70 people and was opened with a welcome address by the Chapter Chair, Dr. Alastair Trigg, followed by an Introduction to EEE Microelectronics Center, co-organizer of the workshop, by the Director, Prof. Kin-Leong Pey. DLs from Singapore, Hong Kong, Malaysia, USA and India presented talks at the Singapore workshop.

- Prof. Juin Liou from Univ. of Central Florida: "On-Chip Spiral Inductors in CMOS Technology for RF Applications"
- Prof. Ramgopal Rao from IIT-Bombay: "Device Design and Optimization Challenges for Nano-scale Multi-gate MOS-FETs",
- Prof. Kin-Leong Pey: "Silicided Hyper-shallow p+/n- Junctions Formed by Pulsed Laser Annealing for Nanoelectronic Devices"
- Prof. Mansun Chan of HKUST: "Application of Integrated Circuit Technology for Biological Material Analysis"
- Prof. Xing Zhou from Nanyang Technological Univ.: "Unified Compact Modeling of Emerging Multiple-Gate MOSFETs",
- Mr. Chih-Hang Tung from Institute of Microelectronics: "Advanced Transmission Electron Microscopy for Nano-electronics Device and Process Analysis".
- Prof. Vijay Arora of Wilkes University and is visiting professor at Universiti Teknologi Malaysia: "Physics-Based Models for Performance Evaluation of a Nanoscale MOSFET".

This first attempt at a joint mini-colloquia, proved very successful as well as economical due to shared travel funds.



DL speakers at WIMNACT-Singapore.: From left to right: Xing Zhou, Kin-Leong Pey, Vijay Arora, Juin Liou, Mansun Chan, Ramgopal Rao, Chih-Hang Tung.

Further information on the 13th WIMNACT, including past history of WIMNACTs, can be found at the website: www.ntu.edu.sg/eee/eee6/conf/WIMNACT07.htm

Two of the DLs extended their stay in Singapore. Prof Juin J. Liou gave a one-day short course on "Electrostatic Discharge (ESD) Protection in BiCMOS/CMOS Technology on 26th July and a day later on 27th July, Prof. Mansun Chan gave a talk on "IC Industry in China: Challenges and Opportunities".

This year, the Chapter's flagship conference on failure analysis, the International Symposium on the Physical and Failure Analysis of Integrated Circuits 2007, was held from 11-13 July in Bangalore, India. It was organized by IEEE ED/SSC Bangalore Chapter and co-sponsored by IEEE Rel/CPMT/ED Singapore Chapter. It comprised one day of tutorials and two days of Symposium and equipment exhibition. Full details can be found at:

ewh.ieee.org/reg/10/ipfa/html/2007/index.htm

Planning is now underway for IPFA 2008 which will be held in Singapore from 7th to 11th July 2008. The first call for papers has been issued and will be available on the Chapter website at **www.ewh.ieee.org/soc/cpmt/singapore**/

Chapter's packaging conference, the 9th Electronics Packaging Technology Conference (EPTC 2007) will be held at Grand Copthorne Waterfront Hotel Singapore in Singapore from 10th to 12th December. Full details of EPTC can be found at the website: **eptc2007.confs.org**/.

Newly Approved CPMT-Chapter in Austin

Submitted by Dr. Om P. Mandhana, Netwoking and Computing Systems Group, Freescale Semiconductor, Inc., Austin, Texas

A new CPMT Chapter in Austin, Texas is approved this year by the IEEE.

The first meeting of this Chapter was held on August 9, 2007 at Freescale Semiconductor, Austin, Texas.

The meeting was attended by many CPMT members from various industries in Austin, Texas area. Following office bearers for the CPMT-Austin Chapter were elected:

Chair: Om P. Mandhana, Freescale Semiconductor Treasurer: Jonathan Burnett, Freescale Semiconductor Technical Program Chair: Moises Cases, IBM Technical Program Co-Chair: Paul M. Harvey, IBM

Future monthly meetings of this Chapter will be held on Thursday of the first week.

Conference Reviews:

Conference report from HDP'07

Submitted by Dr. Johan Liu
SMIT Center, Chalmers University of Technology, Sweden, and Shanghai University & SHU-Intel Joint Lab, Shanghai
University, China
Email:jliu@chalmers.se

The 2007 International Symposium on High Density Packaging and Microsystem Integration (HDP'07) was success-

fully held from between 26 and June 28, 2007 in Shanghai, China. This year, the conference was co-located with the EU-China Green Electronics Workshop, an event that was sponsored by then European Commission and the Ministry of Science and Technology (MOST), China through the official 2007 Sino-EU Science Year Program.

The HDP'07 conference was sponsored by The Institute of Electrical and Electronics Engineers and Component, Packaging and Manufacture Technology Society and supported by The Ministry of Science and Technology and Shanghai Science and Technology Commission, Shanghai Municipal Government, China. We are very honored to have the welcome speeches by Mr. Jianfeng Lu, Principal Program Officer of Department of international collaboration, Shanghai Science and Technology Commission, Shanghai Government, Prof. Min Wang, Vice President of Shanghai University, Mr. Stefan Bengtsson, Vice President of Chalmers University of Technology, Sweden, and Mr. Lars Andreasson, General Consul of the Consulate of Sweden in Shanghai. This conference was also supported by several media including China integrated circuit magazine, semiconductor technology magazine, semiconductor industry magazine and electronic assembly magazine.

More than 300 experts and researchers participated in the HDP'07 conference from countries and regions such as U.S.A., U.K., France, Sweden, Japan, India, Germany, Finland, Poland, Norway, Belgium, Korea, Hong Kong and Taiwan. More than 110 papers were presented in terms of oral and poster presentations. Moreover, we are honored to have outstanding keynote and invited speakers such as Prof. C.P. Wong, Member of Academy of engineers, USA, Fellow of IEEE, Prof. Georgia Tech, USA; Prof. James E. Morris, IEEE Fellow, Maseeh College of Engineering and Computer Science, Portland State University, USA; Prof K. Suganuma, Osaka University, Japan; Mr Matsuda, Hitachi Chemicals, Japan, Thomas Oppert, Pac-Tech, Germany; Dr. Tim Chen, General Manager of Henkel Electronics China Ltd; Dr. Dongkai Shangguan, Vice president, Flextronics U.S.A.; Michael, Todd, Technical Director, Henkel Electronics, USA; Dr. Fay Hua, Principal Engineer, Intel, USA; Dr. Daniel Lu, Staff Engineer, Intel Co., USA; Dr Guilian Gao, Tessera, USA; Dr. Ricky Lee, ASME Fellow, Hong Kong University of Science and Technology; Prof Michael Pecht, IEEE Fellow and Director of CALCE, University of Maryland, USA; Chris Bailey, Greenwich University, UK and Philip Pieters, IMEC, Belgium as well as wellknown industries like Intel, Henkel, Huawei, Du Pont, Pac-Tech, Hirox, STS, Panasonic, Hitachi Chemical, Asymtek, Sang Yue, and universities such as Shanghai University, Tsing Hua University, Fudan University, Shanghai Jiaotong University, Huazhong University of Science and Technology, Central South University, Dalian University of Technology, Harbin Institute of Technology, Shanghai Institute of Microsystem and Information Technology, Chinese Academy Science, Hong Kong University of Science and Technology participating in the conference.

Photos from HDP'07