

Message from the Chair • *Judy M. Vance, Design Engineering Division Chair*



It is with pleasure that I begin my term as Chair of the Design Engineering Division (DED). I wish to thank all of my predecessors for their stewardship and leadership of this organization. The Division is financially healthy and led by devoted volunteers

who care deeply about the Design Engineering Division, the ASME organization, and the mechanical engineering profession.

The mission of the Division is “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”. Through the activities of our 12 technical committees, which are led by teams of volunteers, we provide opportunities for members to interact with groups of colleagues who share interests, expertise and challenges. Our organization also includes 11 standing committees and 2 special committees. The International Design Engineering Technical Conferences (IDETC) and the International Mechanical Engineering Congress & Exposition (IMECE) provide venues for exchanging ideas and making new connections. Across the division, several hundred volunteers are devoting their efforts to advancing the design engineering community through ASME. Thank you all.

ASME is the leading professional society for mechanical engineers, and the Design Engineering Division is one of the largest and most successful groups within the ASME organization, with over 35,000 current members. Design is at the core of the engineering profession. Strengthening our ability to design new products and systems is critical to the economic health of the world. The Design Engineering Division provides a home for us to exchange ideas and grow in our profession.

The ASME organization over the last few years has seen significant changes. With the implementation in July 2005 of the *Continuity and Change* initiative, we find our division in a new position within ASME: We are now part of the Knowledge and Community Group. During the reorganization process, the leader-

ship of the Design Engineering Division explored many options for change. We discussed partnering with other divisions to form an institute. We looked at our financial management strategy to determine the best way to continue to provide value to our members. We reconfigured our conference management to take on more fiscal responsibility and accompanying risks and also to share more of the revenue with the technical committees. We developed a strategic plan for the division that provides a vision for the future. The result is a strong organization, well positioned to move forward. In my year as chair, I intend to continue to examine how we are serving our members in providing value for your participation in the division and its activities.

One of the ways our community has an impact is in recognizing significant achievement of our colleagues through honors and awards. This newsletter has a listing of recent DED members who have been awarded Fellow status. I encourage you to consider nominating deserving colleagues for recognition through ASME. There are many other honors and awards at the society, division, and committee levels that target various levels of professional achievement. Society award descriptions can be found on the ASME website (www.asme.org), division award descriptions can be found on the DED website (divisions.asme.org/ded), and you can find committee award information by contacting individual DED committee chairs. It is an excellent way for us to celebrate the accomplishments of individuals and our profession. Thank you to Dr. Joseph Davidson, DED Honors and Awards Standing Committee Chair, for organizing and managing the nomination and selection process for the division awards.

I would also like to point your attention to the DED website. Last year, Dr. Shayne Gooch reorganized the website and created a look that was consistent with the ASME website. The result is impressive. Information on technical committees, special committees, honors and awards, committee meeting minutes, constitution and bylaws, and much more can easily be accessed through our website. Recently, a colleague approached me to exclaim that “everything” is on the DED website. Well, not exactly everything, but most everything is at your fingertips. Shayne has done a wonderful job organizing and presenting this information for

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our members. I encourage you to explore the information and find out more about the division.

Finally, I want to welcome Dr. William (Buddy) W. Clark and Dr. Zissimos Mourelatos to the DED Executive Committee. They are joining a strong and vibrant leadership team consisting of Dr. Shapour Azarm, Dr. Kazem Kazerounian, Dr. Ahmed Shabana, and Dr. Larry Howell.

I especially want to thank Dr. Shapour Azarm for his leadership throughout the past five years on the DED Executive Committee. I will continue to seek his guidance in the coming year, as I have in the past. I also want to thank the ASME staff members who support the division: Ms. Noha El-Ghobashy and Ms. Lashion Pettiford. We are fortunate to be able to work with such capable individuals. I look forward to working with the Executive Committee, the General Committee, and ASME staff in the coming year as we continue to improve our organization. ●

New Journal

The **Journal of Medical Devices (JMED)** is an exciting new venture offering an important opportunity to our biomedical and design community to describe innovative devices used in the clinic and the laboratory that cannot be easily presented in other journals or venues. See journal reports (page 4) for more information. ●

EXECUTIVE COMMITTEE REPORTS

Greetings from the Past Chair • *Shapour Azarm, Immediate Past DED Chair*



This past year was an exciting and busy year to lead the Design Engineering Division (DED). We had successful International Design Engineering Technical Conferences (IDETC) in Philadelphia in September 2006 under

the leadership of Dr. Vijay Kumar and other organizers. I saw first hand the critical role that the DED's Technical Committees (TCs) play for the Division. With the advice of the executive committee I set a policy for all TCs to have bylaws (and most do) with clear plans for leadership succession and a website. The newest committee that I helped to form was the Standing Committee on Journal Relations, chaired by the secretary of the Division with membership of the technical editors of the DED's (co-) sponsored journals and the chair of the Division. The purpose of the Journal Relations Committee is to establish a coordinated effort for finding ways and using best practices for further improvements in the impact of the DED journals.

The Division continued to sponsor/co-sponsor its ASME transaction technical journals. The newest addition was Journal of Medical Devices which is co-sponsored by DED and the Bioengineering Division. On the other hand, since DED was not a party to a new agreement for the ASME/IEEE Transactions in Mechatronics, the Division ceased its co-sponsorship of that journal.

Regarding IMECE, as you might have heard, it has been going through a lot of strategic and structural changes. Among others, future IMECEs will be shorter and more research-focused with a significantly fewer number of sessions compared to previous IMECEs. There is also a plan to change the name of IMECE. Another activity to report is the DED involvement in the National Manufacturing Week (NMW). For a long time NMW was held in March in Chicago, most recently under Reed Exhibitions. Starting this year, NMW will be held in late September and reportedly will be "the nation's largest design and manufacturing tradeshow". I would like to thank Dr. John Renaud for his help in coordinating the DED's response to NMW over the last few years. I also would like to welcome our new liaison in NMW, Dr. Zissimos Mourelatos, who will represent our Division for NMW for the next few years.

Beginning this last spring 2007, the DED executives have decided to meet twice a year for the executive committee and once a year for the general committee. The spring meeting will be

arranged in the form of a teleconference meeting. The other executive committee meeting and general committee meeting will be held during IDETC with members physically present. We had our first successful teleconference meeting on March 9, 2007, during which, in addition to the executive committee members and ASME staff, the lead organizers of IDETC 2007 and IDETC 2008 were present and gave a report about the progress of their conference planning. In that meeting, among others, the DED executive committee approved a proposal to improve the status of the TC's award accounts while ensuring that DED's custodial account maintains sufficient balance to cover potential losses from future IDETCs.

During my tenure as the chair of the Division, I had the privilege of having the insightful advice of my colleagues in the executive committee. I would like to specifically

thank our outgoing immediate past chair, Dr. Krish Gupta, who advised me on numerous occasions regarding the issues facing the Division. I also would like to thank other members of the executive committee for their willingness to help and for providing many useful inputs. I would like to thank Dr. Chin An Tan, the former Editor of this newsletter, and I welcome the new Editor of our newsletter: Dr. Jeremy Michalek. I would also like to acknowledge the ASME staff, in particular, Ms. Noha El-Ghobashy, Ms. LaShion Pettiford and Ms. Erin Dolan for their support regarding the ASME HQ matters.

Finally, I would like to welcome the new Chair, Dr. Judy Vance. I am confident that she will do a fine job in leading the Division with plenty of willing help from the executive committee members, ASME staff, and other volunteers. Best wishes to her! ●



International Design Engineering Technical Conferences (IDETC) & Computers and Information in Engineering Conference (CIE)

New York City, August 3-6 2008

The 2008 ASME International Design Engineering Technical Conferences (IDETC) and Computers and Information in Engineering Conference (CIE) will take place during August 3-6, 2008 at the New York Marriott at the Brooklyn Bridge, in New York City. The conference is the flagship international meeting in Design Engineering and Computers and Information in Engineering, and includes the following conferences:

34th Design Automation Conference (DAC)

32nd Annual Mechanisms and Robotics Conference (MR)

28th Computers and Information in Engineering Conference (CIE)

20th International Conference on Design Theory and Methodology (DTM)

13th Design for Manufacturing and the Lifecycle Conference (DFMLC)

5th Symposium on International Design and Design Education (DEC)

Technical papers and presentations describing cutting-edge research are solicited for 2008 IDETC & CIE, which will include plenary sessions, keynote lectures, and tutorials on topics related to engineering design. These conferences are a unique opportunity for meeting colleagues and friends, exchanging ideas, and learning about one another's work. Industry participation is particularly encouraged, and we hope that the conferences will provide opportunities for fruitful communication between the research and industrial communities.

New York Marriott at the Brooklyn Bridge is just across the river from Manhattan. Two subway stations by the hotel provide easy access to all parts of New York City. There are walking pathways that will take you from the Brooklyn side of the bridge to the Manhattan side, including Canal Street and City Hall. We look forward to welcoming you to New York in August, 2008.

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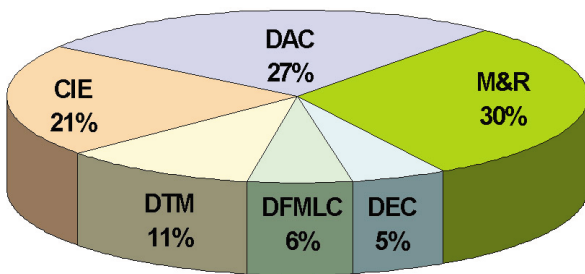
CONFERENCE REPORTS

IDETC/CIE 2006 • *Vijay Kumar, 2006 IDETC Chair*

The ASME 2006 International Design Engineering Technical Conferences and Computers & Information in Engineering Conference (IDETC/CIE), held in Philadelphia, PA, featured six conferences (CIE, DAC, DEC, DFMLC, DTM and MR) and drew nearly 600 participants, with student participation accounting for over 20%. This was the first year the International Design and Design Education (DEC) Symposium was highlighted as a IDETC conference. In addition to paper presentations, the conference featured tutorials and workshops that were formally solicited and reviewed. The conference included a networking

event for students and several contributed research demonstrations and exhibits during the conference, in addition to sponsors' exhibits. Several invited sessions were designed to engage experts from industry, academia and government to address problems and challenges facing the community. ●

The conference reception at the University of Pennsylvania Museum of Anthropology and Archeology (top right). Techno-social networking in front of a 17th century Foo lion (bottom left) and a sarcophagus dating back to the period of Ramses II, 13th century BC (bottom right).



444 reviewed papers were presented at the 2006 IDETC/CIE Conference



IDETC/CIE 2007 • *H.S. Tzou, 2007 General Conference Chair*, *Nader Jalili, 2007 Technical Program Chair*



<http://www.asmeconferences.org/idetc07>
Rio All-Suite Hotel & Casino, Las Vegas, NV
September 4-7, 2007

The 2007 IDETC/CIE has received submittals of a record-breaking 1,400+ papers, contributing to IDETC/CIE's thirteen conferences. Based on the current statistics, the state of the IDETC/CIE is superb. The General and Program Chairs (H.S. Tzou and Nader Jalili) would like to express their sincerest thanks to all conference and symposium organizers, technical committee chairs, ASME staff (Erin Dolan and Christina Perakis), as well as various advisory and international committee members. Without these

leaders and promoters, this new record-setting would not be possible. Preparation for the technical conference is progressing in accordance with planned schedules.

In addition to the excellent technical program, IDETC/CIE07 plans to offer two receptions. Two engineering deans: Dr. Tom Lester, University of Kentucky (UK), and Dr. Eric Sandgren, University of Nevada, Las Vegas (UNLV), will welcome all old and new friends at the Deans' Reception planned for the first evening on UNLV campus. The IDETC/CIE will host the second reception at Rio. Please refer to the final program or web information for details.

Las Vegas is an exciting city to visit. Please come to enjoy not only the excellent technical program, but also the dynamic city. See you at the IDETC/CIE07, September 4-7, 2007. ●



JOURNAL ACTIVITY REPORTS

Computational and Nonlinear Dynamics • *Subhash C. Sinha, JCND Editor*

Since the publication of the inaugural issue (January 2006), the *Journal of Computational and Nonlinear Dynamics* (JCND) has been receiving an expected number of submissions and doing well, in general. JCND is a quarterly journal that provides 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.

Last year six more outstanding educators/researchers joined the JCND as Associate Editors. These are – Dr. David Gilsinn of NIST; Professor Claude-Henri Lamarque of Ecole Nationale des Travaux Publics de l'Etat, Lyon, France; Professor Albert Luo of SIU Edwardsville; Professor Aki Mikkola of Lappeenranta University of Technology, Finland; and Professor Nobuyuki Shimizu of Iwaki Meisei University, Japan. Professors Harry Dankowicz and Oliver M. O. Reilly

edited a special issue of JCND honoring the 60th birthday of Professor Philip Holmes.

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. ●



Computing and Information Science in Engineering • *Jami J. Shah, JCISE Editor*

The mission of the *Journal of Computing and Information Science in Engineering* (JCISE) is to publish archival research results and advanced technical applications in emerging and inter-disciplinary fields at the intersection of Mechanical Engineering, Information Technology, and Engineering Software. Since the very beginning, JCISE has strictly limited its scope to applications in mechanical product development to clearly differentiate it from other CAD/CAM journals.

In March 2007 JCISE celebrated its 6th anniversary. Since our first issue in March 2001, we have produced 25 issues containing 272 articles, of which 223 were full length

research papers. In 2006, the average review time for new papers was less than 2 months, with an increased acceptance rate of 36%.

In 2005 the DED became a full partner with the CIE Division in sponsoring the Journal. Profs. Bahram Ravani and Alan Parkinson are currently DED's representatives, and Prof. Ravani served as Chair for the 2005-06 year. This year the Chair has rotated back to the CIE nominee, Dr. David Lee. We look forward to strengthening our ties with several of DED's technical committees.

We thank all authors, reviewers and associate editors. New appointments in 2006 included Prof. SK Gupta of U. Maryland in the area of CAM/CAPP and Dr. Sean Callahan of Boeing Company and Prof Kincho Law for

engineering informatics. We also welcome Prof. Rich Riesenfeld, School of Computing at University of Utah, and Prof. Paul Wright of UC Berkeley as new members of the JCISE advisory board.

For 2007 we have announced two special issues: one on Engineering Informatics and the other on Advances in Computer aided Manufacturing. We invite you to send papers for these special issues. I invite the DED & CIE community to continue to send us their best papers from the IDETC conferences, as well as to consider JCISE for publishing any other quality papers. JCISE papers are handled online via eLane which can be accessed at: <http://jcise.eas.asu.edu:8080/JCISE>. Thank you. ●

Mechanical Design • *J. Michael McCarthy, JMD Editor*

The 20 associate editors of the *Journal of Mechanical Design* (JMD) serve the mechanical engineering design research community by managing the review of over 450 papers per year, which result in about 150 papers published in 12 monthly issues. The average time to a review recommendation is now approximately four months.

The backlog of articles awaiting publication has been holding steady at about 8 months for several years. It seems our growth in page count has been matched by a growth in quality submissions. The acceptance rate hovers somewhat

below 30%, but this does not account for duplicate, out-of-scope, or redirected submissions on the one hand, and accepted papers that have been through multiple drafts on the other.

Authors often ask if the review process has become tougher. I really do not believe it has, but I know that reviewers from around the world are spending a significant amount of time advising their colleagues on how to improve their papers. In my view, this must be good for the community.

In July 2007, the JMD will publish a special issue on Design Engineering Education. Colleagues in the Design Education technical

committee have had an expanding presence at IDETC, and I am honored to have had Phil Doepker and Clive Dym pull together this outstanding collection of research papers.

My term as Editor is coming to a close this December, and I would like to thank everyone involved in the success of JMD, authors, reviewers, associate editors, guest editors, and ASME production staff for the commitment to excellence that ensures that ours is a thriving and vigorous research community. ●



Medical Devices • *Arthur Erdman, JMED Co-Editor*

The new *Journal of Medical Devices* (JMED) is an exciting venture offered by ASME with Co-Editors Dr. Arthur Erdman, U of Minnesota (Mechanical Engineering) and Dr. Gerald Miller, Virginia Commonwealth University (Biomedical Engineering). This journal offers an important opportunity to our biomedical and design community to describe innovative

devices used in the clinic and the laboratory that cannot be easily presented in other venues.

Papers in this Journal are expected to focus on applied research and development of new medical devices or instrumentation. The Journal will publish papers on devices that improve diagnostic, interventional and therapeutic treatments. Of particular interest are novel devices that allow new surgical strategies, new methods of drug delivery, or other devices that are

intended to reduce the complexity, cost, or adverse results of health care. Significant biomechanical, clinical, or engineering content is expected. The Design Innovation paper category is encouraged for reporting about novel devices for which there may be less extensive clinical or engineering results. Also, featured in the Journal will be a “medical device news” section.

Papers are invited for submission to the

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Medical Devices

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Journal of Medical Devices in the following suggested categories: new medical sensors and actuators; orthopedic devices; cardiovascular devices; rehabilitation devices; neurological

devices; bioheat transfer devices; medical instrumentation; image guided intervention and treatment; endoscopic and laparoscopic devices; minimally invasive devices; human performance and force assessment; tissue engineered devices; drug and cell delivery systems; medical robotics; medical device design

processes; medical device manufacturing; human factors in medical devices; and sports biomechanics related to devices. The first issue, published in March of 2007, is available on the ASME web site. We encourage you to submit a paper or subscribe to the journal: Please visit www.asme.org. ●

Vibration and Acoustics • Kon-Well Wang, JVA Editor



The *Journal of Vibrations and Acoustics* (JVA) has experienced an increasing rate of paper submission during the past few years. There have been 112 papers submitted in 2003, 193 in 2004, 215 in 2005, and 263 in 2006. With the increasing paper submission and backlog, JVA has been allotted an additional 200 pages per year, making the new number of annual available pages 800.

In 2006, Brian Feeny (Michigan State University), Christopher Rahn (Penn State University), Jeffrey Viperman (University of Pittsburgh), C. K. Sung (National Tsing Hua University, Taiwan), Michael Brennan (Institute of Sound and Vibration, United Kingdom), and Jean Zu (University of Toronto, Canada) were nominated and approved as new Associate Editors (AEs). With the help of these new AEs, we are reducing the current workload and

improving the paper handling and review time.

A special issue on vibration-based structural health monitoring, with Guest Editors Bogdan Epureanu (University of Michigan) and Mark Derriso (Air Force Research Labs), is expected to be published in late 2007.

I would like to encourage you to submit your research papers in vibration and acoustics to JVA. I also want to take this opportunity to thank all the authors, reviewers, associate editors and staff members who have contributed to make the past year another good one for JVA. Please feel free to contact me regarding any issues related to the journal. I always welcome ideas and suggestions. ●

Division Members Elected to Fellow Grade

• **Richard A. Hirsch, P. E. Fellows Nominating Committee Chair**

During this past year, Division members did an outstanding job nominating colleagues for the member grade of Fellow. Perhaps my past urgings are paying off, but I didn't make any nominations: You did. Fifteen of our members were elected and they are:

David G. Alciatore, Harry H. Cheng,
Georges M. Fadel, Woodie Flowers, Gary Gabriele,
Ahmet Kahraman, Michael Keefe, C. Mavroidis,
Sayed A. Nassar, John J. Uicke,
Vladimir V. Vantsevich, Michael Y. Wang,
Tachung C. Yih, Masataka Yoshimura, Jean W. Zu.

If I have left anyone off of the list, I apologize.

Keep up the good work.

There remain many deserving colleagues. ●

ASME Design Engineering Division

Executive Committee Roster, July 1, 2007 – June 30, 2008

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National Manufacturing Week 2007

• **John E. Renaud, National Design Engineering Conference Committee Chair**

The National Design Engineering Show and Conference is moving from March to September for the 2007 National Manufacturing Week (www.ManufacturingWeek.com). The Design Engineering Division traditionally sponsors more than a third of the ASME sessions at this conference. Each session involves a fifty minute presentation relevant to industrial participants. The Design Engineering Division would like to encourage members to attend this year's NMW 2007 in Chicago in September. Members are also encouraged to develop presentations for next year's NMW 2008. 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.

Keep in mind that ASME's primary motivation in organizing this conference is to attract potential buyers to the show floor. These buyers include: practicing engineers, technical and mid-managers, and shop floor and plant supervisors. As such, ASME is keen on organizing sessions that add immediate value for this group of people; the information that they obtain at the show and sessions can be used right away in their work place. This group also represents a major portion of ASME's membership base, and as an organization we have an incentive to provide them with programming that facilitates professional growth. To that goal, we are looking for presentations (preferably case studies) that offer the following:

- Real, practical solutions to everyday design, manufacturing and management problems
- Ways to reduce cost and increase productivity
- Ways to make money faster and more efficiently
- Ways to improve quality and reliability
- Avenues to grow professionally

Historically, sessions surrounding these general topics have performed very well and continue to be in demand. These sessions aim to provide the audience member with solutions he/she can implement today, not a couple of years down the road. ●

COMMITTEE REPORTS

Design Automation • Hae Chang Gea, DAC Chair

The *Design Automation Committee* (DAC) serves an important function of promoting research and disseminating knowledge in areas dealing with Design Automation. Since the Design Automation Committee identified four major thrust areas (design representation, design optimization, design evaluation, and design integration) 2 years ago, we have witnessed tremendous growth and renewed focus on both research and educational efforts related to these core areas.

In the 2006 IDETC, the Design Automation Conference (DAC) received 161 papers and accepted 119 papers after a rigorous peer review process. These accepted papers were grouped into 27 technical sessions with 18 top-

ics distributed evenly within the four DAC thrust areas. Additionally, one panel session, organized by Dr. Ren-Jye Yang from Ford Motor Company, was focused on "DAC Accomplishments, Current Status, and Future Trends and Needs: From Industry's Perspective".

The Design Automation Committee congratulates the winner of the 2006 Design Automation award, Professor K.K. Choi from The University of Iowa, for his significant contributions to Design Automation, specifically, sensitivity analysis of structures and reliability-based design optimization with application to automotive systems. Congratulations also to the winners of the 2006 Best Paper Award

(sponsored by Ford Motor Company): Jiaqin Chen, Vadim Shapiro, Krishnan Suresh, and Igor Tsukano from University of Wisconsin-Madison for their paper entitled "Parametric and Topological Control in Shape Optimization".

The Design Automation Committee is open to anyone interested in its activities. The next committee meeting will be held during the upcoming 2007 IDETC. For more information, please visit the web site of the committee at: <http://cdl.engr.uconn.edu/asmeda>, or contact the Committee Chair, Professor Hae Chang Gea, Department of Mechanical and Aerospace Engineering, Rutgers University; gea@rci.rutgers.edu; (732) 445-0108. ●

Design for Manufacturing • Satyandra Gupta, DFM Committee Chair

The mission of the *Design for Manufacturing* (DFM) committee is to disseminate practices, theories and computational methods dealing with all areas of design and manufacturing integration in the engineering community as well as to encourage the growth and recognition of the value of design and manufacturing integration. The DFM committee organizes the DFMLC Conference at IDETC and the DFM

Symposium at IMECE. Current DFM committee officers are: S.K. Gupta (Chair), Jeffrey W. Herrmann (Vice Chair), and Edward P. Morse (Secretary).

Over the last 3 years, the DFM Committee has expanded its focus by beginning to support activities to address Life Cycle Engineering during the early design phases. 33 papers were submitted to the 2006 IDETC Conference, and 25

papers were accepted for publication and presented in 8 paper sessions.

For more information, please contact the Chair, S.K. Gupta, Mechanical Engineering Department and Institute for Systems Research, University of Maryland, College Park; (301) 405-5306, skgupta@eng.umd.edu. ●

Design Theory and Methodology • Janet K. Allen, DTM Committee Chair

The purpose of the *Design Theory and Methodology* (DTM) Committee is to promote research and dissemination of knowledge in such topics as the scientific theories of design, foundations for design environments, models of design processes, design education methods, design management, design for quality and other areas extending the understanding and application of design processes.

For IDETC 2006 we received 94 papers, and

49 were selected for presentation in 11 sessions. In addition, Yan Jin chaired an expert panel session on intelligent synthesis and innovation.

We congratulate Pai Hannukainen of Helsinki University of Technology and Katja Hölttä-Otto of the University of Massachusetts, Dartmouth who received the 2006 DTM Best Paper Award for their paper, "Identifying Customer Needs – Disabled Persons as Lead Users". Also, 9 graduate students and 1 under-

graduate won the NSF/ASME Design Essay Competition and received funding to attend IDETC 2006 and present their ideas in a poster session.

The DTM Committee welcomes all of those interested. The next committee meeting will be held at the 2007 IDETC. For more information, visit the committee's website <http://function.basiceng.umt.edu/asmedtm>. ●

Fastening and Joining • Endel V. Iarve, F&J Committee Chair

The *Fastening and Joining* (F&J) Technical Committee serves ASME members and others who are interested in novel developments related to fastening, welding and adhesive joining of polymeric, metallic, ceramic and other advanced materials and structures. Particular areas of interest include design and manufacturing, cost-effective and rapid joining methods, nano technology and innovations in adhesive bonding, dynamic behavior and long term durability of joined structures, nondestructive evaluation and characterization, industrial applications and case studies as well as many others.

At last year's annual IMECE meeting the committee thanked Professor P. Raju Mantena, University of Mississippi for his leadership in

the past two years and elected Dr. Endel Iarve, University of Dayton Research Institute, to become its new chair.

The committee sponsors symposiums with a specific theme at the annual IMECE Conference. The theme for the 2007 IMECE is "Joining Technologies for Advanced Materials and Structures." The committee currently has about 12 active members and welcomes experts and distinguished researchers from industrial and academic fields to participate. If you are interested in joining the committee or need further information, please contact the Committee Chair: Dr. Endel Iarve, University of Dayton Research Institute; (937) 255-9075; endel.iarve@wpafb.af.mil. ●

Mechanisms and Robotics • Sunil Agrawal, M&R Committee Chair

The purpose of the *Mechanisms and Robotics* (M&R) 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: 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

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Mechanisms and Robotics

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in mechanisms and robotics.

The 2006 Mechanisms and Robotics Conference at IDETC included presentations of technical papers, keynote speakers, student competitions, and other presentations. This is the second year the conference ran as an annual conference. This change has necessitated a

change in the committee structure, requiring the involvement of more colleagues in the mechanisms community to participate in conference organization. The committee activities are strong and healthy.

The committee congratulates Dr. Kazem Kazarounian, University of Connecticut, for receiving the DED Mechanisms & Robotics Committee Award "in recognition of cumulative contributions to the field of mechanism

design and theory." As the outgoing chair of the committee, I would like to express my appreciation to the Members of this committee and the sponsoring support of MSC Software, General Motors, Schlumberger, and L-3 Communications. For more information about the committee and its forthcoming activities, please contact the 2007 Chair, Dr. Vijay Kumar, kumar@cis.upenn.edu, or visit: <http://divisions.asme.org/ded/mechcomm>. ●

Multibody Systems and Nonlinear Dynamics • Subhash Sinha, MSND Committee Chair

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 and nonlinear dynamics and control and other related areas. The committee consists of members from academia and industry. One of the main activities of the com-

mittee is to organize the Biennial *International Conference on Multibody Systems, Nonlinear Dynamics and Control* at IDETC.

Last year one new member, Professor Walter Lacarbonara of University of Rome La Sapienza, Italy, was elected. The votes for D'Alembert and Lyapunov Awards (for significant contributions in the fields of multi-body systems and nonlin-

ear dynamics, respectively) are in, and the D'Alembert Award will be given to Professor Werner Schiehlen of University of Stuttgart. The recipient of the 2007 Lyapunov Award is Professor Francis Moon of Cornell University. These awards will be presented at the 2007 IDETC conference. The next meeting of the committee is also scheduled at the 2007 IDETC. ●

Power Transmission and Gearing • Ahmet Kabraman, PTG Committee Chair

The *Power Transmission and Gearing* (PTG) Committee is preparing for the 10th International ASME Power Transmission and Gearing Conference that will be held as part of the 2007 IDETC. This International conference is held once every four years and attracts a large number of papers globally. The Committee met to define the following sym-

posia: gear design and analysis; gear strength and durability; gear dynamics and noise; gear diagnostics; gear manufacturing; gear lubrication and efficiency; engineered surfaces and tribology; transmissions; chains, belts, & traction drives; and couplings, clutches and bearings.

The PTG committee met in March in Detroit to identify the Buckingham Lecturer

and session chairs as well as the technical symposia organizers. A large number of IDETC papers were received, from which 120 papers have been accepted after a rigorous review process. The PTG Committee is very encouraged by the quality of the accepted papers and looks forward to a successful conference in Las Vegas. ●

Reliability, Stress Analysis, and Failure Prevention • Erol Sancaktar, RSAFP Committee Chair

The *Reliability, Stress Analysis, and Failure Prevention* (RSAFP) Committee of the Design Engineering Division participated in the 2006 IMECE with six sessions. The 22 papers presented included contributions from Japan, China and Austria. A good mix of papers from Industry and Academia was present. The RSAFP Committee will be participating at the 2007 IMECE, as well as at the 2007 IDETC. ●

Vehicle Design • Corina Sandu, VDC Vice-Chair

The *Vehicle Design Committee* (VDC) promotes innovative analytical, computational, and experimental investigations in control, dynamics, and design of full vehicle systems and their sub-assemblies. Fundamental research, applied research, and successful implementations related to light or heavy vehicle design, modeling, and development represent the core of its members' interests.

In 2006 VDC organized the 8th Symposium on Advanced Vehicle Technologies under the 2006 IMECE. The symposium, consisting of 7 sessions, attracted high quality technical publications and presentations. VDC is continuously exploring new ways to increase industry partici-

pation at its events and to encourage and support the direct exchange of scientific ideas between researchers in academia and industry.

VDC is organizing the 9th International Conference on Advanced Vehicle and Tire Technologies under the 2007 IDETC. The Conference will consist of seven symposia in the areas of: vehicle systems design; vehicle systems product development; vehicle design tools to enhance safety, health, and ergonomics; multibody systems modeling and validation for vehicle dynamics applications; vehicle systems dynamics and control; and non-conventional, energy efficient, and environmental friendly vehicles. ●

Vibration and Sound • George T. Flowers, TCVS Chair

The *Technical Committee on Vibration and Sound* (TCVS) provides leadership for promoting research and disseminating knowledge in all areas related to mechanical vibration, acoustics, dynamics and controls. The TCVS membership consists of representatives from academia, government, and industry. One of its main activities is the organization of the *Biennial Conference on Mechanical Vibration and Noise*, which is a part of the odd-year

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

TCVS sponsored two symposia at the 2006 IMECE: Dynamics, Acoustics and Simulations and Dynamics, Identification and Experiments.

TCVS is also cooperating with the Noise Control and Acoustics Division (NCAD), Adaptive Structures and Material Systems (ASMS)/Aerospace Division, and the Dynamics Systems and Control Division (DSCD) in organizing sessions for the 2007 IMECE. These include sessions for the Mechanical Systems and Control track and the Emerging Technologies track. Preparation for the 2007 IDETC is

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nearing completion. The meeting should be one of the largest and best-attended to date. Planning for the 2009 IDETC is also well underway.

TCVS is also responsible for the selection of the J.P. Den Hartog awardee, given to an indi-

vidual in recognition of lifetime contributions to the teaching and practice of vibration engineering, and the N.O. Myklestad awardee, given to an individual in recognition of a major innovative contribution to vibration engineering. The 2007 Den Hartog and Myklestad recipients are Daniel Inman and Kon-Well Wang, respectively. The awards will be presented

during the 2007 IDETC.

Members and friends interested in getting more information or participating in the activities of TCVS are invited to visit our web page at: <http://divisions.asme.org/ded/tcvs/tcvs%20pages> or contact Professor George Flowers, Department of Mechanical Engineering, Auburn University; (334)844-3330; flowergt@auburn.edu. ●

Honors and Awards • Joseph K. Davidson, H&A Committee Chair

The following people received ASME Society Awards at the 2006 IDETC: Dr. Itzhak Green, Georgia Institute of Technology, Machine Design Award “for outstanding achievements and dedication to excellence in design education, innovation, service and research, including cumulative and sustained contributions to analysis, experimental verification, and modeling of machines and triboelements;” and Dr. John S. Lamancusa, Pennsylvania State University, Ruth & Joel Spira Outstanding Design Educator Award “for significant contributions as the co-developer and director of the Learning Factory at Penn

State, which integrates design, manufacturing, and business realities into the engineering curriculum through real projects and a state-of-the-art, hands-on learning laboratory.”

As we look forward to 2008, the DED H&A Committee asks that you identify a qualified candidate for an award and submit a nomination. The deadline for receipt of nomination materials is January 15 for the Spira and Machine Design Awards, and March 1 for the other awards; it is helpful in planning when a potential nominator gives some early notice about a nomination to the Chair of the DED H&A Committee. The ASME Society Awards

include the Machine Design Award and the Spira Outstanding Design Educator Award. Division Awards include the Robert E. Abbot, Leonardo Da Vinci, and Ralph Barnett-Carl Uzgis Awards. In addition, there are several Division-Committee awards that are administered by the different technical committees within the DED. Information about these awards, and greater detail about the above-listed ones, is available within the ASME website, along with the nominating procedures and forms. For something specific, please feel free to contact me at J.Davidson@asu.edu or at (480)965-3824. ●

Publicity and Newsletter • Jeremy J. Michalek, P&N Committee Chair

This year I have taken over Dr. Chin An Tan's duties as Publicity and Newsletter Committee Chair and Editor of the ASME DED Newsletter. Comments and suggestions on the newsletter are welcomed. I have also established a public resource for DED members called the Design Decisions Wiki. DDWiki is intended for researchers, educators, students and practitioners as a central resource and community portal for sharing information about design and tools to analyze and support decision-making. Content includes technical

information about research topics as well as teaching resources and information about the community. DED visitors are encouraged to contribute to using, adding and editing content – especially to share information about their research group and research topics about which they have expertise. DDWiki currently has over 175 articles, 26000 page views and 70 registered users, and it is used actively in design courses and by researchers.

As part of the newsletter development this year, I have made a wiki page for contributing

content to the newsletter. This easily editable content will remain available after publication of the newsletter as a living document for any changes and additional information that contributors wish to submit. For more information, please visit the website (<http://ddl.me.cmu.edu/ddwiki>) or contact the Committee Chair, Professor Jeremy Michalek, Dept. of Mechanical Engineering, Carnegie Mellon University; (412) 268-3765; jmichalek@cmu.edu. ●