



ASME International

# Asia-Pacific e-Newsletter

August 2000

## The 3<sup>rd</sup> Asia-Pacific Rim sROB Meeting, Singapore

The Asia-Pacific Rim sub-Regional Operating Board (sROB) usually meet in January each year. The 1<sup>st</sup> Meeting was held on January 10 and 11, 1998 in Hong Kong at the campus of Hong Kong University of Science and Technology, and the 2<sup>nd</sup> Meeting, was held on January 29 and 30, 1999 at the Narita View Hotel in Tokyo, Japan.

The 3<sup>rd</sup> Meeting was held on January 8 and 9, 2000 at the Orchard Grand Court, Singapore and attended by Sonny H Winoto (the sROB Chairman for 1999-2001), Shuichi Fukuda (the sROB Secretary for 1999-2001), Gad Hetsroni (the Vice President of Region XIII), Michael Michaud (Director of International Operations, ASME International), Byung Man Kwak and Jung Yul Yoo (of Korea Section), Vic Ilic and Peter McBride (of Australia Section), W.K. Chow and Christopher Chao (of Hong Kong Section), John Cheung, Sim Simandiri, Teh Choon Eng, K.C. Toh and William Lee (of Singapore Section), and C.S. Ow and I.T. Cheah (from Malaysia).

Among the items discussed were ways to increase the value and exposure of ASME in the Asia-Pacific Rim. In order to achieve these, it was decided to form four committees:

- 1) Technical Committee (chaired by WK Chow of Hong Kong Section), which would like to host more Professional Development and Distinguished Lecturer Programs, and be involved in the planning of conferences locally. Distance learning and video conferencing by satellite would also be considered, and Haruo Kozono of Japan Section would study this option for the Asia-Pacific Rim Zone.
- 2) Communications Committee (chaired by Shuichi Fukuda of Japan Section), which would publish sub Regional Newsletter which would be sent by e-mail to all members with valid addresses, and by post to members without e-mail addresses.
- 3) Young Engineers & Student Committee (chaired by K.C. Toh of Singapore Section), which would promote job offerings, design contests as well as web-based poster contests.
- 4) Award and Administration Committee (chaired by Vic Ilic of Australia Section), whose aims are to recognize individuals who are of value to the Region and the Society and assist in placing them in other committees in the Society.

At the conclusion of the Meeting, it was decided the next Asia-Pacific Rim sROB Meeting would be held either in Australia or South Korea in 2001.

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## Australian Section

### Student Prizes Awarded

The Australian Section has recognized the academic achievements of three students attending the University of Western Sydney, Nepean. Gregory Whitehead, Roland Painter, and Scott Fletcher all received awards at the 2000 Awards Presentation Program, held at the university on March 31st, for their outstanding performance in the Bachelor of Engineering (Mechatronics) program.

### ASME President Visits Australia

Robert Nickell, then president of ASME, visited Sydney during April to attend the Ninth International Conference on Pressure Vessel Technology, accompanied by his wife and Michael Michaud, Director of International Operations for ASME. A special meeting of the Australian Section was held at the University of Sydney on April 12th, where Dr. Nickell presented a Fellowship Certificate to Dr. Yiu-Wing Mai (see photo). He also addressed the ASME members assembled, covering codes and standards, educational services, and diversity issues. Following the presentation, a dinner was held in his honor at a local restaurant (see photo). Attending were (left to right) Chris Popkowski, Michael Michaud, Greg Bartley, Dr. Nickell, Mrs. Nickell, Vic Ilic, Peter McBride, and Raul Planos.



Photo 1 President Nickell presenting Fellowship Certificate to Dr. Yiu-Wing Mai



Photo 2 Dinner in honor of President Nickell

### Regional Conferences:

- 1) Sixth Asian International Conference on Fluid Machinery, 18/7/00 to 21/7/00, Johor Bahru, Malaysia.  
For more information: <http://www.fkm.utm.my/~aicfm2k>
- 2) APMRC 2000, 6/11/00 to 8/11/00, Tokyo, Japan.  
10th ICBME Biomedical Engineering in the New Millennium: Integration & Breakthroughs, 6/12/00 to 9/12/00, Singapore.  
For more information: <http://www.nus.edu.sg/DB/icbme/>
- 3) Sixth Asian Symposium on Visualization, 28/5/01 to 31/5/01, Masan and Changwon, Korea.  
For more information: <http://piv-ptv.kmaritime.ac.kr/ASV6/>

Peter McBride  
Newsletter Editor  
Australian Section

### ASME President Dr Nickell, Executive Director Dr Belden, & G Antaki in Hong Kong

January this year, we had the rare occasion of seeing very important persons from New York: ASME President Dr Robert E Nickell and Executive Director Dr David L



Photo 1: The head table

Belden, accompanied by spouses (Photo 1), and Fellow George Antaki course instructor, in one goal. Dr Nickell delivered a talk on "[Nuclear power plant and their effect on global climate](#)" concurrent with the AGM of the Section.

George taught us [ASME B31.8](#), turning us from novice into piping experts, particularly, his Antaki rules – ways of life with pipes. He showed us a rare picture of North Pole bears balancing themselves not on ice but on the turns of curvature between supports. Should animals play a part in pipeline design? Then down in the deep, subsea ocean waves sweeping across pipelines in trenches, etc., the seismic effect on pipes research and pipe manufacturing process video films shown were rare to come by. The quiz

sessions over the five days were most interesting as participants had many chances to show off or be challenged.

Photo 3 pictured George invigilating the learning process while participants were trying to work out the answers by team effort. ¶ SN



Photo 2: Speech by ASME President Dr Nickell at the Football Club



Photo 3: Learning the Antaki rules at the HKIE Seminar Room. [photos by SN]

## **International Conference on Electronic CommerceEngineering**

### **New Challenges in 21st Century Manufacturing**

**16-18 September 2001, Xi'an, China**

First Announcement and Call for Papers

#### **AIMS OF THE CONFERENCE**

As a major forum for researchers and practitioners, the conference assists senior managers and researchers to understand and appreciate the role of electronic commerce in digital economy and enterprises. A mix of academic research and experience of industry practitioners will focus on the emerging issues of electronic commerce surrounding Computational Infrastructure, Enabling Technologies, Business Models, Policies and Strategies, Application Service Provision (ASP). The emphasis of this first conference is placed on advanced manufacturing and industrial engineering.

#### **INVITATION FOR CONTRIBUTIONS**

You are welcome to submit original high-quality research and application papers.

#### **PUBLICATION OF PAPERS**

Papers of high quality will be selected, subject to further review and revision, for recommendation to special issues of reputable international journals (International Journal of CAD Special issue on eCommerce of CAD, International Journal on Concurrent Engineering Special Issue on e-Service for Global Manufacturing, and International Journal of Integrated Manufacturing Systems Special Issue on Digital Manufacturing and eCommerce.)

#### **FURTHER INFORMATION**

For more details about the Conference, please visit EITHER

<http://globalPIE.xjtu.edu.cn:8080/icece2001/icece.html> OR

<http://imse.hku.hk/gquang/icece/icece.htm>. Should you have further queries, please contact one of the following:

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Dr. K Cheng, Department of Engineering, Leeds Metropolitan University, UK, [K.Cheng@lmu.ac.uk](mailto:K.Cheng@lmu.ac.uk)

## ASME DISTINGUISHED LECTURE

Professor Isaac Elishakoff delivered an ASME Distinguished Lecture *"Why and How to Deal With Uncertainties?"* on 10 December 1999, at the Faculty of Engineering, National University of Singapore (NUS). This event was jointly organized by ASME Singapore Section and the Professional Activities Centre of the Faculty of Engineering, NUS.



About 250 participants from industry, tertiary institutions, public and private sectors attended the lecture with enthusiastic interaction with the speaker.

Uncertainties surround us in everyday life, even if you are not an engineer. Among the numerous synonyms for "uncertainty" one finds un-sureness, unpredictability, randomness, haphazardness, indeterminacy, ambiguity, variability, irregularity and so forth. Recognition of the need to introduce the ideas of uncertainty in a wide variety of scientific fields today reflects in part some of the profound changes in science and engineering over the last decades.

A world-wide expert in uncertainty-modelling after 25 years of experience, Prof Elishakoff gave an overview of the classical probabilistic approach with its spectacular achievements, in laymen's terms; then, he offered a constructive critique and listed the shortcomings of probabilistic approaches. He outlined the fuzzy-sets based approach and the new kid on the block: convex modelling of uncertainty, of which he was one of the founders. Prof

Elishakoff is apparently the only researcher in the world working in these three seemingly contradictory areas, and moreover, in deterministic mechanics; yet, he showed how to bridge these approaches rigorously. Prof Elishakoff then illustrated the idea of *anti-optimization*, introduced by him, which was based on the folk wisdom, "Hope for the best but prepared for the worst!" and "Make the best out of the worst!"



Dr. Isaac Elishakoff is a Professor of Mechanical Engineering at Florida Atlantic University. He was educated in Russia and spent 17 years at the Technion Institute of Technology, Israel. He joined Florida Atlantic University in 1989, where he served as Associate Director of the Center for Applied Stochastics Research through 1994.

***Prior to his tenure with Florida Atlantic University, he was a Frank M. Freimann Chair Professor of Aerospace and Mechanical Engineering at the University of Notre Dame in 1985-86; the Henry J. Massman, Jr. Chair Professor of Civil Engineering during the Fall Semester, 1996/97; and Visiting Castigliano Distinguished Professor at the University of Palermo, Italy during March, 1992. During the academic year 1979-80 he served as Visiting Associate Professor at the Delft University of Technology, the Netherlands. In 1987, he was Visiting Professor at the Naval Postgraduate School in Monterrey; and during the summers of 1990 and 1991, he was a Visiting Professor of Aerospace Engineering at the Delft University of Technology.***

Prof Elishakoff has published extensively and has given numerous presentations at national and international meetings. He has received several awards, including the Bathsheva de Rothschild prize, as well as Fellowships from the German Academic Exchange Office, and Japan Society of Promotion Science in the University of Tokyo. He was presented special medallions of the University of Notre Dame, and of the University of Tokyo.

In addition to ASME, he is also an active member of the American Academy of Mechanics where, in 1991, he was elected to Fellow for outstanding contributions to random vibrations of structures and pioneering contributions to convex modelling of uncertainty, of which he is one of the founders. His research activities are supported by the National Science Foundation, NASA Kennedy Space Center, NASA Langley Research Center and National Center for Earthquake Engineering Research.

## **ASME SINGAPORE YOUNG ENGINEERS FORUM & E-MENTORING INITIATIVE**

During the ASME Asia-Pacific Rim sub-Region meeting in January 2000, the committee held its own forum on “**Challenges Facing our Young Engineers**”, co-sponsored by Unigraphics Solutions Pte Ltd. Three prominent panelists presented views from their respective perspectives: Mr. Harold Kwan of Davidson & Associates International provided the human resource angle. Ms. Sharon Toh, General Manager of Unigraphics Solutions, is both a major engineering applications specialist and a female engineer who has made good in the profession. Finally Mr. Michael Michaud, Region XIII Director of ASME, elaborated on the role played by professional societies. The participants, both from the senior and student sections in Singapore, as well as the regional delegates, were treated to very open and frank exchanges of the many issues of contention. The forum was so well received that some of the regional delegates have requested the panel to present a similar forum in their own sections.

The Forum is one of the major activities of the newly formed ASME Singapore’s Young Engineers Committee (YEC). It hopes to strengthen its programs and reach out

even more to its members, as well as the engineering community in general in Singapore. It is hoped that the experience gained will provide a springboard for similar activities throughout the Asia-Pacific Rim sub-Region and the whole of Region XIII.

The YEC will be kick-starting an “e-Mentoring Initiative” later this year. It is a web-based portal and email system that would support mentoring activities between senior engineers to share their experiences and guide the young professionals through the use of internet technology. The new Initiative will mark a milestone in multi-society collaboration combining the resources of ASME International, the Institution of Engineers Singapore (<http://www.ies.org.sg>) and the Institution of Engineers Australia (<http://www.ieaust.org.au>) to service the needs of its members here, through their respective Singapore sections. Each society with their respective sphere of influence will bring to this initiative their strengths and diversity that will make this program a unique experience for members who sign up for it. The mechanism is still being finalized but will involve an e-Resource Center where it is possible for members to e-mail questions and get feedback from a panel of very experienced 'volunteer' mentors registered on the web-site. In addition, engineering professionals will also be able to contribute articles on their



**ASME Singapore Young Engineers Forum. From left: Mr. Harold Kwan, Mr. Michael Michaud, Mr. William Lee, Ms. Sharon Toh & Mr. Kok Chuan Toh.**

career experiences and advice into the system.

The e-Mentoring Initiative is but the latest in a series of new action plans for young engineers. In late 1998, with the specter of job insecurity, broken careers and a general downturn in the well being of the economies in Asia, newly graduated engineers faced an uncertain time ahead. ASME Singapore Section used the opportunity of this heightened awareness to form a Young Engineers movement aimed at assisting in the transition from engineering school to a full-fledged engineer. At a brainstorming session attended by many senior members, student members and recent graduates, a **mission** statement for the group was drafted,



*“To serve the needs of graduating or newly graduated engineers starting out in their careers and spur their interest in becoming valuable contributors to the engineering community”.*

It also formulated an **agenda** for action,

- (a) to establish a network of professional in various emerging fields that the mechanical engineering discipline have a predominant influence, such as micro-electro mechanical systems, data storage devices, logistics management, electronics packaging and semiconductor technology, computer-aided engineering and life sciences;
- (b) to start an electronic mentoring scheme for issues faced by the young engineers during the early years of engineering practice, and provide a means for obtaining industry support and feedback;

- (c) to organize forums aimed at engaging engineering students and young engineers in direct interaction with professionals who have a passion for new and exciting technologies;
- (d) to develop core engineering skills and confidence in the young professional to better handle situations encountered in their working life.

For further information on the Young Engineers activities in Singapore, you may check out the ASME Singapore Section website at <http://web.singnet.com.sg/~asmesg> and contact William Lee at [leewl@asme.org](mailto:leewl@asme.org) or KC Toh at [mkctoh@ntu.edu.sg](mailto:mkctoh@ntu.edu.sg)

### **New Correspondent in Malaysia:**

Region XIII has appointed a new Correspondent for Malaysia. Dr. C.S. OW will be taking over as the ASME Correspondent from July 2000-June 30, 2001. The position was previously held by Cheah It Tee an engineer with Agilent Technologies who held the position for 6 years.

Dr. Ow received his PhD from the Imperial College, London University, and is currently a professor of Mechanical Engineering at MARA University of Technology in Selangor Malaysia. He served as a Vice- President of the Institution of Engineers Malaysia from 1995 To 1998 and have been equally active in ASHRAE Malaysia Chapter since 1990 presently overseeing the World Bank funded Recycling and Recovery of R11 and R12 in Chillers for Malaysia.

Dr. Ow hopes to develop areas of local interest among the members in Malaysia and South East Asia. If members have specific ideas about ASME In Malaysia and programs they would like to support they should contact Dr. OW at [iodised@tm.net.my](mailto:iodised@tm.net.my) or [cs@amech.engr.itm.edu.my](mailto:cs@amech.engr.itm.edu.my) .

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## First Announcement and Call for Papers

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### THIRD INTERNATIONAL SYMPOSIUM ON COMPUTATIONAL TECHNOLOGIES FOR FLUID/THERMAL/CHEMICAL SYSTEMS WITH INDUSTRIAL APPLICATIONS

in conjunction with the ASME PVP Division Conference

July 22-26, 2001

at the Hyatt Regency, Atlanta, Georgia, USA

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abstract submission: October 27, 2000

draft paper submission: January 12, 2001

final paper submission: April 13, 2001

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#### Scope

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Modern industrial applications of Computational Fluid Dynamics require the solution of complex fluid-flow problems in conjunction with equipment design, process and product development. For the successful solution of these problems, a high degree of coordination between industrial CFD engineers, software developers, consultants and academic scientists is necessary.

This symposium, to be held for the third time, addresses these issues by focussing on computational modeling of industrially relevant fluid flows in interaction with participating media (solid confinements, porous structures, dispersed phases, plasmas, etc.) and physical/chemical phenomena (diffusion transport, thermal stress, flow induced vibrations, electromagnetic transport, heat generation & dissipation, electrophoresis, phase change, combustion, CVD, chemical reactions, etc.). Participation from the industry is especially encouraged.

#### Topics

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Specific topics may include (but are not limited to):

- The use of CFD in hardware design, process optimization and product development applications in industry;
- Large-scale numerical studies with industrial applications;
- Advanced turbulence modeling and Large Eddy Simulations for industrial flows;

- Modeling of fluid-solid interactions via conjugate heat transfer, thermal stress or load coupling;
- Integration of complex physics and/or chemistry into CFD;
- Coupled multi-scale (microscopic-macroscopic) modeling and multi-scale model integration;
- CFD code interfacing (code-to-code, grid-to-grid, flow to stress, etc.) and integrated code development;
- Object oriented CFD code architecture and CFD command languages;
- Grid generators and pre-processors;
- Novel solvers, codes and algorithms, numerical accuracy analysis;
- CFD implementation for model based control;
- addressing single and multiphase, laminar and turbulent flows,
- free surface flows, flows with phase transition, molecular flow,
- plasma flow etc.

#### Tutorials & Software Demonstrations

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Tutorials are being planned and CFD software demonstrations will be organized at the Conference. Please contact the corresponding organizers with proposals.

#### Dates and location

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The Symposium will be held in conjunction with the ASME Pressure Vessels and Piping Division Conference, July 22-26, 2001, at the Hyatt Regency, Atlanta, Georgia, USA  
([http://www.asme.org/divisions/pvp/index1.htm/pvp\\_home.html](http://www.asme.org/divisions/pvp/index1.htm/pvp_home.html)).

#### Symposium Organizers

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for Japan and Pacific Rim:

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Symposium Web-site (to be accessible soon):  
<http://pw1.netcom.com/~vvk/pvp20.html>  
[USA and Worldwide]  
<http://kawa30ultra.mech.tohoku.ac.jp> [Japan]

## ASME Japan Section Annual Meeting

The annual meeting was held on June 30, 2000 at the Tokyo Denki University, and attended by more than 20 participants. The agenda for the meeting was as follows:

1. Report from Board Members.  
Activities                                    Prof. J. Iwamoto  
Finance                                        Prof. Y. Kurosaki  
Newsletter and Membership    Prof. T. Sawa  
Others
2. New Chair and Board Members for 2000-2002.  
Prof. Yasuo Kurosaki was elected to be the Chair of the Japan Section.
3. Address by New Chair.  
Strategic Plan by new Chair Prof. Kurosaki.
  - a. Shuffling Board Members.
  - b. Improving Services for Section Members: Development of Section Website.
  - c. Revitalization of ASME Japan: Satellite Programs and Video Conference.
4. Talk by Mr. Haruo Kozono.  
"How to access ASME web-site by PC".



Photo: The opening of the meeting by Prof. Iwamoto, Chair of Japan section.

## CONFERENCES

1. The Tenth International Conference Biomedical Engineering, 6-9 December 2000, SINGAPORE. Fax:(65)735 2091; Email:avconsul@pacific.net.sg
2. International Tribology Conference, 29 Oct-2 Nov. 2000, Nagasaki, JAPAN. Fax:(81-92)651 8906; Email: Secretariat@itc.mech.kyushu-u.ac.jp
3. International Mechanical Engineering Congress and Exposition (IMECE-2000), November 5 – 10, 2000, Orlando, Florida, USA. Fax: (212) 591-7795.
4. ASME-JSME Sessions on New Paradigm for Economy, Industry, Technology, and Society in the New Millenium , November 5-10, 2000 Orlando, Florida E-mail: [honda9876@aol.com](mailto:honda9876@aol.com)
5. The Sixth Asian Symposium on Visualization, May 28 – 31, 2001, Masan and Changwon, KOREA. Contact Person: Prof. KIM, Kyung Chun, Fax: 82-51-512-9835, E-mail: [kckim@hyowon.pusan.ac.kr](mailto:kckim@hyowon.pusan.ac.kr)
6. The Third Pacific Symposium on Flow Visualization and Image Processing (PSFVIP-3), March 18 – 21, 2001, Outrigger Wailea Resort, Maui, Hawaii, USA. Contact Person: Dr Nobuyuki TANIGUCHI, Fax: 81-3-5411-3908, E-mail: [ntani@iis.u-tokyo.ac.jp](mailto:ntani@iis.u-tokyo.ac.jp)

The 13<sup>th</sup> International Symposium on Transport Phenomena (ISTP-13), July 14 – 18, 2002, Victoria, BC, Canada. Contact Person: Dr. Sadik Dost, Fax: 1-250-721-6051, E-mail: [sdost@me.uvic.ca](mailto:sdost@me.uvic.ca)

Inquiries and requests about ASME Asia Pacific e-Newsletter should be addressed to the Editor below. This is YOUR e-Newsletter.

Members who have not given their e-mail addresses to ASME headquarters yet, please let the Editor know your e-mail address.

Please help us reduce the mailing cost.

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