

Message from the Chair • *Shapour Azarm*

Sixty-one years ago, in 1945, our Division was founded as the Machine Design Division. This name was changed to the Design

Engineering Division (DED) in 1966. Since then, DED has evolved to become one of the largest and most exciting divisions in ASME with about 36,000 members.

As part of its strategic plan, DED has the Vision “to be an agile and engaged division of the Society that keeps abreast with rapid changes in knowledge, technology, and global and societal needs in the field of design engineering” and the Mission “to lead in fostering and promoting the art, science and application of Design Engineering as well as the professional careers of Design Engineers in Education, Research, and Engineering Practice.” The single most important asset we have is our volunteers. With the help of our dedicated volunteers, the Division has evolved into twelve Technical Committees (TCs). These committees form the backbone of our mechanical design related activities. The TCs are: i) Design Automation, ii) Design Education, iii) Design for Manufacturing, iv) Design Theory and Methodology, v) Fastening and Joining, vi) Mechanisms and Robotics, vii) Power Transmission and Gearing, viii) Reliability, Stress Analysis and Failure Prevention, ix) Vehicle Design, x) Vibration and Sound, xi) Micro/Nano Systems, xii) Multibody Systems and Nonlinear Dynamics. The Division also has special committees such as the committee for “K-12 Awareness of Design Engineering” and the committee for “Professional Engineering Licensure”. If you are interested in serving as a volunteer in any of these TCs, please contact the chair of the respective committee whose name can be found on the DED’s web site: <http://divisions.asme.org/ded/>

DED also sponsors or co-sponsors five technical journals: i) Journal of Mechanical Design, ii) Journal of Vibration and Acoustics, and iii) Journal of Computational and Nonlinear Dynamics are fully sponsored by the Division. The Journal of Computing and Information Science in Engineering is co-sponsored with the Computer and Information in Engineering (CIE) Division, while the IEEE/ASME

Transactions on Mechantronics is co-sponsored with IEEE and has the participation of the Dynamics Systems and Controls Division of the ASME. Early each fall, the Division sponsors the International Design Engineering Technical Conferences (IDETC), which are a set of conferences sponsored by the TCs. The Division also sponsors sessions in the ASME International Mechanical Engineering Congress and Exposition (IMECE), and in the National Manufacturing Week Conference that is held annually in Chicago before the beginning of the spring season.

For my preparation as the Chair of the Division, I attended an ASME sponsored “Leadership Training Conference” (LTC), which was held in Houston during March 3 – 5, 2006. During this meeting, some details of the ASME re-organization were brought to the attention of delegates. Anytime there is a re-organization, the first question that comes to mind is: What are the effects of re-organization on my unit? At LTC, we were told that the effects on divisions will be minimal. The new ASME has five sectors: Knowledge and Community (K&C); Institutes; Centers; Strategic Management; and Codes and Standards. The DED falls under the Systems and Design Group, part of the Technical Divisions and Communities which are under the KandC sector. I know this might be a bit confusing, but you should be able to find details of the new ASME organizational structure at the web site: www.asme.org. It is good to know that two of our former and very able DED Chairs: Dr. Daniel Segalman (Vice President of Technical Communities) and Dr. Ken Waldron (Group Leader of Systems and Design Group) are in the leadership hierarchy above the DED unit. Accordingly, I have every reason to believe that we are in good hands and on to a smooth transition as the new ASME unfolds.

There are several questions we should ask ourselves to ensure that the Division is serving our membership: i) Do we have sufficient industry focus? ii) Do we have a good mix of participation from academia, industry, and government in our committees and conferences? ii) Are we making the necessary impacts nationally and internationally in Design Engineering? In this regard, every one of us as a volunteer can play an important role at both the TC and Division levels. I am fortunate to serve with a

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few of these volunteers in the DED’s Executive Committee. I am particularly indebted to our out-going Chair, Dr. Krish Gupta, who will serve DED as the “Past Chair” and whose mentorship has helped me learn many details and skills needed for this position. I also would like to thank our out-going “Past Chair”, Dr. Subhash Sinha. I welcome the new member of the Executive Committee: Dr. Larry Howell, who will serve as the Secretary of the Division in the coming year. I am also fortunate to work with other members of the Executive Committee: Dr. Judy Vance (Vice Chair/Treasurer), Dr. Kazem Kazerounian (DETC Executive), Dr. Ahmed Shabana (Technical Committee Executive), and Dr. John Renaud (NDEC Chair), who have been tirelessly serving our Division. Finally, I would like to acknowledge the ASME staff, in particular Ms. Noha El-Ghobashi and Ms. LaShion Pettiford, among others, for their help regarding the ASME HQ matters. I look forward to working with all of them in the coming year.

We should continue to be forward looking and embrace changes while simultaneously keeping in sight the things the Division has historically done well. I feel a great responsibility and am indeed honored and privileged to be given the opportunity to serve as Chair. I hope to continue the efforts of my predecessors and the progress that the Division has made thus far.

Let us together move Design Engineering forward! ●

DED Members Elected to Fellow Grade • *Richard A. Hirsch, PE*

Seven members of our Division have been elected to the Fellow grade of membership since January of 2005. They are (listed alphabetically): Janet Allen, Ricardo Chicurel, Stephen Derby, H. Karandikar, Hamid Lankarani, Michael Wang, and Raymond Weidler. Congratulations to our new Fellows and thanks to their nominators.

As of December 2005, there were 2,630 Fellows in ASME with 174 in the Design

Engineering Division. Among the divisions, we rank fourth, with Heat Transfer, Fluids Engineering and Applied Mechanics having more Fellows. However, in terms of percentage of our membership, DED still ranks quite low.

The Fellows Review Committee has made several changes in the nomination procedure. Nominations will now be reviewed semi-annually with the deadlines of June 1 and December 1. Corporate membership in the Society no

longer needs to be continuous but must be currently active. Another significant change is that no more than 10 significant publications can be listed on the form.

The website www.asme.org/member/fellow provides Fellows nomination guidelines and forms. Anyone who needs advice or help may contact me at hirschr@asme.org. ●

Greetings from the Past Chair • *Krishna C. Gupta*

This was an interesting and exciting year. With my web-enabled wireless phone/PDA, PC, Mac, and fax, there were constant streams of division related electrons flowing back and forth. While a lot of our business is transacted at the Spring and Fall meetings of the Division Executive Committee and General Committee, a considerable amount is also transacted in between the meetings by emails. A sign of times — I do not recall any papers received through regular mail.

This is the first year of the ASME reorganization (“Continuity and Change”) that unfolded on July 1, 2005. Now, all technical divisions, local sections and student sections are under Knowledge and Community (“K&C”) sector. Dan Segalman, a former DED Chair, will be the VP (7/06-) of Technical Communities, K&C Sector and Ken Waldron, another former DED Chair, is the Group Leader (1/06-) for Systems and Design Group.

Cooperation and collaboration with other divisions and societies is a continuing theme. In addition to its primary sponsored journals (3), the Division has successful partnerships with other ASME divisions (BIOE and CIE) and societies (IEEE’s IES and RAS) for journals in emerging and interdisciplinary areas (3), including the upcoming ASME Journal of Biomedical Devices. This new journal will be jointly sponsored by ASME Bioengineering Division and ASME Design Engineering Division, and it will be co-edited by Drs. Arthur Erdman (a former DED Chair) and Gerald Miller. Thanks are due to Kazem Kazerounian, Division’s liaison to a joint ad-hoc committee on journal formation, for successfully concluding related negotiations within only a few months. I am also happy to report that there has been significant progress in formalizing an updated Memorandum of Understanding (MOU, or Agreement) for Transactions on Mechatronics (TMech) between ASME and IEEE. The only signed Agreement dates back to 1995 and it is totally out of date. It is hoped that the 2006 MOU will put behind some of the contentious issues related to TMech’s management, operations and finances.

Strong collaboration is continuing between Design Engineering Division (DED) and Computers and Information in Engineering

(CIE) Division in organizing Fall IDETC/CIE Conferences. Division remains open to limited participation by other divisions at Fall IDETCs. Registrations for IDETCs vary considerably between odd and even years and we remain on the lookout for activities to supplement even year IDETCs. Division also has a strong showing at Winter IMECEs. However, some technical committees that participate at IMECEs are considering shifting some or all of their efforts to Fall IDETCs to take advantage of increased flexibility, control, and improved resource situation. The scale of Division’s NMW Conference activities has gone down after ASME centralized NMW planning activities at ASME Headquarters.

Division finances are in good shape. Division funds are held in three types of accounts: General Custodial Account, Division and Division-Committee Award Accounts, and Technical Committee Accounts. General Custodial Account is the primary operational account of the Division. Award accounts hold dedicated funds for several prestigious division-level and division-committee-level awards. These funds now stand at levels that will ensure that honoraria and costs of certificates or plaques for most awards can be covered for many years to come. Technical committee funds are for their normal and routine operations including best paper awards, other committee-level awards and honoraria for keynote speakers.

Two of the society-level awards that grew out of the Division are Machine Design Award and Ruth and Joel Spira Outstanding Design Educator Award. Division’s efforts to elevate division-level Triodyne Safety Award to society-level Barnett-Uzgiris Product Safety Award have run into a snag due to current ASME moratorium on establishing new society-level awards. It is hoped that some resolution will be reached soon on this new award.

The technical committee on Micro/Nano-scale Systems (MNS) is completing its first year. It has launched its website and it is participating in IMECE 2006. John Wesner (a former DED Chair) is working on a proposal to develop a technical subcommittee on entertainment engineering under DFM. This is to capitalize on the expertise of engineers with interest and knowledge in theme park industry. Our

bylaws call for an active group of people with common technical interests to form a subcommittee within an existing technical committee for a period of one or more years, and then the Division Executive Committee can evaluate the proposal to form a new technical committee.

Starting from 2005, ASME stopped paying for printing and mailing paper copies of division newsletters. ASME still covers production and distribution of the electronic versions of newsletters. This (2006) is the second year that the Division Executive Committee has decided to pick up the cost of printing and mailing paper copies of the Design Newsletter to approximately 16,000 members on its distribution list. This cost will be revisited for the 2007 issue of the Newsletter. If you are reading the paper copy of the Newsletter, this may (or may not) be your last chance.

Thanks to DED Webmaster Shayne Gooch, Division’s website has a new look and feel. It will be periodically updated to enhance its visual appeal with pictures and additional links. Most of Division technical committees have their own websites — some residing on ASME server and others on local institution servers. It is desirable to have all technical committees websites on ASME server for continuity and ease of access.

I would like to thank the current executive team: Shapour Azarm, Judy Vance, Kazem Kazerounian, Ahmed Shabana, John Renaud and Subhash Sinha (my predecessor). I also would like to thank Tom Chase, Bahram Ravani, Dan Segalman and Ken Waldron for their contributions in their roles as members of the Advisory Committee. This group of people represents accumulated experience and wisdom of more than a decade of Division’s activities and proved to be a valuable (formal or informal) resource. And finally, I welcome Shapour Azarm, who will lead the Division as Chair for 2006-07. ●

ASME Journal Alert

A free e-mail alerting service on ASME journals is available. Subscribe to the alert service: <http://scitation.aip.org/asm/alert.jsp>, to receive current tables of content of ASME journals of your choice through emails. ●

The Journal of Vibration and Acoustics • *Kon-Well Wang*

The Journal of Vibration and Acoustics has undergone some new developments in the past year. Some of these activities are highlighted in the following paragraphs.

New Associate Editors: During the past year, Professor Steve Shen (University of Washington), Dr. Steven Hambric (Head of Structural Acoustics at the Applied Research Laboratory), Professor Brian Feeny (Michigan State University), and Professor Christopher Rahn (Penn State University) have been nominated and approved as new associate editors. Professor Shen's technical interests include vibration of rotating machines, damping technology, smart structures, and MEMS. Dr. Hambric, an expert in structural acoustics and noise control, is a good replacement for Professor Jerry Ginsberg, who retired as a JVA associate editor in 2004. Professor Feeny's research areas include system identification and friction dynamics. Professor Rahn is an expert in vibration control, mechatronics, and continuous structures. These are some of the areas that JVA is currently getting a significant amount of paper submissions, and thus these new associate editors are great additions to the Journal.

Special Issues: Working with the symposium organizers of the 2005 IDETC Mechanical Vibration and Noise Conference,

we are planning a couple of special issues for the coming years. The first one will be on the subject of vibration-based structural health monitoring, with guest editors Bogdan Epureanu (University of Michigan) and Mark Derriso (Air Force Research Labs). We have also communicated with the Conference program chair and symposium organizers to identify and solicit high quality papers from the Conference. These papers will go through the regular rigorous journal review process.

Additional Journal Pages: The Journal is experiencing an increasing rate of paper submission. There have been 112 papers submitted in 2003, 193 in 2004, and 215 in 2005. With the increasing paper submission rate and a significant backlog, we have requested a page increase from ASME. After the IMECE meeting in November 2005, JVA has been allotted an additional 200 pages per year, making the new number of annual available pages 800.

I would like to take this opportunity to thank all the authors, reviewers, associate editors and staff members who have contributed to make the past year a successful one for JVA. Please feel free to contact me regarding any issues related to the journal. I always welcome ideas and suggestions to make life better. ●

The 2005 IDETC and CIE Conferences

• *Hamid Hamizadeh, David Lee and Albert C. J. Luo*

The 2005 ASME International Design Engineering Technical Conferences and the Computer and Information in Engineering Conference were held during September 24-28, 2005, Long Beach, California, Hyatt Regency Long Beach. The Conference featured 10 conferences, including the 20th Biennial Conference on Mechanical Vibration and Noise, 5th International Conference on Multibody Systems, Nonlinear Dynamics, and Controls, 29th Mechanisms and Robotics Conference, 10th Power Transmission and Gearing Conference, 10th Design for Manufacturing and the Life Cycle Conference, 31st Design Automation Conference, 17th International Conference on Design Theory and Methodology, 25th Computers and Information in Engineering Conference, 18th Reliability, Stress Analysis and Failure Prevention Conference, and 2005 ASME/IEEE Conference on Mechatronics, Embedded Systems and Application. About 1095 attendees presented 1129 papers. This Conference,

which provided a wide platform for researchers to exchange ideas and present new achievements, also attracted many non-ASME member authors to participate.

Special events for the Conference included an opening reception on the Queen Mary Ship, a student picnic, and a student Design Essay Competition. We wish to thank the staff at ASME, especially Kim Punter, Cynthia Clark, Christian Perkins, and Noha El-Ghobashy, for helping to make the Conference a success. ●



Organizers of various conferences received their service awards at the 2005 IDETC/CIE Luncheon.

The Journal of Computational and Nonlinear Dynamics

• *Subhash C. Sinha*

The inaugural issue (January 2006) of the Journal of Computational and Nonlinear Dynamics (JCND) was published in September 2005 and distributed at the IDETC held September 24-28, 2005 in Long Beach, CA. This is a quarterly journal and the next issue is due in April 2006. The journal serves as a forum for the exchange of new ideas and applications in computational rigid and flexible multi-body system dynamics and all aspects (analytical, numerical and experimental) of dynamics associated with nonlinear systems. Currently 17 Associate Editors from around the world serve the journal.

I encourage you to choose JCND as the medium of dissemination of your research if it falls within the scope of the Journal. All manuscripts must be submitted electronically through the 'journaltool' of ASME. All of us associated with the JCND are committed to a rapid review process. Please contact me directly if you have any comments or suggestions. ●

The Journal of Mechanical Design

• *Michael McCarthy*

The Journal of Mechanical Design has experienced significant growth over the past three years. In January 2007, the journal will begin monthly issues totaling 1400 pages, or approximately 140 research articles. This past year we received over 450 submissions, and our Associate Editors were able to work with our reviewers to obtain a recommendation in an average of four months. Our acceptance rate is currently 30%.

Two themed supplements were organized this year, which appear in the January and July 2006 issues. For January, Gordon Pennock and Madhu Rahgavan edited a special supplement on Spatial Mechanisms and Robot Manipulators. Shapour Azarm and Zissimos Mourelatos edited a special supplement on Robust and Reliability-based Design for the July issue. These supplements combine the research papers with invited articles in order to provide insight to the current state of research.

This year nine of our Associate Editors will complete their three-year terms: Kyung K. Choi, Suresh Ananthasuresh, Q. Jeffrey Ge, Erol Sancaktar, David Kazmer, David Dooner, Wei Chen, John Clarkson, and Clive Dym. In addition, Michael Savage stepped in to serve a one-year term to assist our review process. Their leadership and service has provided a great benefit to our research community. ●

Committee Reports

Honors and Awards Committee

The three DED awards are selected by two committees: The Machine Design and daVinci Awards are selected by the entire DED HandA Committee; and the Spira Design Educator Award by a subset of the HandA Committee and three members from the DED Design Education Committee. The cooperation from the Education Committee was superb. Members of the HandA Committee are: J. Davidson (Chair), A. Erdman, C. Hales, A. Parkinson, J. Ge, and G. Kirk. Members of the Spira Award Committee are: J. Davidson (Chair), A. Parkinson, A. Erdman, C. Dym, E. Feldy, and A. Slocum.

This year the Committees above reviewed a single nomination for each of the awards, so our judgments were absolute ones, rather than relative ones. We declined the nominee for the Leonardo da Vinci Award, but chose to accept the nominees for Machine Design and Spira Design Educator Awards. These latter two nominations were sent to ASME before the March 1 deadline, and they were acknowledged. Consequently, there will be no da Vinci Award in 2006. It should be clear that we need more nominations in the coming year. I encourage all DED members to take this to heart and make nominations. The Division website leads to the guidelines for the nomination procedure and the required nomination materials (resume of candidate, a simple form for the nominator, and five letters of support). —Joseph K. Davidson

Design Automation Committee

Design Automation research and education have been a major focus of interest in the ASME design engineering community for the past 30 plus years. Even though the technical topics in DAC have kept evolving to meet the new needs in engineering design practice, the interest in DAC has never faded away due to the enthusiasm of the members of the DAC community, along with the pressing demand for "Automation", a fundamental domain in design engineering that uniquely defines the role of DAC. The DAC community has further classified the technical topics under design automation in four major categories: Design Representation (CAD, virtual and physical prototyping, knowledge based systems, product data management); Design Optimization (structural, topological, multi-disciplinary, heuristic and deterministic, under uncertainty); Design Evaluation (modeling, simulation, approximation); and Design Integration (integration, decomposition, collaboration).

In the 2005 IDETC held in Long Beach, the DAC sponsored 30 technical sessions, featuring 129 papers, a keynote speech, and a successful joint academia-industry panel session on "Offshore Engineering: Where are the future jobs for mechanical engineers?" The Committee congratulates the winner of the 2005 Design Automation award, Dr. Ren-Jye Yang (Ford

Motor Company), as well as the winners of the 2005 Design Automation Best Paper Award (sponsored by the Ford Motor Company): Jeremy J. Michalek, Oben Ceryan, Panos Y. Papalambros, and Yoram Koren from University of Michigan, for their paper entitled "Manufacturing Investment and Allocation in Product Line Design Decision-Making".

The Design Automation Committee is open to anyone interested in its activities. The next committee meeting will be held during the upcoming 2006 IDETC in Philadelphia, PA. For more information, please visit the web site of the committee at: <http://cdl.engr.uconn.edu/asmada/dac/>, or contact the Committee Chair, Professor Wei Chen, Department of Mechanical Engineering, Northwestern University, Evanston, IL 60208-3111; e-mail: weichen@northwestern.edu; phone: (847) 491-7019; fax: (847) 491-3915. —Wei Chen

Design for Manufacturing Committee

The mission of the DFM committee is to disseminate practices, theories and computational methods dealing with all areas of design and manufacturing integration amongst the engineering community as well as to encourage the growth and recognition of the value of design and manufacturing integration. DFM committee organizes the following three events at the ASME sponsored conferences and meetings.

- DFM Conference at the IDETC
- DFM symposium at the IMCEC
- DFM Symposium at the National Manufacturing Week (NMW).

Over the last two years, the DFM Committee is expanding its focus and beginning to support activities to address Life Cycle Engineering during the early design phases. For example, at 2005 IDETC, DFM Committee organized a plenary lecture titled "The Integration of Environmental and Life Cycle Issues into Product Development" by Professor Serge Tichkiewitch of the Institut National Polytechnique de Grenoble. During the lecture, Professor Tichkiewitch articulated the importance of addressing environmental and life cycle issues during the product development.

Current DFM officers are: Satyandra K. Gupta (Chair) Jeffrey W. Herrmann (Vice Chair), and Edward P. Morse (Secretary). For further information, please contact the Chair, Dr. S. K. gupta, Department of Mechanical Engineering and the Institute for Systems Research, University of Maryland, College Park, MD 20742; phone: (301) 405-5306; fax: (301) 314-9477; email: skgupta@eng.umd.edu. —Satyandra K. Gupta

Design Theory and Methodology Committee

Our vision is to facilitate and enhance the development of design theories and the methods that grow from them. Our focus this year is on rebuilding the DTM community. Rob Stone of the University of Missouri, Rolla is our webmaster and has updated and

improved our website which now is available at: <http://function.basiceeng.umr.edu/asmtdtm/>. The DTM Secretary, Ping Ge of Oregon State University, has updated our roster of members.

The 17th annual conference was held at the 2005 IDETC in Long Beach, California. Yan Jin of the University of Southern California was the Conference Chair and John Gershenson of Michigan Technological University was the Papers Chair. In addition to the technical sessions, Stephen Prusha of NASA Jet Propulsion Laboratory delivered the DTM plenary speech on "Challenges in Early-Phase Complex System Design". The 2005 DTM Xerox Best Paper Award was presented to Adriano Galvao and Keiichi Sato for their paper, "Affordances in Product Architecture: Linking Technical Functions and Users' Tasks". We look forward to the 18th annual conference which will be held at 2006 IDETC in Philadelphia, PA. John Gershenson and Rob Stone will be the Conference and Papers Chair, respectively.

The DTM Committee also sponsors the NSF/ASME Design Essay competition which is administered by Janet Allen and Farrokh Mistree. Information about this competition is available at the committee web site mentioned above. Student essays are due June 15, 2006. We welcome both submissions and volunteers to judge these essays. For further information on the activities of DTM, please contact the Chair at janet.allen@me.gatech.edu. —Janet K. Allen

Mechanisms and Robotics Committee

The purpose of the Mechanisms and Robotics Committee is to promote advances in research and education in the theory, design and application of mechanisms and machine systems. Current active areas of interest include, but are not limited to, the following topics: Mechanism Synthesis, Components and Applications; Robotics: Theory; Robotics: Applications; Theoretical and Computational Kinematics; Dynamics of Machines; Compliant Mechanisms; Micro and Nano-Scale Electromechanical Systems; Medical Devices and their Applications; and Education in Mechanisms and Robotics.

We were pleased to initiate a new award this year, the A.T. Yang Memorial Award in theoretical kinematics, in honor of Prof. A.T. Yang and his contributions to the field. Many thanks go to the family of Prof. Yang for their support of this award. The inaugural award was made to Professor Gordon Pennock of Purdue University, and was presented by Ambassador Linda Tsao Yang, wife of the late Prof. Yang.

The 2005 Mechanisms and Robotics Conference was held in Long Beach, California, and included presentations of technical papers, keynote speakers, student competitions, and other presentations. This year, the committee broke away from several decades of tradition by moving from a biennial conference format to an annual conference. This change has necessitated

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a change in the committee structure, requiring the involvement of more colleagues in the mechanisms community to participate in conference organization. The committee would like to express appreciation to the sponsoring support of MSC Software, General Motors, Schlumberger, and L-3 Communications.

For more information about the committee and its activities, please contact the Chair, Dr. Sunil Agrawal, agrawal@me.udel.edu, or visit: <http://divisions.asme.org/ded/mechcomm/>.
—Sunil Agrawal

Multibody Systems and Non-linear Dynamics Committee

The mission of the Technical Committee on Multibody Systems and Nonlinear Dynamics (MSND) is to foster experimental, symbolic, computational and analytical activities pertaining to multibody systems, nonlinear dynamics and control, and other related areas. The committee consists of members from academia and industry. One of our main activities is to organize the Biennial International Conference on Multibody Systems, Nonlinear Dynamics and Control as one of the International Design Engineering Technical Conferences.

The Committee met in Long Beach during the 5th International Conference on Multibody Systems, Nonlinear Dynamics and Control (MSNDC) which was a part of the 2005 IDETC held September 24-28, 2005. Three new members, Aki Mikkola (Finland), Prakash Krishnaswami (USA) and Wan-Suk Yoo (South Korea), were elected. Currently the Committee consists of 25 members from around the world. Ahmed Shabana, who served as the Chair of the 5th MSNDC, reported that over 280 papers were presented at the Conference and it was considered a big success. The 6th MSNDC will be held during September 4-7, 2007 in Las Vegas, Nevada. Subhash Sinha will serve as the Chair and Bala Balchandran will be the Program Chair.

For the very first time, the D'Alembert and Lyapunov Awards (for significant contributions in the fields of multi-body systems and nonlinear dynamics, respectively) were presented at the 5th MSNDC luncheon. The first D'Alembert Award was given to Professor Thomas Kane, while the first recipient of the Lyapunov Award was Professor Ali Nayfeh.

The next meeting of the committee is scheduled at Virginia Tech in Blacksburg during the 11th Conference on Nonlinear Vibration, Stability and Dynamics of Structures to be held during August 13-17, 2006. For further information, please contact Professor Subhash Sinha, Department of Mechanical Engineering, 201 Ross Hall, Auburn University, AL 36849-5341; phone: (334) 844-3325; fax: (334) 844-3307; email: ssinha@eng.auburn.edu. —Subhash Sinha

Power Transmission and Gearing Committee

The objective of the Power Transmission and Gearing (PTG) Committee is to promote the activity and education supporting the art and science of power transmission and gearing as related to the research, design, and development of processes, machines and manufacturing in the industry and academic community. The PTG Committee participated in the 2005 IDETC in Long Beach, CA, with 42 papers presented in 8 sessions in the areas of gear dynamics and noise, gear design and analysis, transmissions, gear lubrication and efficiency, engineered surfaces and tribology, gear strength and durability, gear diagnostics, gear manufacturing, and chains, belts, and traction drives. The 2005 PTG Conference was planned as a smaller conference compared to the 2003 PTG International Conference to primarily allow U.S. participants to present work in which they do not want to wait until the next PTG International Conference planned for 2007.

Please visit our committee website at <http://asme gear.eng.ohio-state.edu/> for more information. If you are interested in the PTG Committee activities, please contact Dr. Ahmet Kahraman, e-mail: kahraman.1@osu.edu.
—Ahmet Kahraman

RSAFP Technical Committee

The Reliability, Stress Analysis, and Failure Prevention (RSAFP) Committee of the Design Engineering Division participated in the 2005 International Mechanical Engineering Congress and Exposition with sessions related to RASAF issues in: Strength and Failure Analysis, Composites, Welded and Threaded Joints, Stress Analysis, Adhesives and Adhesively Bonded Joints, and Design Methodology. Seven sessions were organized with 28 papers, some of which were from overseas countries including Japan, Korea, China, and Germany. There was a good mix of papers from industry, academia, and government (NASA).

The RASAF Committee also participated in the International Design Engineering Technical Conference held in Long Beach, CA, September 24-28, 2005, with sessions related to RASAF issues in: Reliability and Failure Prediction, Materials, Bolted and Welded Joints, Stress Analysis, and Design Methodology. Five sessions were organized with 19 papers, some of which were from overseas countries including Japan, Korea, China, Mexico and Malaysia. A good mix of papers from industry, academia, and government (NASA) was present.

The RASAF Committee will be participating in the IMECE 2006. For more information about the committee and its activities, please contact Professor Erol Sancaktar, 323 Polymer Engineering Academic Center, 250 S. Forge Street, The University of Akron, Akron, Ohio 44325-0301; phone (330) 972-5508; e-mail: erol@uakron.edu. —Erol Sancaktar

Student Affairs Committee

This year the committee continued its focus on actively seeking out opportunities to involve and serve our students, specifically by promoting and expanding student-focused



Winners of the NSF sponsored student competition with organizer Dr. Janet Allen.

activities at the IDETC and CIE Conferences. For the 2005 Conference, the committee organized another Student Picnic (funded by a generous donation from Mr. Dick Hirsch and organized by Jim Schmiedeler and Drew Murray). At the 2005 Conference, we surveyed our student attendees to find out more about them. Some interesting results include: 82% of student attendees were doctoral students and 50% of those were already candidates, 86% of student attendees were at their first IDETC and CIE Conference, 86% of student attendees had their registration fees paid by their advisors, and 93% of students liked the student picnic in Long Beach. Moreover, we again generated a Welcome Message for the Conference Program specifically addressed to students. The purpose of this welcome message was to make students aware of all of the activities available to them at the Conference. Furthermore, we have worked closely with the Conference leadership this past year in further revising the student registration options for the Conference. For the first time, every registered student received a copy of the Conference Proceedings CD-ROM! We welcome your feedback on these efforts as well as your suggestions for future student-focused activities.

For further information on our activities, please contact the Chair: Professor Pierre Larochelle, Department of Mechanical and Aerospace Engineering, Florida Institute of Technology, 150 West University Blvd., Melbourne, Florida 32901-6975; phone (321) 674-7274; fax (321) 674-8813; e-mail: pierrel@fit.edu. —Pierre Larochelle

Technical Committee on Vibration and Sound

The Technical Committee on Sound and Vibration (TCVS) provides leadership for promoting research and disseminating knowledge in all areas related to mechanical vibration, acoustics, dynamics and controls. TCVS consists of members from both academia and industry. One of its main activities is to organize the Biennial Conference on Mechanical Vibration and Noise during the odd-year ASME International Design Engineering Technical

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Conferences. In addition, TCVS sponsors reviewed paper sessions, lectures and panel sessions at the National Manufacturing Week in Chicago and the annual IMECE. Further activities on disseminating information include interacting with the ASME Journal of Vibration and Acoustics on a twice per year basis when it presents its report to the committee.

TCVS sponsored a total of fourteen sessions at the 2005 IMECE, including two panel discussions, plus two sessions co-sponsored with DSC and six co-sponsored with NCAD. The TCVS sessions were divided into two symposia: Symposium on the Vibration and Control of Mechanical Systems, organized by Hamidzadeh and Luo, and Symposium on the Dynamics and Control of Micro and Nanosystems, by Raman.

The 2005 IDETC/CIE was held during September 24-28, 2005 in Long Beach, California at the Hyatt Regency Long Beach. Report is given in the earlier part of this newsletter. The committee is very grateful to Hamid R. Hamidzadeh, David E. Lee, and Albert C. J. Luo for their tireless efforts in organizing the Conference. TCVS presented two awards at the 20th Biennial Conference on Mechanical Vibration and Noise, part of the 2005 IDETC. The J. P. Den Hartog award, which recognizes lifelong achievements in the teaching and research of vibration engineering, was awarded to Professor Clayton Daniel Mote, Jr., President of the University of Maryland, for his extensive body of basic and applied research in vibrations, as well as the mentoring that he

has provided to so many graduate students. The N.O. Myklestad award, which recognizes a major innovative contribution to the field of vibration engineering, was presented to Professor Christophe Pierre, Dean of the Faculty of Engineering at McGill University, for his seminal contributions to the study of mode localization in disordered periodic structures that has led to solutions of critical problems facing the jet engine, turbo machinery, and automotive industries.

Plans are well underway for the IDETC 2007, which will be held in Las Vegas, NV, during September 4-7. The Conference General Chair is Prof. H. S. Tzou of the University of Kentucky. See the Call for Papers in this newsletter for further details.

Conference committees are being finalized and symposia are being organized. A joint proposal by TCVS and MSND has been submitted for the IDETC 2009. The Conference is to be co-chaired by Kurt Anderson (Rensselaer Polytechnic Institute) of MSND and George Flowers (Auburn University) of TCVS. Dane Quinn will serve as program co-chair. This Conference is proposed to be held in San Diego, California. ASME is currently negotiating with possible sites for the meeting.

TCVS interacts with a number of other committees and divisions, with liaisons to the Noise Control and Acoustics Division, Applied Mechanics Division – Dynamic Systems and Structures Committee, Applied Mechanics Review, Aerospace Division--Adaptive Structures Committee, Design Engineering Division – Power Transmission and Gearing Committee, and International Activities

Committee. For more information on the activities of TCVS, please visit our web page at: <http://www.me.psu.edu/tcvs/> or contact Professor William Clark, Department of Mechanical Engineering, 538 Benedum Hall, University of Pittsburgh, 3700 O'Hara Street, Pittsburgh, PA 15261; phone (412) 624-9794; fax (412) 624-4846; e-mail: wclark@engr.pitt.edu. —William W. Clark ●

CALL FOR PAPERS 16th International Conference on Engineering Design

August 28-30, 2007, Paris, France
<http://www.iced07.org>



Conference Theme:
Highlight Knowledge, Innovation and Sustainability as three interdependent dimensions related to major societal issues.

Important Dates are:

- Abstract submission: Sept. 15, 2006
- Notification of acceptance: Nov. 17, 2006
- Full paper submission: Jan. 26, 2007
- Final acceptance: April 27, 2007

For questions, please send email to iced07@ecp.fr, or Professor Wei Chen at weichen@northwestern.edu. ●

2007 ASME International Design Engineering Technical and CIE Conferences

<http://www.engr.uky.edu/idetc07/>

The 2007 ASME IDETC/CIE Conference will be held in Las Vegas at the Rio All Suites Hotel and Casino during September 4-7, 2007. The University of Nevada at Las Vegas is the local host for the conference. The Conference will feature plenary sessions, keynote lectures, paper presentations, workshops and tutorials on topics related to engineering designs. We encourage you to visit the conference web site for further information or contact the Chairs listed below.

Conference General Chair:
Professor H. S. Tzou
University of Kentucky
Phone: (859) 257-6336, x80643
Email: hstzou@engr.uky.edu

Conference Vice-Chairs:
Professor George Flowers
Auburn University
Email: gflowers@eng.auburn.edu

Technical Program Chair:
Professor Nader Jalili
Clemson University
Email: jalili@clemson.edu

Professor William Clark
University of Pittsburgh
Email: wclark@engr.pitt.edu

** Poster design: Macro-, micro- and nano-scopic characteristics synergistically integrated in design/vibration and bio-human systems. Two stars, one rising and one fading, symbolize rejuvenation of classical and contemporary technologies, traditional and cutting-edge researches, older and younger generations, etc. ●

ASME
2007 International Design Engineering Technical Conferences

IDETC@
September 4-7, 2007
Rio All-Suite Hotel & Casino
Las Vegas, Nevada

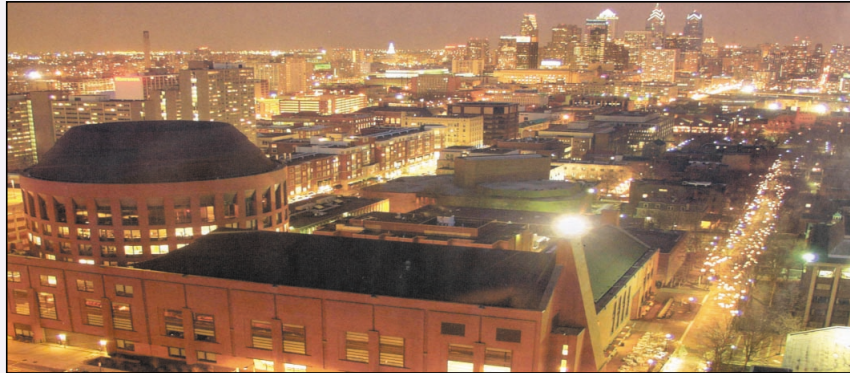
H.S. Tzou, General Chair
hstzou@engr.uky.edu
www.engr.uky.edu/idetc07
N. Jalili, Program Chair
jalili@clemson.edu

UK
UNIVERSITY OF KENTUCKY
College of Engineering

2006 ASME International Design Engineering Technical and CIE Conferences

September 10-13, 2006, Philadelphia, Pennsylvania

<http://www.asmeconferences.org/idetc06/>



GENERAL CHAIRS MESSAGE

On behalf of the ASME Design Engineering Division and the ASME Computers and Information in Engineering Division, it is our great pleasure to invite you to attend and contribute to the 2006 ASME International Design Engineering Technical Conferences (IDETC) and the Computers and Information in Engineering Conference (CIE). This International Conference will take place during September 10-13 2006, at the Wyndham Philadelphia at Franklin Plaza, Philadelphia, Pennsylvania.

This event is the premier international meeting in the fields of Design Engineering and Computers and Information in Engineering. It is designed to showcase cutting-edge research and accomplishments, and to enrich educational experiences in these fields. It will feature tutorials, research workshops and sessions featuring technical papers for the following conferences:

- 32nd Design Automation Conference (DAC). Chair: Hae Chang Gea, Rutgers University; Program Chair: Timothy W. Simpson, Penn State University.
- 18th International Conference on Design Theory and Methodology (DTM) Conference. Chair: John K. Gershenson, Michigan Technological University; Program Chair: Robert B. Stone, University of Missouri, Rolla.
- 11th Design for Manufacturing (DFM) Conference. Chair: William Wood, University of Maryland, Baltimore County; Program Chair: Darek Ceglarek, University of Wisconsin, Madison.
- 26th Computers and Information in Engineering (CIE) Conference. Chair: Imre Horvath, Delft University of Technology; Program Chair: Chris Paredis, Georgia Institute of Technology.
- 30th Mechanisms and Robotics Conference (MR). Chair: Gordon R. Pennock, Purdue University; Program Chair: Stephen L. Canfield, Tennessee Tech University.
- 3rd Symposium on International Design and Design Education (DEC). Chair: Philip E. Doepker, University of Dayton.

These conferences represent a unique opportunity for meeting colleagues and friends, exchanging ideas, and learning about each other's research work. We encourage participation from industry. Indeed, we hope that the conference will lead to effective and fruitful communication between the research and industrial communities.

The conference also features a networking reception at Drexel University where students interested in careers in design can meet prospective employers and a reception in the Chinese Rotunda at the University of Pennsylvania Museum of Archaeology and Anthropology.

Philadelphia provides a rich historical and cultural milieu for the conference, in terms of its world-renowned museums, the Independence National Historic Park, the Philadelphia Orchestra and a thriving theater district. All of this is set within a major metropolitan city with ready access to fine dining, convenient shopping, convenient transportation and other modern urban amenities.

Please come visit us at the ASME 2006 IDETC, and experience and exchange the advances in the field of design engineering. We look forward to having the opportunity to welcome you to Philadelphia in September 2006.

Vijay Kumar
University of Pennsylvania
General Conference Chair

Q. Jeffrey Ge
Stony Brook University
Technical Program Chair

The 2006 National Manufacturing Week

John E. Renaud

The National Design Engineering Show and Conference presented 46 sessions at the 2006 National Manufacturing Week (www.ManufacturingWeek.com). ASME sponsored 15 of these 46 sessions, with more than one third sponsorship from DED. Each session includes a fifty-minute presentation relevant to industrial participants. The DED would like to encourage its members to develop sessions for NMW 2007. The chance to make a fifty minute presentation to a large industrial audience on a topic relevant to your company's products or services is a great opportunity. All speakers will receive 10 free attendance passes

to their respective sessions. High quality presentations will be posted on Lexus Nexus.

The primary motivation in organizing this conference is to attract potential buyers to the show floor. To that goal, we are looking for presentations (preferably case studies) that address real, practical solutions to everyday design, manufacturing and management problems, and ways to reduce cost, increase productivity and improve quality and reliability. These sessions aim to provide the audience with solutions that they can implement right away, not in a couple of years from now. Hence, we are not looking for academic and RandD types of presentations. ●

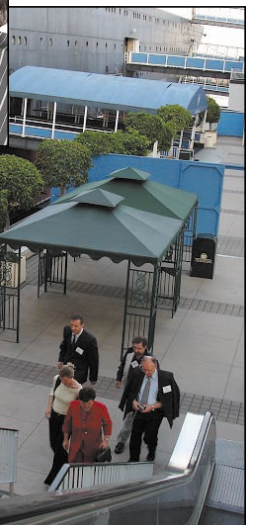
The 2005 IDETC/CIE Conference



2005 IDETC/CIE attendees are networking during a break.



Former DED Chair, Dr. Steve Velinsky (front standing), at the 2005 IDETC/CIE general reception.



Arriving at the Queen Mary for the 2005 IDETC/CIE general reception.

ASME Design Engineering Division

Executive Committee Roster, July 1, 2006 – June 30, 2007

Chair

Shapour Azarm, Ph.D., P.E.
Dept. of Mechanical Engineering
University of Maryland
College Park, MD 20742-3035
P: (301) 405-5250 F: (301) 314-9477
Email: azarm@umd.edu

Vice Chair / Treasurer

Judy M. Vance, Ph.D.
Dept. of Mechanical Engineering
Iowa State University
2025 Black Engineering Building
Ames, Iowa 50011
P: (515) 294-9474 F: (515) 294-3261
Email: jmvance@iastate.edu

IDETC Executive

Kazem Kazeronian, Ph.D.
Dept. of Mechanical Engineering
191 Auditorium Road, Unit-3139
The University of Connecticut
Storrs, CT 06269-3139
P: (860) 486-2251 F: (860) 486-5088
Email: kazem@engr.uconn.edu

Technical Committee Executive and IMECE

Ahmed A. Shabana, Ph.D.
Dept of Mechanical and Industrial Engr.
842 W. Taylor St. (M/C 251)
University of Illinois at Chicago
Chicago, IL 60607-7022
P: (312) 996-3600 F: (312) 413-0447
Email: shabana@uic.edu

Secretary

Larry Howell, Ph.D.
Dept of Mechanical Engineering
435 CTB
Brigham Young University
Provo, Utah 84602
P: (801) 422-8037 F: (801) 422-0516
Email: lhowell@byu.edu

NDEC Chair

John E. Renaud, Ph.D.
Department of Aerospace and
Mechanical Engineering
University of Notre Dame
P: (574) 631-8616 F: (574) 631-8341
Email: Renaud.2@nd.edu

Past Chair

Krishna C. Gupta, Ph.D.
Dept of Mechanical and Industrial Engr.
842 W. Taylor St. (M/C 251)
University of Illinois at Chicago
Chicago, IL 60607-7022
P: (312) 996-3427 F: (312) 413-0447
Email: kegupta@uic.edu

ASME

Noha El-Gobashy
Senior Manager, Engineering Programs
ASME International
P: (212) 591-7787 F: (212) 591-7671
Email: ElGobashyN@asme.org

Lashion Pettiford

Assistant, Engineering Programs
ASME International
P: (212) 591-7387 F: (212) 591-7671
Email: PettifordL@asme.org