

**Report Submitted for the ASME Design Engineering Division
General Committee Meeting**

**Wednesday, September 5th, 2007, 9:30 AM – 12:00 AM
Rio All-Suite Hotel & Casino, Palma H Room
Las Vegas, Nevada**

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ASME Design Engineering Division General Committee Meeting

Agenda

Wednesday, September 5th, 2007, 9:30am – 12:00pm
Rio All-Suite Hotel & Casino, Palma H Room
Las Vegas, Nevada

- | | | |
|---|--------------------|----------|
| 1. Call to Order | J. Vance | 9:30 am |
| 2. Approval of Minutes | W. Clark/L. Howell | 9:32 am |
| 3. Report of the Executive Committee | J. Vance | 9:35 am |
| 4. Technical Committee and IMECE Reports | A. Shabana | 9:45 am |
| (Please limit each report to 3 minutes) | | |
| (a) Design Automation | H. Chang Gea | |
| (b) Design Education | P. Doepker | |
| (c) Design for Manufacturing | J. Herrmann | |
| (d) Design Theory and Methodology | M. Scott | |
| (e) Fastening and Joining | E. Iarve | |
| (f) Mechanisms and Robotics | V. Kumar | |
| (g) Micro and Nano Systems | L. Saggere | |
| (h) Multibody Systems and Nonlinear Dynamics | K. Anderson | |
| (i) Power Transmission and Gearing | A. Kahraman | |
| (j) Reliability, Stress Analysis, and Failure Prevention | E. Sancaktar | |
| (k) Vehicle Design | M. El-Gindy | |
| (l) Vibration and Sound | G. Flowers | |
| 5. Liaison Reports | | |
| (Please limit each report to 4 minutes) | | |
| (a) Journal of Mechanical Design | J.M. McCarthy | 10:21 am |
| (b) Journal of Vibration and Acoustics | K.W. Wang | |
| (c) Journal of Computational and Nonlinear Dynamics | S. Sinha | |
| (d) Journal of Computing and Information Science in Engineering | J. Shah | |
| (e) Journal of Medical Devices | A. Erdman | |
| 6. Vice Chair/Treasurer's report | K.Kazerounian | 10:45 am |
| (Funding levels allocations in committee accounts) | | |
| 7. IDETC report | L. Howell | 10:50 am |
| 8. ASME Meeting Department | R. Ulvila | 11:05 am |
| 9. Standing/Special Committee Reports | | 11:15 am |
| (Please limit each report to 3 minutes) | | |
| • Constitution and Bylaws | H. Lipkin | |
| • National Design Engineering Conference | Z. Mourelatos | |
| • Honors and Awards | J. Davidson | |
| • Nominating Committee | S. Azarm | |
| • US Council for the Theory of Machines and Mechanisms | H. Lipkin | |
| • Government Relations | F. Tahmasebi | |
| • Design Society | W. Seering | |
| • Fellow Nominations | R. Hirsch | |
| • Publicity and Newsletter | J. Michalek | |
| • Student Affairs | P. Larochelle | |
| • Information Management | S. Gooch | |
| • Journal Relations | W. Clark | |
| • K-12 Awareness of Design Engineering | K. Jacobson | |
| • Professional Engineering Licensure | A.V. Karvelis | |
| 10. Old Business | | 11:51 am |
| 11. New Business | | 11:55 am |
| 12. Adjourn | | 12:00 pm |

ASME Design Engineering Division General Committee Meeting
Minutes of the meeting on
Monday, September 11, 2006, 2:30-5:00
Sheraton Philadelphia City Center Hotel, Logan 2
Philadelphia, Pennsylvania

Present: S. Azarm, J. Davidson, A. Erdman, H.C. Gea, K.C. Gupta, L. Howell, K. Jacobson, K. Kazerounian, P. Klasky, H. Lipkin, E. Misawa, B. Ravani, A. Shabana, J. Shah, S. Sinha, K. Waldron

1. **Call to order.** The meeting was called to order by S. Azarm at 2:40 pm.
2. **Approval of minutes.** The minutes of the General Committee Meeting on Sunday March 19, 2006 held in Chicago, Illinois, were unanimously approved.
3. **Report of Executive Committee.** S. Azarm presented the Executive Committee report (oral and written). A summary of the oral report is as follows:
 - *Summary of written report.* See written report or minutes of Executive Committee meeting.
 - *Number of Executive Committee and General Committee Meetings.* DED will keep two Executive Committee meetings per year, one at the IDETC and the other a shorter teleconference in the Spring. There will be only one General Committee Meeting each year during the IDETC. Thus, only one report per year will be required from each committee. This will affect the division bylaws.
4. **Technical Committee and IMECE Reports.**
 - (a) *Design Automation.* Oral (H.C. Gea) and written (W. Chen) reports submitted. Gea summarized the written report and presented the new bylaws for approval. The committee has proposed having four main areas that are well balanced at the conference. S. Azarm relayed discussion from Executive Committee meeting that the bylaws proposal should be modified with the following changes: 1. Update terms of leadership changes to be consistent with the rest of the division, and 2. reduce ambiguity in the term "annual meeting." After the modifications are approved by the Design Automation Committee, the revised proposal should be submitted to the DED Executive Committee for approval.
 - (b) *Design Education.* Written report submitted by P. Doepker
 - (c) *Design for Manufacturing.* Written report submitted by S.K. Gupta
 - (d) *Design Theory and Methodology.* Written report submitted by J. Allen
 - (e) *Fastening and Joining.* No report submitted
 - (f) *Mechanisms and Robotics.* Written report submitted by S. Agrawal
 - (g) *Micro and Nano Systems.* Written report submitted by L. Saggere
 - (h) *Multibody Systems and Nonlinear Dynamics.* Oral and written report by S. Sinha
 - (i) *Power Transmission and Gearing.* Written report submitted by D. Lewicki/A. Kahraman
 - (j) *Reliability, Stress Analysis, and Failure Prevention.* Written report submitted by E. Sancaktar
 - (k) *Vehicle Design.* Written report submitted by M. El-Gindy
 - (l) *Vibration and Sound.* Written report submitted by G. Flowers
5. **Liaison Reports.**
 - (a) *Journal of Mechanical Design.* M. McCarthy submitted written report and arrived later. B. Ravani noted that the Impact Factor has become one of the highest in mechanical engineering.
 - (b) *Journal of Vibration and Acoustics.* Written report submitted by K.W. Wang
 - (c) *Journal of Computational and Nonlinear Dynamics.* Oral and written report submitted by S. Sinha. The journal is on track. Five new associate editors were approved.
 - (d) *ASME/IEEE Journal of Mechatronics.* Written report submitted by D. Mavroidis
 - (e) *Journal of Computing and Information Science in Engineering.* Oral and written reports by J. Shah. The journal is well beyond its infancy. DED is now a co-owner with CIE. Expressed hope that DFM, DAC, and others would be supportive of the journal. Some collaboration with ACM, but they are more broad than the journal. Review times are decreasing for the journal. Nominations for AE's can come from anywhere, then they are reviewed by the advisory board, then by ASME. Requested that the next newsletter carry an article about JCISE.

- (f) *Journal of Medical Devices*. Oral and written report submitted by A. Erdman. The journal is ready to go forward. Encouraged the conference to sponsor sessions in this area as in the past four years. Submitted a written report that was not available for the pre-meeting report.
6. **Vice Chair/Treasurer's report.** J. Vance reported at the Executive Committee Meeting. Refer to the minutes of the Exec Comm.
7. **IDETC Technical Conferences.** K. Kazerounian reported that 2006 was going well. 2007 being planned, 2008 hotel identified in NYC, 2009 moving forward for San Diego. Two groups (J. Vance and S. Sinha) have declared interest in submitting proposals for 2011. Mechatronics symposium in 2005 has requested revenue sharing with the challenge being that they are not currently a technical committee. Azarm expressed the opinion that this should follow usual procedures, i.e., be attached to a committee and then become their own committee and receive revenue sharing. Kazerounian will talk to them about submitting a proposal. 29 papers were at the symposium, which would be a maximum of \$1600 if they had been a committee.
8. **ASME meetings.** P. Klasky reported for N. El-Ghobashy. Congress needed to be overhauled. Three task forces have been approved: research conference, annual general meeting (added to summer), and specialty symposiums. Waldron expressed hope that changes to be consistent with NDEC.
9. **Standing/Special Committee Reports.**
- *Constitution and Bylaws.* Oral and written reports by H. Lipkin.
 - *NDEC.* Written report submitted by J. Renaud
 - *Honors and Awards.* Oral and written reports by J. Davidson. Requested nominations for Machine Design, Spira Outstanding Design Educator Award, Leonardo Da Vinci Award. Product Design Safety Award in limbo as a society award, but is still a division award.
 - *Nominating Committee.* Oral and written reports by K.C. Gupta
 - *USCToMM.* Oral report by K. Waldron. Fee likely to increase from \$3K to \$3.6K.
 - *Design Society.* Written report submitted by W. Seering
 - *Fellow Nominations.* Written report submitted by R. Hirsch
 - *Publicity and Newsletter.* Written report submitted by C.A. Tan
 - *Student Affairs.* Written report submitted by P. Larochelle
 - *Information Management.* Written report submitted by S. Gooch
 - *K-12 Awareness of Design Engineering.* Oral and written reports by K. Jacobson. Committee was encouraged to submit a proposal for financial support (\$1K-\$2K).
 - *Professional Engineering Licensure.* Written report submitted by A.V. Karvelis
10. **Old Business.** No old business.
11. **New Business.** No new business.
12. **Adjourn.** The meeting was adjourned at approximately 4:00 P.M.

Respectfully submitted,

Larry L. Howell
Secretary of the Division

DED Chair's Report September 23, 2007

Personnel Changes

I wish to welcome Professor William W. (Buddy) Clark to the DED Executive Committee. He began his service on the committee July 1, 2007 as Secretary. He is currently Professor of Mechanical Engineering and Director of the Vibration and Control Laboratory and the John A. Swanson Micro and Nanotechnology Laboratory at the University of Pittsburgh. He is past chair of the Technical Committee on Vibration and Sound (TCVS) and a current Associate Editor for the *ASME Journal of Vibrations and Acoustics*.

Congratulations to Noha El-Ghobashy on her promotion to the position of Director, Technical Programming and Development, Knowledge and Community (K&C) Sector, effective July 1st. I am very pleased to see her recognized with this promotion and wish her success in her new leadership role in ASME, although we will really miss working with her on division matters.

A new reorganization of the Knowledge and Community Sector resulted in Richard Ulvila being appointed as the new ASME staff support person. Rich is responsible for supporting all technical divisions in the Systems and Design Group and the Environment and Transportation Group, as well as ASME District A (Northeast) and B (North Central). See the attached Leadership & Communities Personnel Assignments chart for more details on the reorganization of personnel.

All standing and special committee chairs were reappointed with the exception of the Government Relations Committee and the US Federation for the Theory of Machines and Mechanisms (USToMM) representative. Farhad Tahmasebi has been appointed as the Government Relations Committee Chair. Dr. Farhad is employed as an Aerospace Engineer at NASA Goddard Space Flight Center. He has received many awards from NASA for his work including the NASA Outstanding Performance Award and the NASA Group Achievement Award. His achievements are summarized on his website: <http://mysite.verizon.net/farhad99/>.

Professor Harvey Lipkin has agreed to serve as the USToMM representative. Professor Lipkin is an Associate Professor of Mechanical Engineering at Georgia Tech University. He served as the General Co-chair of the 1998 IDETC and is a former Associate Editor of the *ASME Journal of Mechanical Design*. He is also serving the DED as Constitution and Bylaws chair. Thank you to Greg Chirikjian for his past service in this role.

There are two committee chair terms that will end in June 2008: Constitution and Bylaws, and Honors and Awards. In addition, with Pierre Larochelle's increased responsibilities as the 2010 IDETC/CIE Conference Co-chair, he has asked to step down from his position and has suggested this committee be disbanded or refocused. ASME is increasing support for students and early career engineers so perhaps this committee could be reconstituted to serve that community. Nominations for these two open positions are welcome.

Finances

The finances of the division are in good shape. The 2006 IDETC/CIE conference ended with a profit of approximately \$40,000. There are several outstanding issues with fund transfer that need to be resolved with headquarters. As former treasurer, I have passed along the list of issues to the new treasurer, Kazem Kazerounian, who will be following up.

The award matching program offered to the technical committees from the DED Executive Committee as a result of the vote at the March 2007 meeting was very well received with approximately 50% of the TCs participating. Details on the funding are included in the Treasurer's report.

Committees

The Division continues to support 12 technical committees:

- Design Automation
- Design Education
- Design for Manufacturing
- Design Theory and Methodology
- Fastening and Joining
- Mechanisms and Robotics
- Micro & Nano Systems
- Multibody Systems and Nonlinear Dynamics
- Power Transmission and Gearing
- Reliability, Stress Analysis & Failure Prevention
- Vehicle Design
- Vibration and Sound

Journals

The Division continues to support five journals:

- *ASME Journal of Mechanical Design*
- *ASME Journal of Vibration and Acoustics*
- *ASME Journal of Computational and Nonlinear Dynamics*
- *ASME Journal of Computing and Information Science in Engineering* (co-sponsored with the Computer and Information in Engineering (CIE) Division)
- *ASME Journal of Medical Devices* (co-sponsored with Bioengineering Division)

Newsletter

The newsletter was completed in late July. 13,911 domestic copies and 2,245 foreign copies were sent through the mail for a total of 16,162 copies. The cost of the newsletter (without postage) was \$4534 broken down as follows:

17,000 copies - 8 pages 4/4, 8 1/2 x 11 and delivered to the Post Office and New York City,
including preparatory work - \$3,030.00
Creating pdf file for internet - \$80.00
16,162 tabbed - \$364.00
16,162 inkjet address plus barcode and sort - \$1,060.00
Postage is additional.

The extra 838 copies will be sent to the IDETC for distribution. I wish to thank Jeremy Michalek for his excellent work putting together his first newsletter and working with ASME staff and all of the newsletter contributors to get the newsletter out as a quality publication in a timely manner.

Action items from March meeting

Following are the action items from the March 2007 DED Exec meeting.

J. Vance to transfer \$10K to DaVinci Award account. The Outstanding Educator Award account will be closed with the balance moved to the DaVinci Award account. TCs will be informed about the match, up to \$5K, for their award account. – not complete.

N. El-Ghobashy and E. Dolan will coordinate with other staff at ASME to see if the IDETC site can be initiated sooner than the usual one-year-before-event schedule. – status unknown.

A. Shabana to check DED website to see if it lists the new committee chairs, and send new committee chairs' contact information to S. Gooch for upload to the site if needed. – completed.

N. El-Ghobashy to check on links from ASME pages to NMW page. – status unknown.

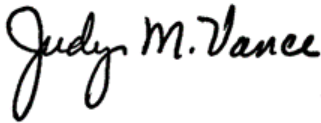
K. Kazerounian to inform P. Larochelle and A. Murray of the decision noted above. (Decision to approve them as the 2010 IDETC Conference Chairs) – completed.

New Standing Committee

I would like to create a new standing committee: Broadening Participation Committee. The purpose of this committee would be to support activities that broaden the participation of minorities and underrepresented DED members in the division. The committee would be responsible for reporting on minority and underrepresented persons participation on technical committees, as associate journal editors, as paper reviewers, as attendees at conferences supported by the division and other aspects of involvement in the division. In addition, this person would be a liaison with the ASME Center for Leadership and Diversity.

The next meeting of the DED Executive Committee will be via conference call on March 6, 2008.

Respectfully submitted,

A handwritten signature in black ink that reads "Judy M. Vance". The signature is written in a cursive, flowing style.

Judy M. Vance
Chair, ASME Design Engineering Division 2007-2008

Leadership & Communities Personnel Assignments

Elio A. Manes, Director, Leadership & Communities (New York)

Personnel (Location)	Lee Hawkins (Garland, TX)	Vince Dilworth (San Ramon, CA)	Rich Ulvila (New York)	Tom Wendt (Racine, WI)
Role	Technical/Global	Technical/Global	Technical/Global	Leadership/Training
<u>Groups</u> Divisions	<u>Basic Engineering</u> Applied Mechanics Bioengineering Fluids Engineering Heat Transfer Materials Tribology <u>Manufacturing</u> Manufacturing Materials Handling Plant Engineering & Maintenance Process Industries Textile Engineering	<u>Energy</u> Advanced Energy Systems Internal Combustion Engine Nuclear Engineering Power Solar Energy <u>Pressure Technology</u> Pressure Vessels & Piping NDE Engineering <u>Eng & Tech Management</u> Management Safety Engineering & Risk Analysis (SERAD) Technology & Society	<u>Systems & Design</u> Computers & Info in Eng Design Engineering Dynamic Systems & Control Elect & Photonic Packaging Fluid Power Systems Info Storage & Processing Systems (ISPS) Microelectromech (MEMS) <u>Environment & Transportation</u> Aerospace Environmental Engineering Noise Control & Acoustics Rail Transportation Solid Waste Processing	Student Leadership Seminars (SLS) Student Professional Development Conferences (SPDC) Leadership Training Conference (LTC)
Districts	E – Southwest F – Southeast I – Latin America	D – Pacific G – Asia	A – Northeast B – North Central	C – Midwest J – Middle East H – Europe



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K&C Leadership & Communities Department Staff Personnel

Vince Dilworth has over 15 years experience with United Airlines, where he managed various departments, including engineering support, strategic planning and the project office. Prior to working with United, Vince spent 6 years with Transamerica Delaval, where he held the positions of Marketing Manager, Purchasing Manager, Division Controller, and Manager of Project Management. He also spent 12 years with PG&E, where his last position was Division Engineer. Upon joining ASME, Vince has held the position of Director, Western Field office located in San Rafael, CA for 3 years. For the past two years at ASME, Vince has held the position of Director, Client Relations, where he managed relationships with major industrial giants, such as Boeing. Vince has a BS in Mechanical Engineering from the University of California-Berkeley and an MBA in Marketing, Finance and Operations Research. He also maintains his PE license in the state of California.

Lee Hawkins has been with ASME for 3 years. During his first year of ASME employment, Lee was the Field Director for the Southern Field Office. Over the past two years, he has been the Director of Client Relations. In addition, Lee has a 15-year proven track record of senior level association management experience, including previous career stints as Director of Member Services and Director of Chapter Services at the American Public Works Association. Lee is originally from Detroit, Michigan and is a graduate of the University of Kansas. He currently resides in the Dallas, Texas area.

Richard Ulvila has been a Program Manager at ASME's New York headquarters for five years. Prior to joining the ASME, he designed and developed computer printers, medical recorders, XY plotters, floppy disks, galvanometers, tape decks, cutting/perforating rule, color measurement instruments and control systems. He managed both union and non-union manufacturing employees and set up manufacturing facility in Puerto Rico. Rich also provided client/server networks, including accounting, manufacturing, and process software. Previous positions and employers include: Executive Vice President (Partner), ABBI Business Systems (New Jersey); Director, Research & Development, Zimmer Industries Inc. (New Jersey); Vice President, Engineering, MACBETH Inc. (New York); and Director of Engineering, Centronics Data Computer Corp. (New Hampshire). He also held various engineering positions with MFE Corp, Raytheon and Hamilton Standard. Rich holds both an MSEE and a BSEE degree from Northeastern University.

Thomas E. Wendt has both a BS in Mechanical Engineering and an MBA from the University of Wisconsin. He is a Licensed Professional Engineer and also holds a certificate as an Engineering Management Professional (EMCP). His career began as an engineer at the Kimberly Clark Corp. He later joined Wisconsin Energy, where through a 22-year career he held several positions, including Director of Operations and Director of Engineering in the natural gas distribution area of the utility business. After leaving Wisconsin Energy, he joined the Institute of Gas Technology as Associate Director of Industrial Education. Tom joined ASME in 1998 as Director of the Midwest Field Office. In 2005, Tom became, Director of Client Relation providing marketing services to industry.

Technical Committees & IMECE Report

Technical Committees

Reports:

(a) Design Automation Committee	H.C. Gea	(written report)
(b) Design Education	P. Doepker	(written report)
(c) Design for Manufacturing Committee	J.W. Herrmann	(written report)
(d) Design Theory and Methodology	M.J. Scott	(written report)
(e) Fastening and Joining	E.V. Iarve	(written report)
(f) Mechanisms and Robotics	V. Kumar	(written report)
(g) Micro and Nano Systems	L. Saggere	(written report)
(h) Multibody Systems and Nonlinear Dynamics	K. Anderson	(written report)
(i) Power Transmission and Gearing	A. Kahraman	(written report)
(j) Reliability, Stress Analysis, and Failure Prevention	E. Sancaktar	(written report)
(k) Vehicle Design	M. El-Gindy	(written report)
(l) Vibration and Sound	G. Flowers	(written report)

Issues & Action Items:

1. Changes in the leadership of the Technical Committees: Jeffrey W. Hermann replaced S.K. Gupta as the chair of the Design for Manufacturing Committee, Michael J. Scott replaced Janet Allen as the chair of the Design Theory and Methodology Committee, Endel V. Iarve replaced P. Raju Mantena as the chair of the Fastening and Joint Committee, Vijay Kumar replaced Sunil Agrawal as the chair of the Mechanisms and Robotics Committee, and Kurt Anderson replaced Subhash Sinha as the chair of the Multibody System and Nonlinear Dynamics Committee. DAC will also have a new chair this year who will replace H.C. Gea. The new Technical Committee Chair Roster is attached.
2. PTG proposed to have a new award with candidate name "The Darle Dudley Award". The proposal was approved starting with \$5K from PTG matched with \$5K from DED custodial account.
3. The Mechanisms and Robotics Best Paper Award was proposed (starting with \$5K from MR matched with \$5K from DED custodial account).
4. The Micro and Nano Systems Committee Award was proposed (starting with \$1K from MNS matched with \$1K from DED custodial account).
5. Vehicle Dynamics is having its first conference at the 2007 IDETC's.
6. MR is considering establishing a new journal on Mechanisms and Robotics.

IMECE

There will be significant changes in the structure of the IMECE. The conference will be more research focused and will have significantly smaller number of sessions. The number of sessions will be reduced from 625 to approximately 240 sessions within a period of three years.

1. The 2007 IMECE will be held in Seattle during the period of November 12 – 15, 2007.
2. No sessions will be allocated for divisions. Sessions will be allocated for tracks which are co-chaired by division representatives.
3. 40% of the revenue goes for ASME and 60% for the divisions. The distribution of the revenue for divisions will be based on the number of sessions. Sessions which will be attended by less than 10 people will not be counted in the revenue distribution. The sessions of a track will be equally distributed among the divisions participating in this track.
4. The DED technical committees were contacted in November 2006 to nominate DED Track Representatives. A list of DED Track Representatives is provided.
5. The number of abstracts submitted to the 2007 IMECE is 2808 abstracts. Some tracks were merged together. The final number of tracks is 17. The number of sessions is 460 with 2200 presentations (1655 manuscript submissions, approximately 1500 papers will be accepted.)
6. In December 5, 2006; Said Jahanmir presented a revised plan for restructuring the congress. This revised plan is attached to this report. The Technical Communities Operating Board (TCOB) approved the new congress structure early this year.

Technical Committee Chair Roster

Design Automation Committee

Hae Chang Gea

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Design for Manufacturing

Jeffrey W. Herrmann, Ph.D. (07/07 - 06/08)

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Multibody Systems and Nonlinear Dynamics

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Design Engineering Division Track Representatives

Track	Proposed DED Track Chair of Co-Chair	DED Technical Committee	E-Mail Address
Mechanics of solids and Structures	Erol Sancaktar	Reliability, Stress Analysis, and Failure Prevention	erol@uakron.edu
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Fluid Dynamics, Heat Transfer and Thermal Systems			
Nanotechnology and Microtechnology	Laxman Saggere	Micro and Nano Systems	saggere@uic.edu
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Transportation Systems	Khaled Zaazaa	Multibody Systems and Nonlinear Dynamics	Zaazaa.Khaled@ensco.com
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Engineering Education			
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Advances in Aerospace Technology			
New Developments in Software for Engineering Applications			
Engineering Management and Ethics			
Recent Advances in Engineering Research			
Early Career Development			
Engineering Entrepreneurship			

Plans for Restructuring ASME Congress from IMECE to IERIC Version 3 (December 5, 2006)

Introduction

In order to make Congress more focused on its strength (i.e., presentation of state of the art developments in engineering research) BOG commissioned a Task Force chaired by Warren DeVeries to critically evaluate and develop a set of recommendations for revising the Congress. The Task Force report has been adopted by the BOG. It recommends splitting the present Congress into three separate venues, International Engineering Research and Innovation Congress (IERIC), General Annual Meeting (GAM), and a series of Industry Focused Symposia (IFS). The present Congress will be replaced by IERIC and will be held at the same time frame, i.e., second week of November. The Summer Annual Meeting will be replaced with the GAM. While the focus of new Congress will be on Research and Innovation, the GAM will focus on ASME business, professional development and other general engineering issues. Three new Task Forces have been commissioned by the ASME President to develop the strategic and business plans for these three events. The transition to the new format will probably take three to four years. The new Congress will be much smaller than the present Congress. The number of sessions will be reduced from 600 to 240 and the Congress will run from Monday through mid day on Thursday.

It is hoped that the new format for the smaller and more focused Congress will result in reduced cost (i.e., lower registration fees), improved quality and increased revenues. Furthermore, the structural changes in the new Congress should provide direct opportunities for Divisions to control and oversee the technical program. Starting with these goals in mind and considering the main mission that is to “organize high-quality forums for exchange of recent results from research and innovations and for networking,” the following operating procedures are recommended:

Congress Steering Committee

The International Engineering Research and Innovation Congress (IERIC), or the Congress will be directed and managed by the Congress Steering Committee (CSC). The CSC shall consist of a Chair and nine members appointed jointly by the Vice President of Technical Communities (TC) and Vice President of Programs and Activities (P&A). Each member, except the Chair, shall be appointed for a maximum term of three years. Membership on the CSC is limited to one person per Division participating at Congress. Each year participating Divisions that are not represented on CSC shall nominate a new member to fill the upcoming vacancies. The CSC shall select three new members and transmit the names to the VPs of TC and P&A. The VPs shall determine if some Divisions due to their continued major involvement in Congress shall have permanent seats on the CSC. The Chair of CSC shall be nominated by the CSC and appointed jointly by the VPs of TC and P&A for a two-year term. The Chair shall have served a full 3-year term on CSC. The CSC may include non-voting members, as advisors, selected by the VPs of TC and P&A.

ASME staff shall serve as non-voting members of the CSC and one staff shall serve as the recording Secretary responsible for drafting the meeting minutes and making arrangements for the CSC meetings.

The CSC shall have the responsibility for all aspects of Congress, including site selection, budget, technical program, and all other social and technical functions. The CSC shall appoint a Technical Program Chair (TPC), who shall report to CSC, for planning and execution of the technical program. The TPC will be assisted by Track Chairs and Vice Chairs, as outlined below. The TPC shall chair the

Congress Technical Program Committee composed of Track Chairs, as members, and past TPC's, as advisors.

Multidisciplinary Symposia

In order to encourage collaboration among Divisions and develop a multidisciplinary program, the technical program of Congress shall consist of several multidisciplinary Tracks. The Tracks may consist of multidisciplinary symposia and/or sessions. Each year in July the TPC with input from CSC shall develop a preliminary list of Track topics for the next year's Congress. This list shall be communicated to Division Chairs and Division Program Representatives asking for input and suggestions for symposium/session topics for each Track. Divisions will be asked to also provide suggestions for new multidisciplinary Track topics, as well as suggestions for Track Chairs and Vice Chairs, and Symposium/Session Organizers. The final list of Track topics and Track Chairs shall be developed by the TPC with approval of CSC. Each Track shall include at least two Divisions, and the Chairs and Vice Chairs shall be selected from different Divisions.

The TPC shall allocate sessions for Tracks based on the number of abstracts submitted to each Track. Technical sessions may include presentations of peer-reviewed papers or extended abstracts, presentations of recent innovations, poster presentations, and panel discussions. Each potential presenter shall submit an abstract for review. The Track Chairs with input from Symposium/Session Organizers and with approval of TPC shall decide the presentation types for their Tracks, Symposia and Sessions. All reviewed and accepted manuscripts shall be published by ASME using an appropriate media such as DVD.

All authors and presenters shall register and pay the registration fees in advance of the Congress prior to a deadline set by the CSC with input from ASME staff. The final technical program shall be reviewed by the TPC and approved by the CSC.

Congress Schedule

Congress shall start on Monday morning and end on Thursday noon. No technical presentations are to be scheduled on the preceding Sunday or on the evenings, unless approved by the CSC. The total number of parallel sessions for Congress shall be decided by the CSC. It is desired to limit the number of parallel sessions to 15. The present Congress schedule with respect to session length (90 minutes with a maximum of 4 presentations in each session) and start time 7:30 am should be kept until changed by the CSC. Each Track shall have at least one invited Plenary presentation (30-45 minutes) providing a comprehensive overview of the technical topic as well as research needs and future directions. Plenary speakers shall be selected by the Track Co-Chairs. The Plenary presentations should be staggered through the program to avoid scheduling conflicts. The Plenary speakers shall be provided with registration fee waivers, either included in the Congress budget, provided by the Divisions, or drawn from Congress set aside account.

Congress may include a small table-top exhibit if approved by the CSC. ASME staff shall be responsible for marketing and coordinating the exhibits.

Congress Venue and Budget

Congress shall be held during the second week of November in a location having the required space for the parallel technical sessions, committee meetings, and social functions. Every attempt shall be made to find a suitable location with affordable costs (registration fee, air fare, and lodging cost). The final decision on site location rests with the CSC. The Congress budget shall be prepared by ASME

staff with review and approval of the CSC no later than January 15 of the year of the Congress. All negotiations of hotel and other facilities will be carried out by the ASME staff in consultation with the CSC.

A list that outlines the contribution of each Division and other ASME Unit to the organization of sessions shall be developed for each Congress. The net positive revenue generated from Congress shall be distributed to the participating Divisions and Units based on session attendance and total number of sessions programmed. Any residue revenues not distributed to Divisions and Units (e.g., associated with sessions less than 10 attendees) shall be deposited in a Congress account. These monies shall be used to improve the quality of Congress by providing registration waivers, travel assistance, etc. Decisions regarding disposition of monies from this account shall be made by the CSC Chair and TPC.

Registration fee waivers as well as travel reimbursements to Congress shall be provided for the CSC Chair and TPC based on ASME Travel Reimbursement Policy. These funds may be included in the Congress Budget or drawn from the Congress account.

Students shall be provided a reduced registration fee as set by the ASME Policy.

Transition from IMECE to IERIC

As directed by the BOG and the ASME President the transition from IMECE to IERIC shall begin in 2007 and completed in three to four years. The following transition plan should ensure a smooth transition:

As directed by the BOG, various society-wide business meetings and other functions such as professional development sessions shall be reviewed for movement to other venues such as new ASME General Annual Meeting. The number of technical sessions in 2007 Congress shall be reduced to 460. The Keynote presentation, the Exhibit program, and the Tours shall be closely examined and continued if found warranted. A transitional Congress Steering Committee shall be formed from Divisions most active in recent Congress events. This Committee shall serve as advisors to the Congress Planning Committee and the Congress Task Force.

The new structure for the Congress Technical Program Committee shall be initiated starting with the plans for the 2008 Congress on or about June 2007. The Congress Steering Committee shall replace the current Congress Planning Committee on or about June 2007. The total number of sessions for 2008 Congress shall be reduced to 360, and more emphasis shall be placed on poster presentations. Based on recommendations from the Congress Task Force, most technical sessions that are not focused on Research and Innovation shall be moved out of Congress in 2008.

The transition shall be completed with the 2009 or 2010 Congress. The number of sessions shall be reduced if necessary and all presentations not related to Research and Innovation shall be moved out of Congress to appropriate events such as GAM, IFS, Division conferences or others.

Design Automation Committee (DAC) Report

August 24, 2007

Design Automation Committee serves an important function of promoting research and disseminating knowledge in areas dealing with Design Automation. Due to the enthusiasm of the members of the DAC community, along with the increasing demand for “Automation”, Design Automation research and education have continued to be one major focus of interest in the ASME design engineering community.

In the 2006 IDETC held in Philadelphia, DAC sponsored 27 technical sessions, featuring 119 papers and one panel session, organized by Dr. Ren-Jye Yang from FORD Motor Company, focused on “DAC Accomplishments, Current Status, and Future Trends and Needs: From Industry’s Prospective”. The Design Automation award and the Best Paper Award were announced at the award luncheon. The Committee meeting at the conference was well attended with over 50 members. In recent years, the committee has attracted a number of junior faculty members with a variety of research backgrounds.

We expect another successful DAC in 2007. 172 papers were submitted to the conference, and 125 papers were accepted after a rigorous peer review process. The paper acceptance rate is approximately 73%, similar to the rates in the past several years. These accepted papers are grouped into 21 topics and will be presented in 27 technical sessions, running in three parallel tracks. We have an exciting Plenary Speaker planned for this year’s DAC. Dr. Chris Unger, Chief Engineer for Imaging Subsystems within GE Healthcare, will share his experiences and discuss Thermo-Mechanical Challenges in Diagnostic Imaging, which has helped revolutionized healthcare the last three decades. Two panels have also been scheduled. Our Industrial Liaison, Mr. Joe Donndelinger from General Motors Corporation, has assembled a panel of recent graduates from within the DAC community who will share their experiences with how their DAC research prepared them for working in industry. Dr. Wei Chen has also organized a panel session focusing on verification and validation that includes experts from industry, government agencies, and academia. The Design Automation award (recipient: Prof. Shapour Azarm) and the winner of the Best Paper Award sponsored by the FORD Motor Company will be announced at the award luncheon.

The Committee continues to attract many applicants to the Executive Committee. Since the bylaw changes made in 2004, the structure of the DAC Executive Committee has been stabilized. The current Executive Committee members are: Dr. Hae Chang Gea (Committee Chair), Dr. Tim Simpson (Conference Chair), Dr. Frank Liou (Program Chair), Dr. Kazuhiro Saitou (Special Sessions Paper Chair), and Mr. Joe Donndelinger (Industry Liaison). Dr. Wei Chen is the past chair. This year, we selected a new web coordinator, Dr. Horea Ilies, to replace Dr. Tim Simpson who has served for many years. The committee contacted ASME and set up our own space on the ASME webserver <http://divisions.asme.org/ded/dacomm/>.

The DAC committee has made bylaw changes in 2004 and two small revisions in 2006. The modified bylaws are enclosed at the end of this report for the final approval from the design division. The revisions in 2006 are: (1) “the Annual Meeting” is clearly defined as the committee meeting in the annual Design Automation Conference as in the item #2; (2) Term of Executive Subcommittee is modified as from July 1 till June 30 the following year as in the item #3.

Respectively submitted,
Hae Chang Gea, Committee Chair

ASME Design Automation Committee Bylaws

ASME
DESIGN ENGINEERING DIVISION
DESIGN AUTOMATION COMMITTEE
OPERATING MANUAL
Proposed revisions 10/06

INTRODUCTION

The Design Automation Committee of ASME has one primary function, and that is to promote research and the dissemination of knowledge in the areas identified as dealing with Design Automation. They include topics in the broad areas listed below and other areas identified through new research.

- **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
- **Design Integration**
 - Integration, decomposition, collaboration

1. **Committee Structure.** The Design Automation Committee is composed of persons actively publishing and conducting research in Design Automation. See Section 15 of this document for information about membership on the Committee. The Committee is governed by the Design Automation Executive Subcommittee, composed of the

Chair, the Vice Chair and two members. Each member of this subcommittee sits for a 4 year term, and serves in each position for a 1 year period. The immediate past Chair of the Committee is an ex-officio member of the Executive Subcommittee for a period of one year. The immediate past Chair does not vote on Executive Subcommittee business except when necessary to break a tie. An Industrial Advisor also participates in the meetings of the Design Automation Executive Subcommittee. The duties of this position consist in strengthening industrial participation to solve more industry related problems, and envisioning future R&D needs

2. Committee Meetings. The Design Automation Committee meets every fall at the annual Design Automation Conference (hereafter referred to as the annual meeting).
3. Nomination and Election to Executive Subcommittee. Candidates are nominated for election to the Executive Subcommittee in March every year. Any member of the Design Automation Committee may nominate a candidate. Nominations are to be made to the Committee Chair. Candidates are elected to the Executive Subcommittee by a majority vote of the current members of the Executive Subcommittee. Term of Executive Subcommittee starts from July 1 every year and ends June 30 the following year.
4. Prior to the annual meeting, candidates are nominated for election to the position of Industrial advisor. Any member of the Design Automation Committee may nominate a candidate. Nominations are to be made to the Committee Chair. Candidates are elected to the Executive Subcommittee by a majority vote of the current members of the Executive Subcommittee. The term of service begins after the annual meeting. The Industrial Advisor will have voting privileges and serve one two year term. The Industrial advisor cannot be elected member of the exec committee while serving.
5. Service in Office. Each member of the Executive Subcommittee serves for one year in each of the Committee offices, in the following order:
Special Sessions Chair, Program Chair, Conference Chair (Committee Vice-Chair), and Committee Chair.
6. Conference Chair. The Conference Chair is responsible for the organization of the annual conference. The conference organization involves the following tasks.
 - i. Promotion of the conference through the appropriate media. This includes the preparation and distribution of conference notices, calls for papers, conference programs, etc. Appropriate media include ASME Transactions Journals, Mechanical Engineering, Design Division Newsletter, and other publications that are of interest to the research community in Design Automation.
 - ii. Development of invited sessions on topics of current or future interest. The Conference Chair may wish to appoint qualified individuals to arrange such sessions from time to time.
 - iii. Selection of papers for presentation at the annual conference. All papers submitted for presentation at the annual conference will be subjected to peer review. This review process is separate from the review process for work

- iv. Arrangement for social functions at the annual conference. Each year there will be a conference luncheon. Other social functions may be held from time to time when appropriate.
 - v. Interaction with the ASME Meetings Manager at ASME headquarters in New York City.
 - vi. Interaction with other committees who are actively planning annual conferences. Every effort should be made to cooperate with other groups in ASME who share common interests. At the time of this writing, the annual conference in odd numbered years is held in conjunction with the Biennial Vibrations Conference, the annual conference in even numbered years is held in conjunction with the Biennial Mechanisms Conference.
7. Program Chair. The Program Chair has the following responsibilities.
- i. Acts as the liaison between the Committee and the Journal.
 - ii. Maintains a data-base of reviewers which is to include persons who are known to be actively involved in research and/or scholarly activities in Design Automation. This database would normally be updated frequently during the Papers Review Chair's term in office.
 - iii. Serves as coordinator for the peer review of all papers that are to be considered for publication in the conference proceedings.
8. Special Sessions Chair. The Special Sessions chair will assist the Program Chair and Conference Chair in organizing special sessions. He/She will also coordinate with the International Paper Liaisons and the Industrial Advisor to broaden the reach of the DAC community and to widen the scope of the featured sessions
9. International Conference Liaisons. International Conference Liaisons, typically representing the Pacific Rim and Europe will coordinate the paper solicitation, submittal and review with authors in their respective regions of the world. They are selected by the Conference Chair with the consent of the Executive Sub-committee. They will work with the Special Sessions Chair to coordinate their activities with the Conference organizers.
10. Committee Vice Chair. The Committee Vice Chair who is also the Conference Chair will normally assist the Committee Chair in directing the activities of the Committee. The Committee Vice Chair will maintain the Design Automation Committee mailing list in cooperation with the ASME Meetings Manager. The Vice Chair will also keep the minutes at the annual meeting. The minutes will be sent to all members of the Committee within 90 days of the annual meeting.

11. **Committee Chair.** The Chair of the Committee will preside over meetings of the Committee and meetings of the Executive Subcommittee. The Chair will be the Committee's representative to other governing bodies in ASME (such as the Design Division General Committee). The Chair will inform the Design Division whenever there is an impending change of officers (typically during September of each year). The Chair will recommend the Papers Review Chair to serve as Associate Editor for Design Automation for the Transactions Journal. The Recommendation is made to the Technical Editor of the Journal.
12. **Immediate Past Chair.** The Immediate Past Chair will serve as an ex-officio member of the Executive Subcommittee. The Immediate Past Chair will only vote on Executive Subcommittee business when there is a tie vote.
13. **Executive Subcommittee Business.** The Executive Subcommittee has two primary functions. The first function is to establish the agenda for the annual committee meeting at the fall conference. The second function is to elect a new member and an Industrial Advisor from the lists of nominees. (See 3. and 4. above).
 - i. **Agenda for the Executive Subcommittee.** The agenda for the Executive Subcommittee will be set by the Chair after consultation with all of the other members of the Executive Subcommittee. The agenda should be established and circulated to all of the Executive Subcommittee members at least two weeks before the annual Design Automation Conference.
 - ii. **Meetings of the Executive Subcommittee.** The Executive Subcommittee will meet as soon as possible during the annual Design Automation Conference. The Chair and two of the other voting members shall constitute a quorum. Every effort will be made to assure the participation of all members of the Executive Subcommittee in all Executive Subcommittee business. At its annual meeting, the Executive Subcommittee will set the agenda for the annual Design Automation Committee Meeting by majority vote. The Executive Subcommittee will also elect one new member and an industrial advisor as outlined above in 3. and 4.
14. **Design Automation Committee Business.** The Design Automation Committee has one primary function, and that is to promote research and the dissemination of knowledge in the areas identified as dealing with Design Automation. The Committee carries out this function by conducting an annual meeting on Design Automation.
 - i. The Committee will meet on the second or third night of the annual conference. The date and location will be set by the Chair of the Committee in consultation with the ASME Meetings Manager. This information will be published in the Conference Program that is prepared by the ASME Meetings Manager.
 - ii. Any issues to be decided will be done so by a majority vote of those present at the committee meeting.
 - iii. At the annual committee meeting the agenda established by the Executive Subcommittee will be deliberated on.
 - iv. On issues requiring a vote, the Chair will only cast a vote to break a tie.
 - v. At the annual committee meeting, each subcommittee will present a report of its activities.

15. Membership on the Design Automation Committee. The Design Automation Committee is composed of persons who are interested in Design Automation. Membership on the committee is attained by active participation at the conference and at the committee meeting. By default, those who actively participate become members of the committee.
16. Areas of Design Automation Research. The Committee wishes to promote theoretical and experimental research and industrial applications in the broad areas given below and other areas identified by new research:
- 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
 - Design Integration
 - Integration, decomposition, collaboration
17. Technical Subcommittees and Their Business. The Design Automation Committee Chair will appoint appropriate technical subcommittees. The purpose for such subcommittees will be to expedite the dissemination of knowledge in that subcommittee's technical field. The Conference Chair will utilize the talents of the technical subcommittees in conducting the peer review process for the annual Design Automation Conference. Each Technical Subcommittee may recommend one paper to the Honors and Awards Subcommittee for consideration as the annual "Best Paper in Design Automation" award. See Section 20 below for additional information about this award.
18. Peer Review of Conference Presentations. Papers are submitted to the Program Chair for Review. The Conference assisted by the Program Chair will organize the papers into tentative sessions by topic. Papers that are to be considered for a particular session may be forwarded to a Technical Subcommittee Chair that is closely identified with the session topic. The Technical Subcommittee Chair will actually arrange for reviews of the papers. The Technical Subcommittee Chair will report back to the Conference Chair and/or Program Chair in a timely fashion. Each paper submitted for presentation will be reviewed by at least three qualified referees. Any paper that is presented and published at the conference must have received at least two favorable reviews. The peer review process will have four possible outcomes at this level.
- i. The paper may be rejected as unsuitable for presentation at the annual conference.
 - ii. The paper may be accepted for presentation at the annual conference after some revisions have been made.

- iii. The paper may be accepted for presentation at the annual conference without any revisions.
- iv. The paper may be accepted for presentation at the annual conference (with or without revisions) and further recommended for journal review by the Papers Review Chair for possible publication in the ASME Transactions Journal. Standard ASME Conference/Journal review forms will be used for the conference review.

19. Schedule of Review Activities. It is important that the review process be conducted in a timely fashion. Accordingly, the following schedule is recommended.

- i. Papers should be submitted to the Program Chair for distribution to the Technical Subcommittee Chair and other referees before the deadline set by the conference chairs in the conference announcement.
- ii. Referees and subcommittee Chairs should inform the Program Chair of their recommendations by the deadline set by the Program Chair in coordination with the other conference chairs and ASME.
- iii. The Program Chair should make final decisions and report to each communicating author by the date published in the conference announcement.
- iv. The communicating authors must return the author prepared final drafts incorporating any required revisions to ASME by the date specified in the conference announcement.
- v. The Program Chair should send any manuscripts that are to be reviewed for inclusion in the ASME Transactions Journal to the Journal Technical Editor.
- vi. The Conference Chair must have the complete program ready for submission to the ASME Meetings Manager by the deadline set by ASME.

20. Honors and Awards. The Chair shall appoint members to serve on the Honors and Awards Subcommittee. The membership of this subcommittee shall include the Immediate Past Chair, the Vice Chair, and one or more other members of the Committee. The Design Automation Committee makes two regular awards after positive recommendation by the Honors and Awards Subcommittee.

The two awards, their purpose and their frequency are:

- i. “Best Paper in Design Automation” award is given annually at the conference luncheon. The purpose of the award is to recognize excellence in a paper that is presented at that year’s conference. Each Technical Subcommittee can forward one paper each year to the Honors and Awards Subcommittee for consideration as a possible recipient of this award. Nominations should be submitted 2 months before the conference starting date. Nominations must be communicated to the Chair of the Honors and Awards Subcommittee by the Technical Subcommittee Chair. Any member of a Technical Subcommittee can suggest a possible nomination to the Chair of that Technical Subcommittee.
- ii. Design Automation Award is given from time to time, but never more than once each year, to recognize sustained meritorious contribution to research in Design Automation. This award will only be given after the recommendation of 75% of the members of the Honors and Awards Technical Subcommittee.

Nominations for this award can be made by any member of ASME. The nomination package should include specific details of the nominee's contributions to the area of Design Automation, and a critical explanation of why these contributions are significant enough to warrant the award. Curriculum Vitae should also be included for the nominee along with appropriate letters of recommendation from other researchers in the nominee's field.

21. Revision of This Operating Manual. This manual can be revised by a two thirds majority vote of the members of the Design Automation Committee. Suggested revisions should be forwarded to the Chair of the Committee. Once each year or whenever there are suggested revisions (whichever is less frequent), the Chair will forward all suggested revisions to all of the members of the Committee for their consideration. Suggested revisions will be discussed and voted on by the DAC participants who were present at the last annual meeting.

**Design Education Committee(DEC)
Design Engineering Division (DED)
Report to the Division
August 8, 2007**

The Design Education Committee (DEC) continues to expand its activities and provide programs that meet the goals of the Constitution of the Division and the newly

1. Phil Doepker continues as chair of the committee and will step down June 30, 2008. He began as chair in 2005.
2. The last committee meeting was held at the IDETC Sunday, September 10, 2006 at the Sheraton in Philadelphia. The issues addressed at this meeting were:
 - a. There appears to be a good fit with the DEC and the DED at the IDETC. Thus, the DEC will continue to participate in the IDETC instead of the IMECE.
 - b. SPIRA Award and Triodyne Awards
 - c. National Manufacturer's Week as it moves to the fall.
 - d. Plans for the IDETC in Las Vegas in 2007.
 - e. International Activities Committee participation with conferences (ICED, etc.)
 - f. The DEC was invited to provide journal papers to the special issue of the Journal of Mechanical Design in July 2007.

Details of this meeting were published in the minutes

3. The DEC worked to provide sessions at the IDETC in Las Vegas. There will be 5 technical sessions and 2 panel sessions. Attempts to have sessions for the Young Designers Competition did not materialize as hoped. Thanks to Gul Kremer and Mike Keefe for putting together a solid program. They worked hard to provide a full symposium in an "off year" Also thanks to the session chairs who formed the basis for the reviewing process.
4. DEC successfully participated in selection for the Spira Design Educator Award. The award was presented to John Lamancusa at the IDETC in Philadelphia in September, 2006. It will again be presented at the IDETC in Las Vegas.
5. The DEC was invited to submit papers to the Journal of Machine Design for the July 2007 issue. A call for papers was issued in August 2006. Approximately 28 papers were submitted with 15 papers being published. The Journal was published on time (thanks to Mike McCarthy's experience and prodding). Thanks to Mike McCarthy, editor of the journal, for this invitation. Initial response to the journal has been positive. Mike is pursuing the possibility of making this into a "book" for publication by ASME. Clive Dym and Phil Doepker were the co-editors with many members of the committee acting as reviewers and authors. Thanks!
6. Needs:
 - (1) Someone to head the honors and awards activity for the DEC. Nominations are needed for the Spira Design Educator Award for the next cycle.
 - (2) Identify a plan for DEC tracks at future IDETC's
 - (3) Ideas for identifying and obtaining papers for the Young Design Engineers Paper Competition
 - (4) Someone to head the technical conference (IDETC) activity for 2008
 - (5) Development of a nominating committee to fill the spots in the committee
 - (6) Someone to replace Doepker in July 2007

Respectfully submitted, Phil Doepker, Chair (2005-2008)

To: ASME Design Engineering Division Executive Committee
From: Jeffrey Herrmann, Chair, DFM Technical Committee
Edward Morse, Vice-Chair, DFM Technical Committee
Kazuhiro Saitou, Secretary, DFM Technical Committee
Date: August 20, 2007
Re: DFM Technical Committee Activities

We are pleased to submit this report to the Design Engineering Division about the activities of the Design for Manufacturing Technical Committee.

Bylaws

The Design for Manufacturing (DFM) Technical Committee is operating under new bylaws, approved at our general body meeting in September, 2006. Under the new bylaws, the members of the DFM executive subcommittee serve one year in each position (for a total of three years).

DFMLC 2007 Status Report

We expect a successful Design for Manufacturing and the Life Cycle (DFMLC) Conference this year. Fifty-two papers were submitted to the 2007 conference, and thirty-two were accepted. (Last year, thirty-three were submitted, and twenty-four were accepted.) The plenary speaker will be Vijay Srinivasan, from IBM, an expert on product lifecycle management. The DFM Technical Committee will have a formal meeting and an informal lunch during the 2007 DFMLC conference.

Edward Morse (University of North Carolina at Charlotte) and Peter Sandborn (University of Maryland) organized the 2007 conference.

Peter Sandborn will be the conference chair and Marcos Esterman (Rochester Institute for Technology) will be the papers chair for the 2008 DFMLC conference.

Representation on ASME Journal Editorial Boards

The following persons are representing the DFM community as Associate Editors for ASME journals:

- Jeffrey W. Herrmann is an Associate Editor (Design for Manufacturing) for the *Journal of Mechanical Design* (JMD).
- Satyandra K. Gupta is an Associate Editor (Computer Aided Product Development) for the *Journal of Computing and Information Science in Engineering* (JCISE).

Design Theory and Methodology Committee – Annual Report
September 2007

The mission of the Design Theory and Methodology Committee is to facilitate and enhance the development of design theories and the methods that grow from them.

DTM Conference: The 19th International Conference on Design Theory and Methodology will be held at IDETC2007 in Las Vegas, Nevada. Rob Stone of the University of Missouri – Rolla is the Conference Chair and Li Shu of the University of Toronto is the Papers Chair. The 2007 conference consists of 11 technical sessions and one panel discussion. The committee maintains the following statistics on submissions and acceptances:

Papers submitted: 89

Papers accepted: 54 (acceptance rate: 60.7%)

Papers accepted with at least one author with an industry affiliation: 5

Papers accepted with at least one author from an institution outside the United States: 12

The Best Paper Award will be given to “An Evaluation of the Pugh Controlled Convergence Method” by Dan Frey, Paulien Herder, Ype Wijnia, Eswaran Subrahmanian, Konstantinos Katsikopoulos and Don Clausing.

The following people served as review coordinators for the conference: Saeema Ahmed, Fabrice Alizon, Janet K. Allen, Matt Campbell, P. John Clarkson, Ping Ge, Katja Holtt-Otto, Dan Jensen, Katie Grantham Lough, Dan McAdams, Robert Paasch, Linda Schmidt, Christian J. Schwartz, Michael J. Scott, Durward Sobek, Irem Y. Tumer, Kristin L. Wood, Maria Yang, and Ali Yassine.

For the 20th Annual DTM Conference in 2008, Li Shu of the University of Toronto will be the Conference Chair and Robert Paasch of Oregon State University will be the Papers Chair. These positions were elected by the membership at the DTM committee meeting at IDETC2006 in Philadelphia.

Officers: New officers for the committee were also elected at the committee meeting at IDETC2006. The new officers serve two-year terms beginning July 1, 2007:

Chair: Michael J. Scott (UIC)

Vice-chair: Dan McAdams (UMR)

Secretary: Ping Ge (OSU)

Webmaster: Rob Stone (UMR)

The next DTM Committee meeting will be held at IDETC2007 on Wednesday, September 5, 2007 from 5:30-7:30 pm. All are welcome to participate.

Respectfully submitted,

Michael J. Scott

Chair of the Design Theory and Methodology Subcommittee

Report

2007

Fastening and Joining Committee

Design Engineering Division, ASME

The Fastening and Joining Technical Committee of Design Engineering Division 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. On its annual meeting in November of last year in Chicago during the ASME IMECE the committee thanks 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 International Mechanical Engineering Congress and Exposition. The theme for the 2007 IMECE in Seattle, Washington is “Joining Technologies for Advanced Materials and Structures” The organizers for this symposium are Dr. Rajamohan Ganesan, Concordia University, Canada, Dr. Bazle A. Gama, The Boeing Company and Dr. Tim Breitzman, Air Force Research Laboratory. The committee currently has about 12 active members and welcomes experts and distinguished researchers from industrial and academic fields to participate in the activities of the committee. 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, Dayton OH 45469-0168, phone (937) 255-9075; fax (937) 258-8075; e-mail: endel.iarve@wpafb.af.mil

Endel V. Iarve

Mechanisms & Robotics Committee Report

August 6, 2007

The ASME IDETC/CIE 2006 Conference held in Philadelphia, Pennsylvania featured six conferences (MR, DAC, CIE, DTM, DFMLC, DEC, and CIE) and drew nearly 600 participants, and 444 reviewed papers were presented. M&R with over 30% of the presented papers was the largest contributor to the conference. The organizers were all drawn from the Mechanisms and Robotics Committee:

Jeffrey Ge, Program Chair
Venkat Krovi, Publicity Chair
Michael Wang, Workshop Chair
Mary Frecker, Tutorials Chair
Gloria Wiens, Industry Track Chair
Pierre Larochelle, Student Affairs Chair
G. K. Ananthasuresh, International Participation Chair
Andrew Murray, Exhibits Chair
James Schmiedeler, Special Events Chair

The Mechanisms and Robotics Conference had 156 papers submitted, with 135 accepted and published in the proceedings. The conference was organized into 12 symposia, including the following: Mechanisms Synthesis, Components and Applications; Robotics: Theory; Robotics: Applications; Theoretical and Computational Kinematics; Dynamics of Machines; Compliant Mechanisms; Micro and Nano-Scale Electromechanical Systems (MEMS and NEMS); Medical Devices and their Applications in Rehabilitation, Surgery; Education in Mechanisms and Robotics; History of Mechanisms and Robotics; Mechanisms for in-Space Applications; and Adaptronics in Machines and Mechanisms. In addition to traditional technical presentations, the conference included 20 interactive presentations plus 3 invited keynote speakers and one panel session, "Research around the World". Other events included the ASME Student Mechanism Design Competition. The DED Mechanisms & Robotics Award was presented to Prof. Kazem Kazerounian. In addition to the Mechanisms & Robotics Committee Best Paper Award, we were pleased that MSC Software and General Motors each provided \$1,000 donations for the MSC Software Simulation Award and the GM/Freudenstein Young Investigator Awards, respectively. The organizers did a terrific job and making the conference enjoyable, productive and profitable.

The Mechanisms and Robotics Committee has had several subcommittees that have been active over the past year.

1. Awards Committee (Pierre Larochelle and Steve Canfield): Formalizing the process of nominating and selecting awardees;
2. M&R Website Committee (Venkat Krovi, Dennis Hong, Thomas Sugar and James Schmiedeler, Hashef Ashrafioun): Making the committee website more vibrant and upto date.

3. New Journal (Vijay Kumar, Michael J. McCarthy, Larry Howell, and Sunil Agrawal): Drafting a proposal for a new journal, the Journal of Mechanisms and Robotics, and engaging in discussions with PTG and MNS. The title and scope provided by the subcommittee follows:

Title: ASME Transactions Journal of Mechanisms and Robotics

Scope: The ASME Transactions Journal of Mechanisms and Robotics (TMR) publishes fundamental research on the geometry, kinematics, dynamics, design, manufacture, and control of mechanisms, robots and mechatronic systems, with a view to advancing the state-of-the-art in theory and practice. Complex mechanisms, robotics, electro-mechanical systems, transmissions, micro mechanisms, bio-inspired machines, and nano machines are illustrative topics covered by the journal.

4. Future Conference Planning (Vijay Kumar, Jeffrey Ge, Jahangir Rastegar, Larry Howell, Kazem Kazerounian, Pierre Larochelle and Andrew Murray). The following table describes the involvement of M&R committee members from 2005-2010.

Position	2005	2006	2007	2008	2009	2010
M&R Committee						
Program Chair	Pennock	Rastegar	Ge	Larochelle	Murray	TBD
Conference Chair	Agrawal	Pennock	Rastegar	Ge	Larochelle	TBD
Chair Elect	Kumar	Kumar	Pennock	Rastegar	Ge	Larochelle
Committee Chair	Howell	Agrawal	Kumar	Pennock	Rastegar	Ge
Past Committee Chair	Kazerounian	Howell	Agrawal	Kumar	Pennock	Rastegar
IDETC						
General Conference Chair	n/a	Kumar	n/a	Rastegar	n/a	Larochelle
General Program Chair	n/a	Ge	n/a	Ge/other	n/a	Murray

More information about the committee and its activities can be found at <http://www.asme.org/divisions/ded/mechcomm/index.html>. The list of members of the M&R committee is provided in an appendix.

Vijay Kumar
Chair, Mechanisms and Robotics Committee

Appendix: Committee Membership

Executive Committee

Chair: Vijay Kumar
Chair Elect: Gordon Pennock
Past Committee Chair: Sunil Agrawal
Secretary James Schmiedeler
Treasurer: Andrew Murray
Mechanisms and Robotics Conference Chair: Jahan Rastegar

Elected General Members

Raffaele Di Gregorio
Dennis Hong
Chintian Huang
Peng Song
Gloria Wiens
Steve Canfield
Jian Dai
Laxman Saggere
James Schmiedeler
Thomas Sugar
Just Herder
Mary Frecker
Venkat Krovi
Carl Nelson
Andrew Murray

Ex-Officio Members

Jeffrey Ge
Michael McCarthy
Hashem Ashrafiun
Tom Chase
Mary Frecker
A. Ghosal
L. L. Howell
Pierre Larochelle
Q. Liao
H. Lipkin
J.M. Rico
K.-L. Ting
H.-S. Yan

To: The ASME Design Engineering Division (DED) General Committee

From: Laxman Saggere, Chair, Micro- and Nanosystems (MNS) Committee

Date: August 24, 2007

Subject: MNS Committee report for the period September 2006–August 2007.

Committee Meetings

The MNS committee held its first formal meeting on November 8, 2006 at the venue of the 2006 IMECE in Chicago. The items discussed at the meeting included: MNS committee By-Laws, the committee membership, budget, awards, the symposium organized at the 2006 IMECE, planning of MNS conference at the 2007 IDETC. Following this meeting, the committee carried out some of its official activities including ratification of the By-Laws and elections of new committee members via emails. The second committee meeting is scheduled to take place on September 5, 2007 at the 2007 IDETC venue.

MNS Committee By-Laws

In October 2006, the committee adopted and ratified a set of By-Laws on the basis of which the committee will operate within the Design Engineering Division. These By-Laws (a copy attached to this report) were ratified by more than 2/3rd majority committee membership through a voting process conducted via emails.

Symposium at the 2006 IMECE

The committee organized a symposium titled “*Design, Dynamics, and Controls of Micro/Nano Systems*” jointly with the MEMS Division at the 2006 IMECE held in Chicago in November 2006. Two members of the MNS committee, Frank Feng and Dane Quinn were the Co-Chairs of the symposium. The joint symposium had six oral sessions, three sessions contributed by the DED and the other three contributed by the MEMS Division. A total of 39 papers were accepted for the symposium, based on reviews of 2-page Extended Abstracts. Of these 39 accepted papers, 30 papers are invited for oral presentations and the other nine papers are invited for poster presentation in the MEMS Division poster session.

1st International Conference of Micro- and Nanosystems (MNS) at the 2007 IDETC

The MNS committee is pleased to join the 2007 IDETC by organizing its 1st International Conference on Micro- and Nanosystems. The conference technical program includes 47 peer-reviewed papers from 11 countries organized in 10 technical sessions on a variety of topics in micro/nano systems area including: sensors and actuators, dynamics and control, design and modeling, instruments for nanotechnology, micromechanisms and micromanipulation, applied mechanics and materials, and nano imprint technology. In addition, the conference has a plenary session and a panel session. The plenary talk will be given by Dr. Kurt Petersen, CEO of SiTimes and a member of the NAE. In the panel session, a panel comprised of panelists from industry, government, federal funding agencies, and academia, will discuss “opportunities and challenges for mechanical engineers in the micro/nano field.” To promote excellence at this conference, the MNS Committee has sponsored a Best Paper Award for the most outstanding paper in the MNS conference. The best paper at the 2007 conference was selected through a process involving nominations by the symposia organizers and an independent review by an awards sub-committee comprised of three regular MNS members (listed on the following page).

MNS Participation in 2008 and 2009 IDETC

MNS committee recently voted to organize its conference annually henceforth. Accordingly, the committee will organize its 2nd and 3rd International Conferences on Micro- and Nanosystems in 2008 and 2009 IDETCs respectively. The organizing committees for these conferences are currently being established.

Committee Membership

The MNS committee had 4 vacancies on its regular membership of 20 last year and one member of the committee, William Clark, stepped down as a regular member with vote earlier this year, which created an additional vacancy. The MNS Committee elected 5 new members earlier this year to fill these 5 vacancies according to the procedures established in its By-Laws. The 5 new members are: Hartono Sumali, Aman Haque, Matt Allen, John Hart, and Brian Mann. With the election of these 5 new members, the committee now has a full membership of 20. The terms of the current executive officers of the committee will expire in December 2007, and the committee is expected to elect new executive officers at the committee meeting to be held on September 5, 2007 at the 2007 IDETC venue.

Current MNS Committee Membership:

Laxman Saggere, University of Illinois at Chicago, Chair (2005-07)
Arvind Raman, Purdue University, Vice-Chair/Treasurer (2005-07)
Gloria J. Wiens, University of Florida, Secretary (2005-07)
James Allen, Sandia National Laboratories (2005-08)
Matt Allen (2006-09)
G. K. Ananthasuresh, Indian Institute of Science, Bangalore, India (2005-08)
Edward Berger, University of Virginia (2005-08)
Shaochen Chen, University of Texas at Austin (2005-08)
Martin Culpepper, MIT (2005-08)
Frank Feng, University of Missouri, Columbia (2005-08)
Aman Haque (2006-09)
John Hart (2006-09)
Brian Mann (2006-09)
Constantinos Mavroidis (2005-08)
Dane Quinn, University of Akron (2005-08)
Chris Rahn, Penn State University (2005-08)
Steve Shen, University of Washington, Seattle (2005-08)
Metin Sitti, Carnegie Mellon University (2005-08)
Hartono (Anton) Sumali, Sandia National Laboratories (2006-09)
Min-Feng Yu, University of Illinois at Urbana Champaign (2005-08)

Awards Sub-Committee:

James Allen
G. K. Ananthasuresh
Edward Berger

BY-LAWS OF THE MICRO- AND NANOSYSTEMS (MNS) COMMITTEE

MEMBERSHIP AND TERMS OF SERVICE

1. A full committee shall nominally consist of twenty regular members (including ex-officio members), with each member to serve for three years. Under special circumstances, the number of members can be expanded to more than twenty through voting of the MNS committee.
2. A member can serve no more than two consecutive three-year terms and may not be re-elected within two years after expiration of the term.
3. A member will be eligible to serve a second term, only if the member has attended at least two of the three annual meetings during the member's first term of membership.
4. The Committee Chairperson shall be an ex-officio member of the committee, with vote, for two years after completing that term office.
5. Officers shall serve a complete two-year term of office as voting members of the committee even if such service extends beyond the end of their normal term of committee membership. If a portion of the three-year term, to which an officer was elected as a committee member, remains at the completion of the term of office, it shall be finished as a regular committee member.

ELECTION OF NEW MEMBERS

1. Elections of new MNS members and/or officers shall normally be held at the IDETC (or IMECE), where the MNS will conduct its annual meeting. However, at the discretion of the committee Chairperson, elections may be held through email/postal mail ballot.
2. Each year, either before or at the MNS committee meeting at the IDETC (or IMECE), the recording secretary will take nominations of potential new members from the existing members or the potential new members themselves directly and present a list of nominees to the Chairperson.
3. The nominees will introduce themselves and express their interest and motivation for serving on the committee either by being physically present at the MNS committee meeting, if possible, or through a written email communication. Nominations without the oral or written consent of the potential new member will not be considered for elections.
4. Moderated by the committee chairperson, the members of MNS will discuss the nominations in a closed-door meeting and then vote at the MNS meeting. Each member of the MNS, except the chairperson, shall have one vote. The nominees with the largest number of votes shall be considered elected. The chairperson shall cast a tie-breaking vote, in case of any tie. The new members shall take office on January 1 following their election.
5. If, for any reason, an MNS member is unable to complete the full term of membership and resigns from the membership at the MNS committee meeting, then the vacancy will be filled at the meeting through the procedures described in clauses 1–3 above.
6. If a member resigns in the middle of a year before completing a full term of membership and before the committee meeting, then the committee Chairperson shall appoint the person who received the most number of votes among those not elected at the preceding elections as the replacement member. If no such person is available, then the committee Chairperson may request new nominations from the current members and conduct an election of the nominees via an email or a postal mail ballot to fill the committee membership vacancy.

OFFICERS

1. The committee shall be governed by a Chairperson, a Vice-Chair/Treasurer, and a Recording Secretary.
2. The term of office for all officers shall be two years, extending from January 1 of an even numbered year until the end of December two years later.*
3. Officers shall be elected from among the committee members, by the committee members. Elections for the officers shall be held right after the election of committee members, and shall be accomplished by plurality of the votes cast.
4. A member must have served at least three years as a regular member of the MNS committee to be eligible for the position of the committee Chairperson, and a member must have served at least one year as a regular member of the MNS committee to be eligible for the positions of the committee Vice-Chair/Treasurer, and a Recording Secretary.*
5. A member may stand for election of the committee Chairperson even if that person has less than two years of membership remaining, provided the member satisfies the eligibility requirements to serve as the committee Chairperson as defined in clause 4 of this section.
6. If the MNS Chairperson cannot complete the term of office, then the Vice-Chair/Treasurer shall become the Acting-Chairperson until the next elections when a new Chairperson shall be elected.
7. A sitting Committee Vice-Chair/Treasurer or Recording Secretary may stand for election of a higher office even if their current membership term has expired, provided they satisfy the eligibility requirements to serve as the committee Chairperson as defined in clause 4 of this section.

SUBCOMMITTEES

1. The Chairperson of the MNS has the authority to establish subcommittees, and shall appoint the Chairperson of each such subcommittee.
2. The members of the subcommittees need not be members of the MNS. The Chairperson of each subcommittee must be a member of the MNS, except in such special cases where a majority of the members of the MNS agrees to elect a non-committee member as subcommittee Chairperson by voting.

RATIFICATION AND AMENDMENTS

1. These rules are ratified by MNS committee and effective as of October 1, 2006.
2. Amendments to these rules require two-third vote of all regular members of the MNS.

* Excepting the first year in which the committee is established.

**Report on the
TECHNICAL COMMITTEE ON MULTIBODY SYSTEMS AND
NONLINEAR DYNAMICS (MSND-TC)
August 2007**

Mission:

The mission of the *Technical Committee on Multibody Systems and Nonlinear Dynamics (MSND-TC)* 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 the main activities of the committee is to organize the Biennial *International Conference on Multibody Systems, Nonlinear Dynamics and Control (MSNDC)* as one of the Design Engineering Technical Conferences.

Prior Activities:

The Technical Committee on Multibody Systems and Nonlinear Dynamics had its last meeting in Blacksburg, Virginia on Tuesday, August 15, 2006, 5.00-7:00 P.M, at *The Inn*, VPI Blacksburg, VA. . During this meeting, the present members of the committee discussed the preparation for and the proposed symposia of the *Sixth International Conference on Multibody Systems, Nonlinear Dynamics and Control (MSNDC2007)* which is part of the 2007 ASME Design Engineering Technical Conferences to be held in Las Vegas, Nevada. These discussions included debate on the rules for a proposed student paper competition/awards at future MSNDC conferences. Additionally, one new member (Walter LaCarbonera), was elected (a listing of current MSND-TC active members follows).

6th I International Conference on Multibody Systems, Nonlinear Dynamics and Control:

With regard to *MSNDC2007*, I would like to thank all of the session organizers, reviewers, and authors for what promises to be a very informative conference. I would especially like to thank Professor Subhash Sinha *MSNDC2007* Conference Chair and Professor Bala Balachandran *MSNDC2007* Program Chair, for all they have done. The *MSNDC2007* consists 20 different symposia, and has received 239 submissions of which 215 (and six non published presentations) papers were accepted. This represents ~18.2% of the 1217 total presentations for the entire ISETC2007. Many of the best of these paper are expected to go on for consideration for publication in the *ASME Journal of Computational and Nonlinear Dynamics*, which is doing well (Detailed statistics regarding the *Journal of Computational and Nonlinear Dynamics* have been compiled by the Technical Editor, Professor Subhash Sinha, and will not presented here).

The *MSNDC2007* will also feature the presentation of the Multibody Systems and Nonlinear Dynamics Technical Committee's *D'Alembert Award* and *Lypunov Award*. For the *MSNDC 2007* Professor Francis Moon of Cornell will be receiving the Lyapunov Award, while Professor Werner Schiehlen of Stuttgart will receive the D'Alembert Award. Professors Schiehlen and Moon will respectively give a Plenary *D'Alembert* and *Lyapunov Lectures* at the *IDETC 2007*.

IDETC 2009 Planning:

As a Multibody Systems and Nonlinear Dynamics Technical Committee member, I have had the pleasure of working with George Flowers of VIB on the organization of the upcoming IDETC 2009. Professor Flowers and I will be serving as Co-Chairs of the IDETC 2009 and we have already made considerable progress in the organization of this conference. Specifically, the following conference items have now been set:

- Conference City: San Diego, CA.
- Conference Dates: August 30-September 2, 2009
- Conference Venue: San Diego Convention Center
- Conference Hotel: Omni Hotel – San Diego
 - (<http://www.omnihotels.com/FindAHotel/SanDiego.aspx>)
 - Conference room rate: \$189 (single/double) \
 - Room Nights Blocked: 1300 room nights
 - Required Pickup: 80% (1040 room nights)
 - We have a total of 36 meeting rooms each day from Monday, August 31, 2009 through Wednesday, September 2, 2009
 - Food & Beverage Minimum: \$100K (at the convention center)
- *IDETC 2009* webpage up (<http://www.rpi.edu/~anderk5/IDETC2009/>) and general announcement has been prepared for distribution at the IDETC 2007. This IDETC 2009 announcement (attached) will be distributed with materials provided to IDETC2007 participants.

The next meeting of the committee is scheduled to be in Las Vegas, Nevada, during the September 5, 2007.

Prepared by

Kurt S. Anderson
Chair ASME MSND-TC
August 20, 2007

TECHNICAL COMMITTEE ON MULTIBODY SYSTEMS, NONLINEAR DYNAMICS, AND CONTROL

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Power Transmission and Gear Committee Report August 16, 2007

The Power Transmission and Gearing (PTG) Committee has organized the 10th International Power Transmission and Gearing Conference as part of IDETC/CIE 2007. The following committee members served as symposium organizers:

Neil Anderson, GM Powertrain
Richard Dippery, Kettering University
Qi Fan, Gleason Works
Robert Handschuh, U.S. Army Research Lab / NASA Glenn
Jonny Harianto, The Ohio State University
Donald R. Houser, The Ohio State University
Ahmet Kahraman, The Ohio State University, *Conference Chair*
Albert Karvelis, Packer Engineering
Timothy Krantz, U.S. Army Research Lab / NASA Glenn
David G. Lewicki, U.S. Army Research Lab / NASA Glenn
Teik C. Lim, University of Cincinnati
Jacob Lin, John Deere
Steve Siegert, Borg Warner
Avinash Singh, GM Powertrain, *Technical Program Chair*
Jon Williams, Hilliard Corp

The organizing committee members facilitated the review process to review 156 abstracts and 132 papers to accept 116 papers. The accepted papers are from more than 20 countries covering the topics of gear design and analysis, gear strength and durability, gear dynamics and noise, gear manufacturing, gear tribology, lubrication, engineered surfaces and efficiency, transmissions, and other transmission components. The PTG Committee also decided to invite Mr. William Bradley of American Gear Manufacturers Association to give the Buckingham Lecture.

The PTG Awards sub-committee concluded its work on setting up a new award, PTG *Darle W. Dudley Award*, to honor a prominent power transmission and gearing researcher for his or her outstanding contributions to our field. This proposal has been approved by the DED Executive committee and an award account has been set up. This award will be given once every four years as part of the International PTG conferences. The PTG Committee decided to present the first Dudley award to Professor Donald R. Houser of the Ohio State University at the PTG conference dinner.

More information about the committee activities can be found at <http://www.asmeptg.org>. The list of the current members is given in the appendix.

Ahmet Kahraman
Chair, Power Transmission and Gearing Committee

Appendix: Committee Membership

Ahmet Kahraman, *Chair*
Avinash Singh, *Vice Chair*
David Lewicki, *Past Committee Chair*
Richard Dippery, *Secretary*
Paris Altidis
Neil Anderson
Vance Brown
Qi Fan
Robert Handschuh
Jonny Harianto
Donald Houser
Al Karvalis
Tim Krantz
Teik Lim
Jacob Lin
Robert Parker
Alfred Pettinger
Steve Siegert
Nagesh Sonh
Jon Williams

8/13/2007

TO: The ASME DED, Executive Committee
FROM: Erol Sancaktar, RSAFP Technical Committee

The RSAFP Technical Committee is participating at the IDETC 2007 with 20 papers in 4 Sessions. These papers include international contributions from Japan, United Kingdom, and China.

The RSAFP Committee is also supporting 3 tracks (Mechanics of Solids and Structures, Processing and Engineering Applications of Novel Materials, Electronics and Photonics) at the IMECE 2007. Two sessions have been specifically organized within the Mechanics of Solids and Structures Track to serve current interests in RSAFP Committee.

Respectfully submitted,

Erol Sancaktar

ASME International
The American Society of Mechanical Engineers

VEHICLE DESIGN COMMITTEE
Design Engineering Division

Activity Report (August 3, 2007)

Prepared by:

Moustafa.El-Gindy, Ph.D.

Chair, Vehicle Design Committee
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The Chair of the committee has appointed new vice-chairs, **Dr. Brian Gilmore** of John Deere and **Dr. Corina Sandu** of Virginia Tech for one year with possibility of renewal.

The Vehicle Design Committee (VDC) is pleased to be a part of the IDETC for the first time in many years. The VDC sponsors this, the 9th International Conference on Advanced Vehicle and Tire Technologies. This conference serves to bring vehicle and tire designers together to share engineering design experiences from around the world. The symposium will include 7 paper sessions of 31 accepted technical papers and presentations.

I would like to thank all of the session organizers, reviewers, and authors for what promises to be a very informative conference. I would especially like to thank the conference program chair and vice-chair of the VDC, Professor Corina Sandu, who will receive an appreciation award for her outstanding service to AVTT in 2007. Welcome to the 9th International Conference on Advanced Vehicle and Tire Technologies.

In recognition of outstanding service of Professor Imtiaz Haque as Vice-Chair of the Vehicle Design Committee (1998-2005) of the Design Engineering Division, Professor Haque will also receive an outstanding service award from ASME.

The members of the Vehicle design committee have decided about moving its activity to the IDETC starting 2007.

The current active members are:

Professor Massimiliano Gobbi, Politecnico di Milano
Professor Farid Amirouche, University of Illinois-Chicago
Dr. Michael Kokkolaras, University of Michigan
Professor Imtiaz Haque, Clemson University
Dr. Scott Kimbrough, Motion Research Inc.

Dr. David Gunter, U.S. Army Tank Research Center
Mr. Mike Letherwood, U.S. Army TRC
Dr. Brian Gilmore, John Deere Corp.
Professor Ion Stihary, Concordia University
Professor J.Y. Wong, Carleton University
Professor Mehdi Ahmadian, Virginia Tech
Dr. Gary Heydinger, NHTSA
Dr. MING CAO, Penn State University
Mr. Hillegass, Matthew
Dr. Xubin Song, Eton Corp
Dr. Shung H. (Sue) Sung, General Motors Corporation
Dr. Paul Lomangino (P.F.) (Ford)
Dr Goldman Robert, US Navy
Professor Corina Sandu, Virginia Tech
Dr. Xiaobo Yang, Daimlerchrysler
Dr. Trivedi Mukesh, Volvo 3P
Mr. Wayne Evenson, TITAN Corp
Mr. Scaglione Mario, US Navy
Mr. Donald Nefske, GM
Dr. Yin-ping \ (Daniel) Chang, Oakland University
Professor Ebrahim Esmailzadeh, [University of Ontario
Institute of Technology](#)
Mr. Alan Matton, CDC
Dr. Taehyun Skim, University of Michigan
Dr. Yuksel Gur, FORD
Dr. Shung H. (Sue) Sung, GM
Professor Jacob Tsao (San Jose State University)
Professor Rajesh Rajamani (University of Minnesota)
Professor Mohammad H. Elahinia, University of Toledo

The Vehicle Design Committee has organized the 9th International Conference on “Advanced Vehicle and Tire Technologies”, 2007 ASME International Design Engineering Technical Conference (IDETC) September 4-7, 2007, Rio All-Suite Hotel & Casino, Las Vegas, Nevada, USA

2007 Conference Chair:

Dr. Moustafa El-Gindy

Professor and Senior Scientist
Director, Vehicle Dynamics and Simulation Research Center
Applied Research Laboratory (ARL)
The Pennsylvania State University
Tel: (814)863-7930
Fax: (814)865-3039
E-mail: mxe15@psu.edu

2007 Program Chair:

Professor Corina Sandu

Assistant Professor of Mechanical Engineering
Director of Advanced Vehicle Dynamics Laboratory (AVDL)
101 Randolph Hall, Virginia Tech, Blacksburg, VA 24061
E-mail: csandu@vt.edu

Technical Research Areas:

The Vehicle Design Committee of the ASME Design Engineering Division is organizing an International Conference entitled "Advanced Vehicle and Tire Technologies". Papers are invited on innovative analytical, computational, and experimental investigations in control, dynamics, and design of full vehicle systems and their sub-assemblies. Papers may address fundamental research, applied research, or successful implementations relating to light or heavy vehicle design and development. Seven symposia will be organized as follows:

Symposium AVTT-1: Advances in Methods for Vehicle Systems Design and Control

Topics include optimal, reliable, and robust design of vehicles and their systems and subsystems, design of integrated (mechatronics) systems, and engineering applications referring to vehicle design.

Organizer: **Professor Massimiliano Gobbi**
Politecnico di Milano (Technical University)
E-mail: massimiliano.gobbi@polimi.it

Co- Organizer: **Rajesh Rajamani**
University of Minnesota
E-mail: rajamani@me.umn.edu

Symposium AVTT-2: Advances in Vehicle Design Tools to Enhance Safety, Health, and Ergonomics

A number of vehicle design tools such as finite element and biomechanics dynamics programs are used to design safety and health enhancements that reduce the probability and intensity of injuries in vehicle crashes. Topics will include finite elements to study the validity and accuracy of crush-based accident analysis, the design of seats with airbag and seatbelt system integrations and robust structures that protect occupants during impacts, the response of the human body to vibration and mechanical shocks, and general means for improving crashworthiness of vehicles and biomechanics studies.

Organizer: **Prof. Yin-Ping (Daniel) Chang**
Oakland University
E-mail: ychang@oakland.edu

Co- Organizer: **Alan Mayton**
NIOSH, Pittsburgh Research Lab,
E-mail: amayton@cdc.com

Symposium AVTT-3: Advances in Multibody Systems Modeling and Validation for Vehicle Dynamics Applications

Topics will include advanced multibody systems modeling methods and algorithms that enable a more efficient, accurate, and improved vehicle mobility and dynamic performance prediction. Experimental evaluation and model validation tests are also topics of interest. Other example topics include: full or subsystem vehicle modeling, tire modeling, advanced analytical and computational methods and algorithms, uncertainty modeling, damping modeling, new equipment and new methodologies developed for testing vehicles and vehicle systems.

Organizer: **Dr. Corina Sandu**
Virginia Polytechnic Institute and State University
E-mail: csandu@vt.edu

Co-Chair: **Dr. Xiaobo Yang**
DaimlerChrysler Corporation
E-mail: xy1@dcx.com

Symposium AVTT-4: Advances in Vehicle Systems Dynamics and Control

Papers in the general area of Dynamics and Controls applications to vehicle systems are welcome. Topics include integrated design, modeling, analysis, and experimental testing of ABS systems with load shifting, active and semi-active suspensions for improving vehicle ride and handling, intelligent rollover warning systems, active yaw stability control systems for on- and off-road vehicles, and advanced propulsion control systems for improving fuel economy, emission control and drivability for both passenger and commercial vehicles.

Organizer: **Dr. Xubin Song**
Eaton Corp.
E-mail: XubinSong@eaton.corp

Co- Organizer: **Dr. Beshah Ayalew**
Clemson University
E-mail: besah@CLEMSON.EDU

Symposium AVTT-5: Advances in non-conventional, energy efficient and environmentally friendly vehicles

The recent hikes in fuel prices as well as growing environmental concerns have drawn renewed interest on research and development of more energy efficient vehicles. While electric and hybrid electric vehicles (EV/HEV) have seen some market success, significant progress is also being made with fuel cell vehicles (FCV), hydraulic hybrid vehicles (HHV), and solar (photovoltaic cell) powered vehicles. This session emphasizes but is not limited to the design, analysis and optimization of EVs, HEVs, HHVs, FCVs and solar cell powered vehicles. Examples of topics include innovative controls and energy management strategies; new component or sub-assembly designs for HEV/EV/FCV/HHVs, including power electronics and electrochemical/hydro-pneumatic energy storage systems; hydrogen storage systems; PV cell design and optimization, thermal stress management; regenerative braking systems; implications to vehicle dynamics, safety and reliability; and the analysis of environmental impact.

Organizer: **Dr. Ming Cao**
United Technologies Research Center
E-mail: CaoM@UTRC.utc.com

Co-Organizer: **Dr. Joel Anstrom**
Penn State University
E-mail: jra2@psu.edu

The Vehicle Design Committee has organized the 9th International Conference on “Advanced Vehicle and Tire Technologies”, 2008 ASME International Design Engineering Technical Conference, IDETC-2008.

2008 and 2009 Conference Chair:

Professor Corina Sandu

Assistant Professor of Mechanical Engineering
Director of Advanced Vehicle Dynamics Laboratory (AVDL)
101 Randolph Hall, Virginia Tech, Blacksburg, VA 24061
E-mail: csandu@vt.edu

2008 and 2009 Program Chair:

Professor Mohammad H. Elahinia

Dynamic and Smart Systems Laboratory
MIME Department, University of Toledo
E-mail: melahin@UTNet.UToledo.Edu

2007 Vehicle Design Committee Meeting

The next Vehicle Design Committee meeting will start at 12:00 noon in Las Vegas, Nevada on September 7, 2007.

Technical Committee on Vibration and Sound

Design Engineering Division

The American Society of Mechanical Engineers

<http://divisions.asme.org/ded/tcvs/tcvs%20pages/Hom>



TO: DED Executive Committee

FROM: George T. Flowers, TCVS Chair (flowegt@auburn.edu)

SUBJECT: Summary of TCVS activities during September 2006 to September 2007

DATE: August 22, 2007

- **Elections:** At the most recent TCVS meeting on March 18, 2007 at the University of Illinois at Chicago, the committee voted on:

Members: Membership elections were held. Bogdan Epureanu, Nader Jalili, Dane Quinn, Steve Suh, Jiong Tang, and Jeanne Zu were re-elected to new three year terms. Tamas Kalmar-Nagy, Wei-dong Zhu, Robert Parker, and George Szasz were elected as new member to three year terms.

Awards: TCVS is also responsible for the selection of the J.P. Den Hartog awardee, given to an individual 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 in Las Vegas, Nevada.

- **TCVS Treasurer's Report:** We continue to build up the TCVS award accounts in an effort to push them toward becoming ASME level awards. The Myklestad Award account balance is currently \$21,000 and the Den Hartog Award account balance is \$43,943. The balance for the Den Hartog Award account is over the \$40,000 needed to raise it to an ASME award, and we hope that the balance of the Myklestad Award account will be to the required amount relatively soon. Accordingly, we are in the process of preparing proposals to elevate both awards.
- **VIB 2007:** VIB 2007 is being held in Las Vegas. This year's conference consists of 22 symposia arranged in 54 technical sessions and one poster session, contributing a total of 255 papers, selected and peer-reviewed from the original 269 draft papers and 281 abstracts. These symposia cover topics from traditional subjects to emerging technologies, e.g., active/passive vibration control, continuous systems, wave propagation and acoustics, nonlinear dynamics, optimization and reliability of mechanical systems, system identification, smart material systems, smart structures and structronics, biomedical applications, engineering management, rotor dynamics, engine and powertrain dynamics, vibration damping treatments, dynamics of MEMS and NEMS, vibration and control of manufacturing systems, vibration-based sensing and energy harvesting, etc. The TCVS wishes to express a heartfelt special thanks to Nader Jalili and H-S Tzou.
- **IDETC 2009:** IDETC 2009 and VIB 2009 will be held August 30 - September 2, 2007, at the San Diego Convention Center in conjunction with the Omni San Diego Hotel. Kurt Anderson and George Flowers will serve as the co-chairs for the IDETC. Thirteen conferences will participate (so far) in the 2009 IDETC. George Flowers will serve as the chair for the 22nd Biennial Conference on Mechanical Vibration and Noise (VIB) and Dane Quinn will serve as the program chair. A webpage is currently active and can be found at <http://www.rpi.edu/~anderk5/IDETC2009>
- **IMECE 2006:** Two symposia from TCVS were held at the IMECE '06. They were

- Symposium on Dynamics, Acoustics and Simulations (Hamidzadeh and Luo). There were 7 technical sessions and 1 panel session.
- Symposium on the Dynamics, Identification and Experiments (Kerschen and Feeny). There were three technical sessions.
- **IMECE 2007:** TCVS is affiliated with one track: Mechanical Systems and Control. This track was organized for TCVS by Albert Luo, Carol Mei, and Doug Adams. There are a variety of symposia in this track and there have been a good response. Over 300 abstracts were received and 229 papers were accepted. There were two symposia for this track that are associated with TCVS. They are
 - 9-10 Analysis and Control of Vibrations and Wave Propagations (16 papers).
 - 9-11 Vibration and Control of Mechanical Systems (44 papers).
- **Journal of Vibration and Acoustics:**

The rate of paper submission is increasing. A total of 112 papers were submitted in 2003, while 263 papers were submitted in 2006. The challenges are the backlog and increased handling effort. The number of pages has increased in 2006 by 200 pages (800 total pages). There was a 10-month backlog, and now there is a six-month backlog. A special issue is in progress (Vibration Based Structure and Health Monitoring, Mark Derriso (WPAFB) and Epureanu as guest editors), and the review process is almost done. It is desired to have better quality papers. Wang requests communication with IDETC organizers to solicit good papers from symposia. Organizers can request authors to submit to JVA, or ask Wang to invite authors to submit. In any case, there will still be a regular journal review, perhaps using conference reviewers with a higher standard set. Symposia organizers can use the quality check (journal quality, honors quality) on the reviewer's form.
- **Interactions:** The TCVS interacts with a number of other committees and divisions, with liaisons to *Noise Control and Acoustics Division (Grosh)*, *Applied Mechanics Division – Dynamic Systems and Structures Committee (Luo)*, *Applied Mechanics Review (Pierre)*, *Aerospace Division--Adaptive Structures Committee (Wang)*, *Design Engineering Division – Power Transmission and Gearing Committee (Parker)*, *DED International Activities Committee (Dyke)*, *Micro and Nano Systems Committee (Raman)*.



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Report to the Executive Committee of the Design Division Journal of Mechanical Design

Prepared by J. Michael McCarthy

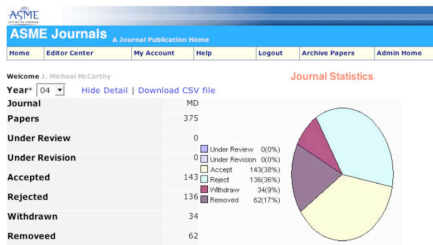
August 25, 2007

I. Overview

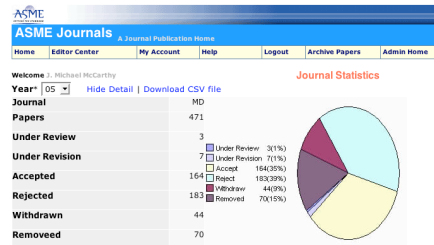
A. Paper Review Process:

- i. August 15 2002 to August 15, 2003: 299 papers submitted, (39% accepted)
- ii. August 15, 2003 to August 15, 2004: 357 papers submitted
222 closed (34% accepted) in an average of 3mons, 131 open for an average of 4 mon.
- iii. August 15, 2004 through August 15, 2005: 434 submitted
268 closed (27% accepted) in an average of 3 months, 166 open for an average for 3 months;
- iv. August 7, 2005 through August 7, 2006: 442 submitted
305 closed (24% accepted) in an average of 3 months, 137 open for an average for 3 months;
- v. August 1, 2006 through July 31, 2007: 477 papers submitted,
335 closed (22% accepted) in an average of 3 months, 142 open for an average of 4 months.

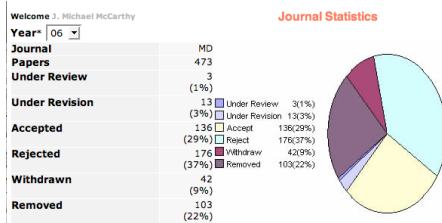
ASME JMD records similar statistics from the web page, which run for the calendar year.



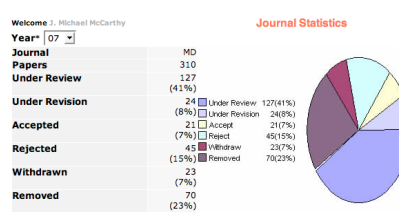
2004 Acceptance 29%



2005 Acceptance 36%



2006 Acceptance 29%



2007 Acceptance 7% as of August 25.

(These are screen shots at 72dpi, which is why they are such poor quality. The data is reproduced on the next page.)

--The ASME statistics collect the information on all papers in the yearly time windows. In some cases, it can take over a year before the decision on particular papers is resolved.

--The JMD statistics were developed as an in-progress snap-shot from August of one year to August of the next. The acceptance rate shown will increase over time, because papers open longer are usually under revision.

More ASME statistics:

Journal data:

Journal	Papers	In Progress	Accepted	Rejected	Withdrawn	Removed
2003	391	17	135 (34%)	146	41	52
2004	375	0	110 (29%)	136	34	62
2005	471	1	171 (36%)	184	44	71
2006	473	16	136 (29%)	176	42	103
2007	310	151	21	45	23	70
All Years	2020	181	492 (24%)	687	184	358

Review Process data:

Journal	Average Days			Average Months	
	Assigned to AE	TE Decision	TE Approval	Draft TE Decision	Draft TE Approval
2003	22	3	8	6.514	8.651
2004	8	2	11	4.978	7.454
2005	19	2	13	5.092	7.177
2006	10	3	14	4.832	6.877
2007	6	4	7	3.455	3.705
All Years	13	2	12	5.248	7.485

B. Production Backlog

- i. August 2003: 73 papers after September 2003 issue, through June 2004
- ii. August 2004: 85 papers after September 2004 issue, through May 2005
- iii. August 2005: 80 papers after September 2005 issue, through May 2006
- iv. August 2006: 93 papers after September 2006 issue, through June 2007
- v. August 2007: 80 papers after September 2007 issue, through May 2008.

II. Production

A. Production schedule

- i. January 1, 2003, quarterly, July 1, 2003 allocation, 900 pages.
- ii. January 1, 2004, bimonthly, July 1, 2004 allocation, 900+200supplemental pages.
- iii. January 1, 2005, bimonthly, July 1, 2005 allocation, 1100+200 supplemental pages.
- iv. January 1, 2006, bimonthly, July 1, 2006 allocation, 1400 pages.
- v. January 1, 2007, monthly

B. Themed collections of papers

- i. July 2005 (supplement): Design of Micro, Nano and Biologically-inspired Systems (Dinos Mavroidis and Suresh Ananthasuresh, eds.)
- ii. January 2006 (supplement): Spatial Mechanisms and Robot Manipulators (Gordon Pennock and Madhu Raghavan, eds.)
- iii. July 2006 (supplement): Risk-Based & Robust Design (Shapour Azarm and Zissimos Mourelatos, eds.)
- iv. January 2007 (special issue): Direct Contact Mechanisms (David Dooner and Teik C. Lim, eds.)
- v. July 2007 (special issue): Engineering Design Education (Phil Doepker and Clive Dym, eds.)

III. Status of Associate Editors

A. AE's ending their terms in 2007

- i. David Dooner, January (Power Transmission and Gearing)
- ii. Kemper E. Lewis, June (Design Automation)
- iii. Hashem Ashrafiun, June (Mechanisms and Robotics)
- iv. Teik Chin Lim, June (Power Transmission and Gearing)
- v. Shapour Azarm, September (Design Automation)

- vi. Larry L. Howell, September (Mechanisms and Robotics)
 - vii. Thomas R. Chase, September (Mechanisms and Robotics)
- Recognition plaques are mailed to each former AE.

B. New Associate Editors beginning in 2007:

- i. Hong S. Yan, March
- ii. Avinash Singh, June

IV. Interaction between JMD and IDETC:

- i. September 2004: Author, Reviewer and Associate Editor Appreciation Reception organized for the 2004 DETC in Salt Lake City, Utah.
- ii. September 2005: AE dinner was organized for those who attend the Conference, and occurred on September 25 (Sunday) 6:00-8:00 PM.
- iii. September 2006: Author, Reviewer and Associate Editor Appreciation Reception occurred at the 2006 DETC in Philadelphia, PA.
- iv. September 2007: AE lunch is scheduled for those who attend the 2007 IDETC in Las Vegas, on Wednesday, September 5, 2007

V. Quality of JMD

A. Production issues:

- i. There is an increased emphasis on on-time publication of JMD.
The goal is to have the Journal on-line the third week of the previous month, and in the mail the first week of the month of issue. This has been accomplished throughout 2007.
- ii. Page count for July 1, 2006 through June 30, 2007 is 1400 pages. The growth in submissions seems to have slowed but it remains on track to 500 submissions in 2007.
- iii. A new policy for figures printed in JMD has been instituted. Authors are required to provide the figures that meet a minimum level of quality before publication, which is that fonts be clear and appropriately sized, not fuzzy or pixelated, and that line weights are appropriate and without rasterization. Paper proofs with poor quality font or line weights in their proofs will be held from publication. The technical editor enforces this at Final Approval, and ASME production staff follow-up with a check of the figures in the final proofs.

B. Impact Factor

- i. 2002: 0.268, 12th out of 18 ASME journals, 2003: 0.354, 15th out of 18 ASME journals
2004: 0.461, 10th out of 18 ASME journals,
2005: 1.245, 2nd out of 18 ASME journals,
2006: 1.252, 2nd out of 18 ASME journals, 9th of Mechanical Engineering journals.
- ii. The large production backlog continues to be a problem.
- iii. Final manuscripts are listed on the web page: <http://mae.eng.uci.edu/jmd/forthcomingissues.html>

C. The Future

- i. The nominee for the next JMD Editor has been selected. The interview with the Publications Committee is being scheduled. The appointment cannot occur until after this interview.
- ii. On-line JMD issues must be expanded to include issues prior to 2000.
- iii. Discussions have begun about increasing service to the research community that supports JMD by adding a journal title to allow two Editors to support this community. Most every detail has been addressed and resolved except the title of the new journal.

Sincerely,



J. Michael McCarthy
Professor
University of California, Irvine

ASME Journal of Vibration and Acoustics
Report to Design Engineering Division Committee
September 2007

Purpose and Scope

The purpose of the Journal of Vibration and Acoustics (JVA) is to serve as a vehicle for the communication of original research results of permanent interest in all areas of vibration and acoustics. Papers published by the journal are full-length articles of considerable depth. The journal also presents Technical Briefs, which are intended to serve as a means for the rapid communication of recent developments in an abridged form. Examples of specific topic areas covered include, but not limited to: vibration of continuous and lumped parameter systems; random vibration; modal analysis; mechanical signatures; structural dynamics and control; vibration suppression; vibration isolation; passive and active damping; machinery dynamics; rotor dynamics and vibration; acoustic emission; noise control; machinery noise; structural acoustics; fluid-structure interaction; aeroelasticity; and flow induced noise and vibration.

Associate Editors

We are increasing the numbers of Associate Editors (AEs) to reduce the AE workload and reduce paper handling/review time. Recently, Dr. Michael Brennan, Professor at the Institute of Sound and Vibration, University of Southampton, UK, Dr. J. W. Zu, Professor at the University of Toronto, Canada, and Dr. Weidong Zhu, Professor at the University of Maryland Baltimore County were nominated and approved as new associate editors. The current total number of JVA Associate Editors is 17. We plan to add a few more AEs in 2007.

Special Issue

A special issue on *vibration-based structural health monitoring techniques*, with guest editors Bogdan Epureanu (University of Michigan) and Mark Derriso (Air Force Research Labs), has completed its reviewing process. The issue will be published in 2007. The ASME Publication Committee has requested the editors to reduce the number and frequency of special issues; therefore we will not be actively soliciting special issues in the near future.

Current Status and Outlook

In 2006, we have used 802 pages of our allotted 800. The Journal is experiencing 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 page number (from 600 pages to 800 pages per year) approved by ASME in 2005, we were able to reduce our backlog from 5-6 issues to 3-4.

To help the authors update their references, we have implemented the following process since mid 2006: When a paper is accepted for publication, in the Editor's email to the author, we provide the authors with a list of recent relevant JVA publications (selected by the Editor) for their reference and citation. We made it clear to the authors that our intention is only to provide new information that might not be available when they first submitted their manuscript and to help them further refine and update their papers. It is the authors' decision whether they use it or not.

We are communicating with the IDETC symposium organizers to identify and solicit high quality papers from the Conference. These papers will go through the regular rigorous journal review process.

Respectfully submitted,



Kon-Well Wang, JVA Editor
William E. Diefenderfer Chaired Professor in Mechanical Engineering
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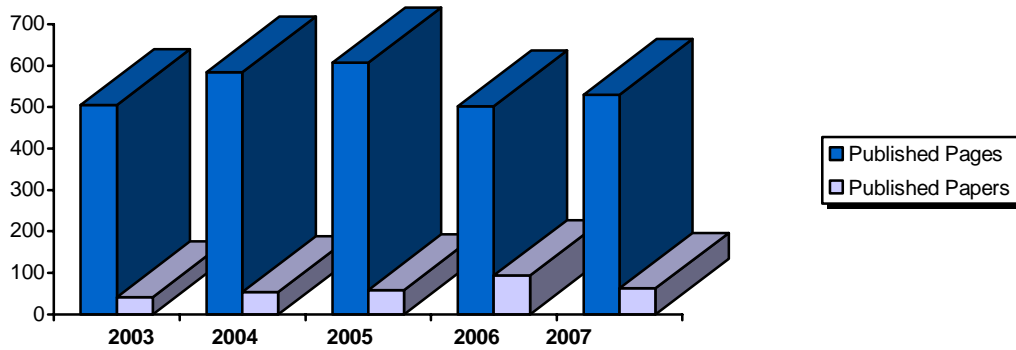
Journal Assistant
Karen J. Thal
kjt3@psu.edu
(814)863-1673

Associate Editors and Areas of Expertise

Name	Institution	Term 1 End Date	Term 2 End Date	Area of Research
Michael Brennan	University of Southampton, England	12/31/2009		Vibration and noise control, smart structures, vibrations of rotating machinery
William Clark	University of Pittsburgh	12/31/2006	12/31/2009	Vibration control, smart structures, sensors & actuators
Brian Feeny	Michigan State University	12/31/2008		Structural vibration, system identification, and friction dynamics
Jean-Claude Golinval	University of Liege, Belgium	12/31/2007		Modal analysis and identification, testing, finite element updates
Karl Grosh	University of Michigan	12/31/2006	12/31/2009	Structural acoustics, bioacoustics, MEMS
Stephen Hambric	Applied Research Labs	6/15/2008		Structural acoustics, computational methods
Richard Keltie	North Carolina State University	12/31/2004	12/31/2007	Structural acoustics, noise control
Sotirios Natsiavas	Aristotle University, Greece	12/31/2006	12/31/2009	Nonlinear & multi-body systems, parameter identification
Robert Parker	Ohio State University	12/31/2005	12/31/2008	Gyroscopic systems, gear and transmission dynamics
D. Dane Quinn	The University of Akron	12/31/2005	12/31/2008	Nonlinear dynamics, resonance capture, robust control
Christopher Rahn	The Pennsylvania State University	12/31/2008		Active vibration control, continuous structures, MEMS, mechatronics
I.Y. (Steve) Shen	University of Washington	6/15/2008		Rotating systems, damping, MEMS, smart structures
Cheng-Kuo Sung	National Tsing Hua University, Taiwan	5/31/2009		Machine dynamics, smart structures, precision machine design
Chin An Tan	Wayne State University	12/31/2004	12/31/2007	Vibration and control of continua, friction and braking systems
Jeffrey Vipperman	University of Pittsburgh	5/31/2009		Active noise and vibration control, smart materials and structures
Weidong Zhu	University of Maryland, Baltimore County	5/31/2010		Structural dynamics and vibration, modal identification, vibration based damage detection
Jean Zu	University of Toronto, Canada	12/31/2009		Machine dynamics and vibrations, nonlinear vibrations, biomechanics

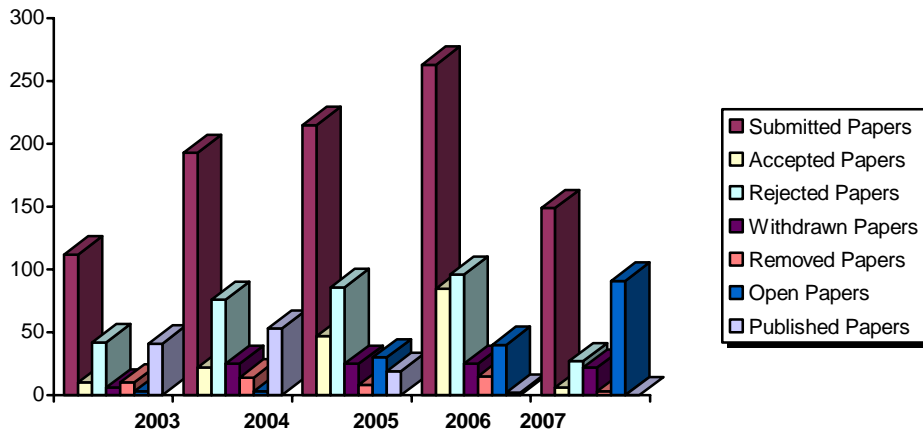
Summary of papers published in issues from January 1, 2003 through August 6, 2007

	2003	2004	2005	2006	2007
Num. of Pages Published	506	584	607	802	530
Num. of Papers Published	41	53	58	93	62



*Distributions of papers submitted each year (January 1, 2003 – August 6, 2007)**

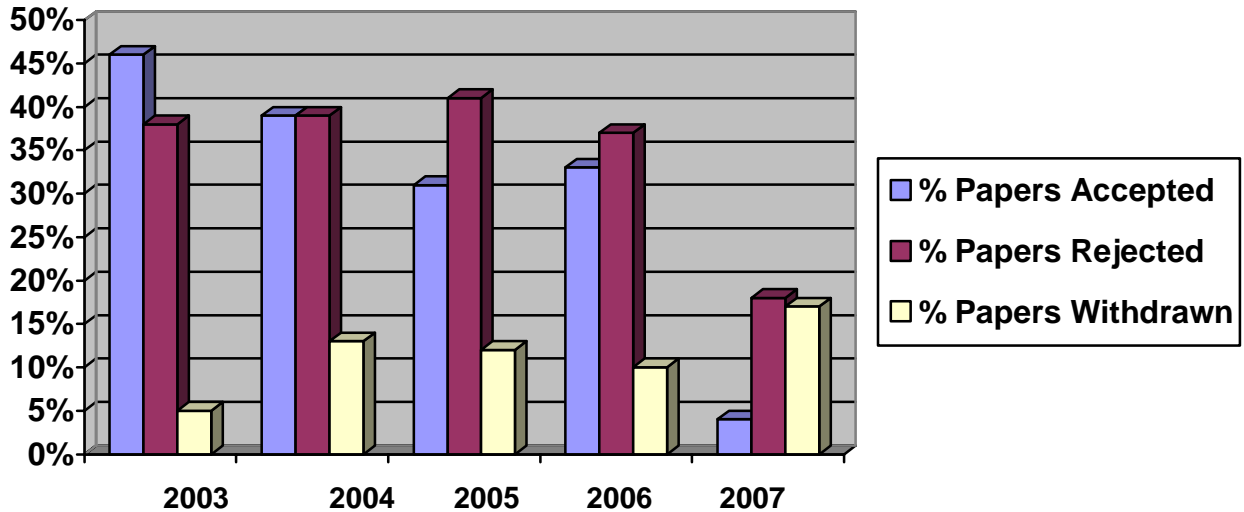
	2003	2004	2005	2006	2007
Submitted Papers	112	193	215	263	149
Accepted Papers	10	22	47	85	6
Rejected Papers	42	76	88	96	27
Withdrawn Papers	6	25	25	25	22
Removed Papers	10	14	8	15	3
Open Papers	3	3	28	40	91
Published Papers	41	53	19	2	0



* Note: These numbers are downloaded from the ASME web tool, which reflect the distributions of the papers *submitted* that year, but not the actual “activities” that year. The actual activities should include actions on papers submitted in prior years as well.

Percentages of distributions of papers submitted each year
(January 1, 2003 – August 6, 2007)**

	2003	2004	2005	2006	2007
% Papers Accepted/Published	46%	39%	31%	32%	4%
% Papers Rejected	38%	39%	41%	37%	18%
% Papers Withdrawn	5%	13%	12%	10%	15%



** Note: These percentages are calculated based on numbers in the previous table summarizing distributions of papers submitted each year.

**ASME Journal of Computational and Nonlinear Dynamics
Report, August 2007, Period: (Jan' 06 –Aug' 07)
(Editor: Subhash C. Sinha, Auburn University)**

- Special Projects:**
1. Special Issue (October 2006) honoring 60th Birthday of Professor Phillip Holmes.
 2. Special Issue (April 2008, tentative): Discontinuous and Fractional Dynamical System

Current Status and Outlook: On track, CND Submission to Thomson Scientific for review for inclusion in Journal Citation Reports (JCR).

- Competition:**
1. *Nonlinear Dynamics*, Springer Publication
 2. *International Journal of Nonlinear Mechanics*, Elsevier Publication,
 3. *Communications in Nonlinear Science and Numerical Simulation*, Elsevier Publication

Associate Editors and Area of Expertise

Name	Institution	Term 1 End Date	Term 2 End Date	Area of Research
Om Prakash Agrawal	Southern Illinois University	01 Mar 08		Fractional Derivatives and their Applications, Rigid and Flexible Multibody Dynamics
Kurt S. Anderson	Rensselaer Polytechnic Institute	01 Mar 08		Multibody Systems Dynamics, Computational Methods, Advanced Computation
Bala Balachandran	University of Maryland	01 Mar 08		Nonlinear Dynamics- Analytical Methods, Experiments, Impacts, Control of Bifurcations, Applications in Manufacturing
Olivier A. Bauchau	Georgia Institute of Technology	01 Mar 08		Flexible and Multibody Systems
Alain Berlioz	University of TOULOUSE, France	01 Mar 08		Design, Experiments in Nonlinear And Dynamics, Control of Structures and Multibody Systems
Harry Dankowicz	University of Illinois at Urbana-Champaign	01 Mar 08		Nonlinear Dynamics, Nonsmooth Dynamics Systems, Control, Multibody Systems Dynamics
Al Ferri	Georgia Institute of Technology	01 Mar 08		Frictional, Discontinuous, Nonlinear dynamical systems
Henryk Flashner	University of Southern California	Nomination Submitted		Nonlinear Bifurcation, Linear & Nonlinear Control of Time Varying Systems

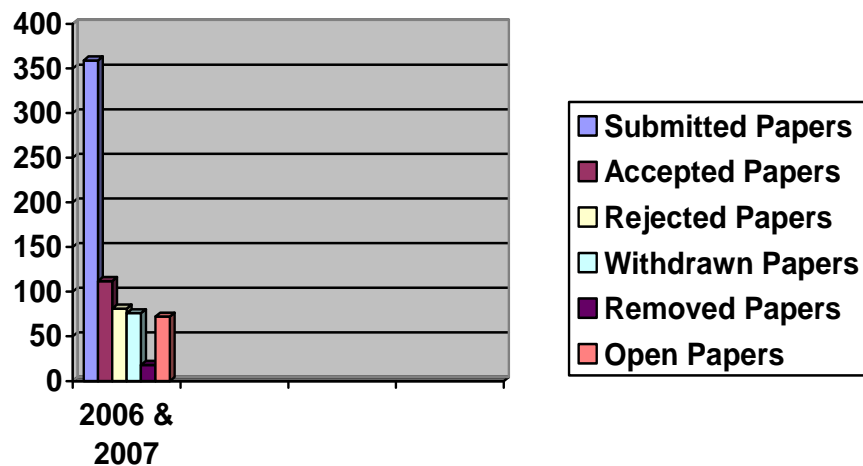
Claude-Henri Lamarque	Ecole Nationale des Travaux Publics de l'Etat, France	01 Jul 09		Nonlinear dynamics, chaos, non Smooth systems, nonlinear Vibrations, Dynamics of Structures And shells
Hamid M. Lankarani	Wichita State University	01 Mar 08		Multibody Dynamics, Impact Dynamics, Crashworthiness, Biomechanics
Albert C.J. Luo	Southern Illinois University at Edwardsville	01 July 09		Nonlinear and Dynamics, Nonlinear Continuum Mechanics And Damage Mechanics
John J. McPhee	University of Waterloo, Canada	01 Mar 08		Multibody Dynamics and Graph Theory, Vehicle Dynamics, Biomechanics, Contact, and Friction
Aki Mikkola	Lappeenranta University of Technology, Finland	01 Jul 09		simulation of machine systems, Flexible Multibody Dynamics, Nonlinear FE formulations
Friedrich Pfeiffer	University of Munich, Germany	01 Mar 08		Dynamics, Control, Optimization
Christophe Pierre	McGill University, Canada	01 Mar 08		Nonlinear Dynamics-Nonlinear Vibrations Coupled to Rigid-body Motion, Nonlinear Normal Modes, Localization, Applications to Nonlinear Structural and Mechanics Systems
Giuseppe Rega	University of Rome, Italy	01 Mar 08		Nonlinear Dynamics, Computational Mechanics
Werner Schiehlen	University of Stuttgart	01 Mar 08		Nonlinear Dynamics-Fundamental Problems, Analytical, and Numerical Methods
Ahmed A. Shabana	University of Illinois at Chicago	01 Mar 08		Multibody Systems Dynamics, Finite Elements, Computational Mechanics
Nobuyuki Shimizu	Iwaki Meisei University, Japan	01 Mar 08		Multibody dynamics, fractional Differentiation, damping Technology, dynamics of soft Materials
Anand V. Singh	The University of Western Ontario, Canada	01 Jul 09		Computational methods in solid Mechanics, vibration and Buckling of plates and shells

Lawrie Virgin	Duke University	01 Mar 08		Experimental Methods, Structural Vibrations, Stability
Wan-Suk Yoo	Pusan National University, South Korea	01 Jan 10		Flexible multi-body dynamics, Computational kinetics and dynamics, Vehicle dynamics & suspension

Summary of Activity (January 2006 through August 2007)

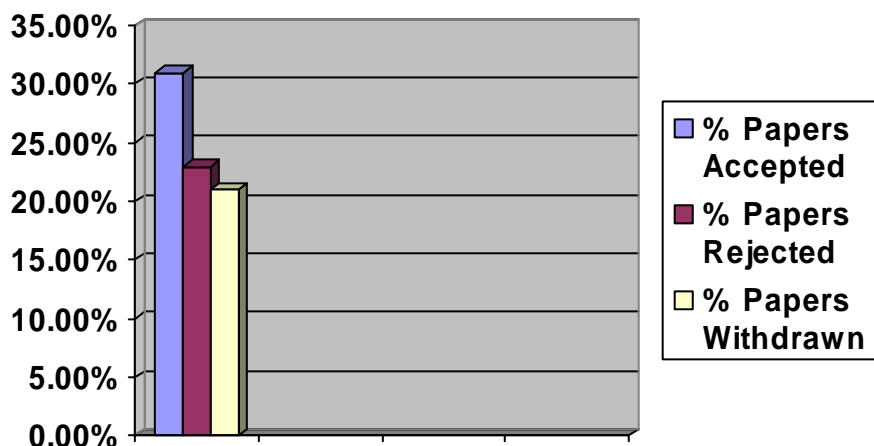
Submitted Papers	359
Accepted Papers	112
Rejected Papers	81
Withdrawn Papers	76
Removed Papers	18
Open Papers	72
Published Papers	39
Number of Pages	374

Summary of Activities



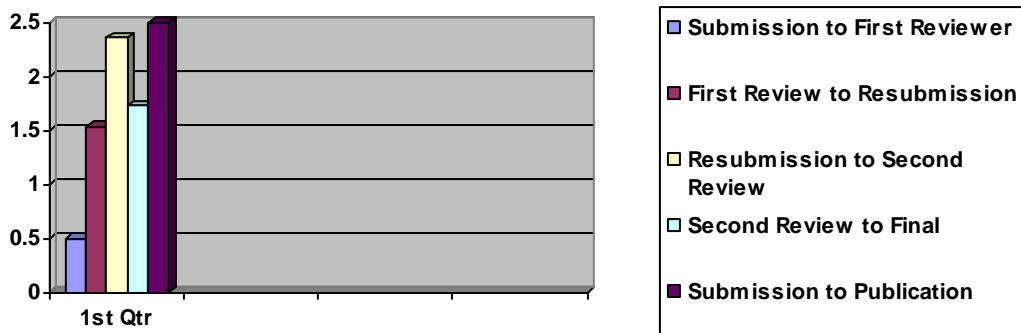
Percentages

% of Papers Accepted	31%
% of Papers Rejected	23%
% of Papers Withdrawn	21%



Review Timing (Time in Months)

Submission to First Reviewer	0.5
First Review To Resubmission	1.533
Resubmission to Second Review	2.367
Second Review to Final	1.73
Submission to Publication	6.601



**ASME Journal of Computational and Nonlinear Dynamics
Report, August 2007, Period: (Jan' 07-Aug' 07)
(Editor: Subhash C. Sinha, Auburn University)**

- Special Projects:**
1. Special Issue (October 2006) honoring 60th Birthday of Professor Phillip Holmes.
 2. Special Issue (April 2008, tentative): Discontinuous and Fractional Dynamical System

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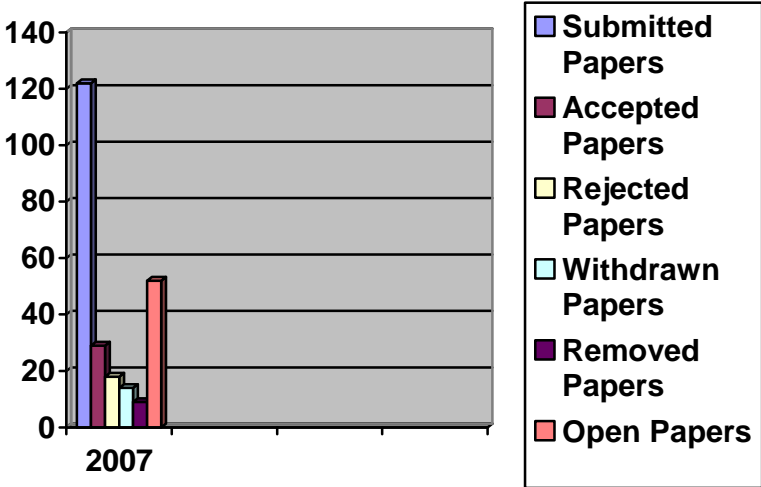
Claude-Henri Lamarque	Ecole Nationale des Travaux Publics de l'Etat, France	01 Jul 09		Nonlinear dynamics, chaos, non Smooth systems, nonlinear Vibrations, Dynamics of Structures And shells
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Ahmed A. Shabana	University of Illinois at Chicago	01 Mar 08		Multibody Systems Dynamics, Finite Elements, Computational Mechanics
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Wan-Suk Yoo	Pusan National University, South Korea	01 Jan 10		Flexible multi-body dynamics, Computational kinetics and dynamics, Vehicle dynamics & suspension

Summary of Activity (January 1, 2007 through August 14, 2007)

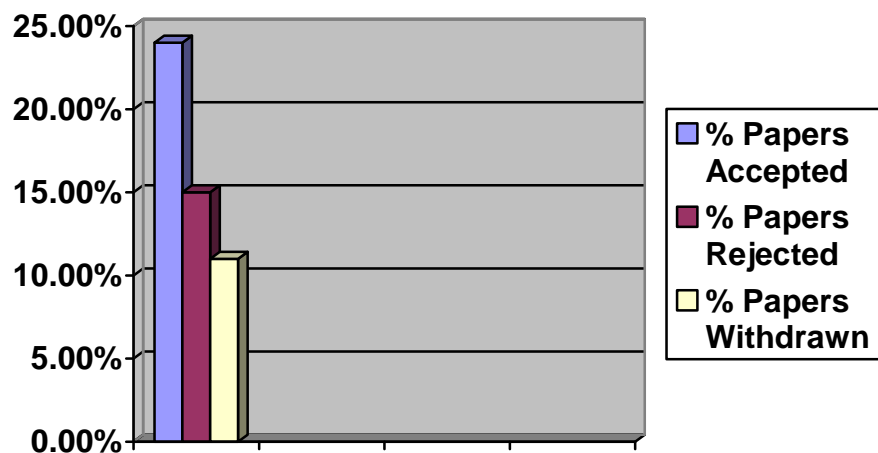
	2007
Submitted Papers	122
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Rejected Papers	18
Withdrawn Papers	14
Removed Papers	9
Open Papers	52
Published Papers	30
Number of Pages	384

Summary of Activities



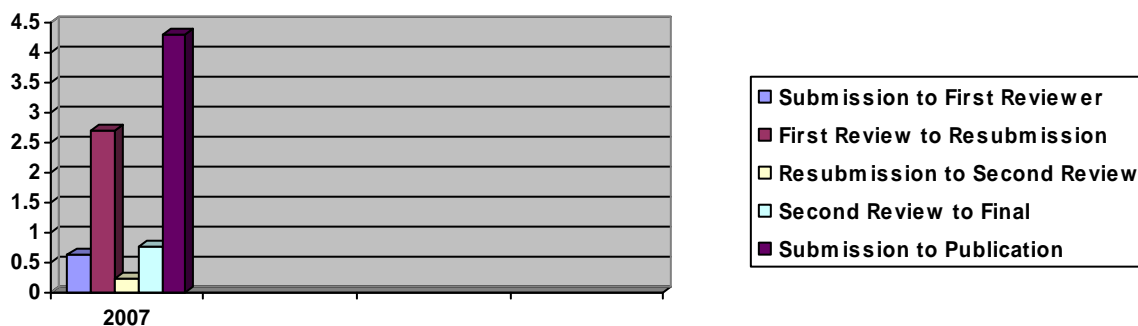
Percentages

% of Papers Accepted	24%
% of Papers Rejected	15%
% of Papers Withdrawn	11%



Review Timing (Time in Months)

Submission to First Reviewer	0.62
First Review To Resubmission	2.7
Resubmission to Second Review	0.23
Second Review to Final	0.76
Submission to Publication	4.31



July 26, 2007

Publication Processing
Thomson Scientific
3501 Market St.
Philadelphia, PA 19104
USA

Dear Publication Processing Representative:

Enclosed is the latest copy of the *Transactions of the ASME, Journal of Computational and Nonlinear Dynamics* for evaluation for inclusion in the Web of Science.

The second page has the requested information about the journal.

I have also completed the Journal Submission Form on the web at:
<http://scientific.thomson.com/forms/isi/journalsubmission/>

I will forward the next two issues as they are published.

Thank you for your time and attention in reviewing the journal.

Sincerely,

Colin McAteer
Manager, Journals
ASME
Three Park Avenue
New York, NY 10016
P: 212.591.7033
F: 212.591.7292
E: mcateerc@asme.org

Enclosures (2)

Full Journal Title:

Journal of Computational and Nonlinear Dynamics

ISSN:

1555-1423

Publisher's Name and Address:

ASME

Three Park Avenue

New York, NY 10016

Editor's Name and Address:

Professor S. C. Sinha

Department of Mechanical Engineering

202 Ross Hall

Auburn University

Auburn, AL 36849

P: 334-844-3325

F: 334-844-3307

ssinha@eng.auburn.edu

Brief statement on the unique features of the journal and how it is distinguished from other journals in the field:

With the advent of digital computers it has become possible to solve the equations of motion of complex systems numerically. This permits the investigation of engineering systems that would otherwise be intractable by analytic means, thus spawning the growth of the field of Computational Dynamics, now a cornerstone of modern engineering analysis and design. Parallel with this development, efforts have been made to combine approximate analytical techniques and powerful topological methods in the study of highly nonlinear dynamic system behaviors. The corresponding area of Nonlinear Dynamics has flourished, resulting in a more complete picture of the response of such systems than had been possible beforehand and permitting complex (even strongly) nonlinear phenomena to be studied and relatively completely understood.

The journal presents many of the important capabilities and advances made by different members of the analytic, nonlinear, and computational dynamics communities and provides a forum for bringing the highly important and complementary approaches for understanding and predicting the nonlinear behavior of dynamic systems together. In this manner, the material presented is readily available for the researcher, practitioner, and educator to explore the entire scope of methods and application.

Thomson Scientific requires 3 consecutive issues for review. The *ASME Journal of Computational and Nonlinear Dynamics* began the process with the July 2007 issue. The evaluation should be completed in January 2008.

The following is an excerpt taken from the Thomson website
<http://scientific.thomson.com/free/essays/selectionofmaterial/journalselection/>

The Thomson Scientific Journal Selection Process

Thomson Scientific is committed to providing comprehensive coverage of the world's most important and influential journals to meet its subscribers' current awareness and retrospective information retrieval needs. Today Web of Science covers over 9,000 international and regional journals and book series in every area of the natural sciences, social sciences, and arts and humanities.

But comprehensive does not necessarily mean all-inclusive. ¹

Why Be Selective?*

It would appear that, in order to be comprehensive, an index to scientific journal literature might be expected to cover all the scientific journals published. This approach would be not only impractical economically, but as analyses of the scientific literature have shown, unnecessary. It has been demonstrated that a relatively small number of journals publish the bulk of significant scientific results. This principle is often referred to as Bradford's Law. ²

In the mid-1930's S. C. Bradford realized that the core literature for any given scientific discipline was composed of fewer than 1,000 journals. Of these 1,000 journals, there are relatively few with a very strong relevance to the given topic, whereas there are many with a weaker relevance to it. Those with a weak relevance to the given discipline or topic, however, typically have a strong relevance to some other discipline. Thus, the core scientific literature can form itself around various topics, with individual journals becoming more or less relevant depending on the topic. Bradford understood that an essential core of journals forms the literature basis for all disciplines, and that most of the important papers are published in relatively few journals. ³

** In order to evaluate a journal for possible coverage we must receive at minimum three consecutive current issues, one at a time as they are published, and/or free electronic access to the publication. Send print issues to Publication Processing, 3501 Market Street, Philadelphia, PA 19104, USA.)*

More recently, an analysis of 7,528 journals covered in the 2005 JCR[®] revealed that as few as 300 journals account for more than 50% of what is cited and more than 25% of what is published in them. A core of 3,000 of these journals accounts for about 75% of published articles and over 90% of cited articles. Furthermore, this core is not static. Its basic composition changes

constantly reflecting the evolution of scholarly topics. Our mission is to update journal coverage in Web of Science by identifying and evaluating promising new journals, and deleting journals that have become less useful.

The Evaluation Process

Journal evaluation and selection is ongoing at Thomson Scientific with journals added to and deleted from the database as frequently as every two weeks. Each year, Thomson Scientific's editorial staff reviews over 2,000 journal titles, and selects around 10-12% of the journals evaluated for inclusion in the Thomson Scientific database. Moreover, existing journal coverage in Thomson Scientific products is constantly under review. Journals now covered are monitored to ensure that they are maintaining high standards and a clear relevance to the products in which they are covered. The journal selection process described here is applied to all journals in Web of Science[®], whether covered in Science Citation Index Expanded[™], Social Sciences Citation Index[®], or Arts & Humanities Citation Index[®]. Some special consideration is given in the evaluation of social science and arts & humanities journals, particularly with regard to citation analysis. These considerations are noted below.

Many factors are taken into account when evaluating journals for coverage, ranging from the qualitative to the quantitative. The journal's basic publishing standards, its editorial content, the international diversity of its authorship, and the citation data associated with it are all considered. No one factor is considered in isolation, but by combining and interrelating the data, the editor is able to determine the journal's overall strengths and weaknesses.

The Thomson Scientific editors performing journal evaluations have educational backgrounds relevant to their areas of responsibility as well as experience and education in information science.

Basic Journal Standards

Timeliness of publication is a basic criterion in the evaluation process. It is of primary importance. A journal must be publishing according to its stated frequency to be considered for initial inclusion in the Thomson Scientific database. The ability to publish on time implies a healthy backlog of manuscripts essential for ongoing viability. It is not acceptable for a journal to appear chronically late, weeks or months after its cover date.⁵ To measure timeliness we need to see three consecutive current issues, one after another, as soon as they are published.

Timeliness is also essential for electronic journals. If the e-journal is publishing distinct issues at a stated frequency, these issues should appear online in a timely manner.

However, when an e-journal publishes articles one at a time rather than collecting articles for release as an 'issue' we take a slightly different approach to measuring timeliness. In these cases the editors look for a steady flow of articles over several months time.

Thomson Scientific also notes whether or not the journal follows **international editorial conventions**, which optimize retrievability of source articles. These conventions include

informative journal titles, fully descriptive article titles and abstracts, complete bibliographic information for all cited references, and full address information for every author.

English is the universal language of science at this time in history. It is for this reason that Thomson Scientific focuses on journals that publish full text in English or at very least, their bibliographic information in English. There are many journals covered in Web of Science that publish only their bibliographic information in English with full text in another language. However, going forward, it is clear that the journals most important to the international research community will publish full text in English. This is especially true in the natural sciences. In addition, all journals must have cited references in the Roman alphabet.

Application of the peer review process is another indication of journal standards and indicates overall quality of the research presented and the completeness of cited references.⁶ It is also recommended that, whenever possible, each article publish information on the funding source supporting the research presented.

Editorial Content

As mentioned above, an essential core of scientific literature forms the basis for all scholarly disciplines. However, this core is not static--scientific research continues to give rise to specialized fields of studies, and new journals emerge as published research on new topics achieves critical mass. Thomson Scientific editors determine if the content of a journal under evaluation will enrich the database or if the topic is already adequately addressed in existing coverage.

With an enormous amount of citation data readily available to them, and their daily observation of virtually every new scholarly journal published, Thomson Scientific editors are well positioned to spot emerging topics and active fields in the literature.

International Diversity

Thomson Scientific editors look for **International Diversity** among the contributing authors and the journal's editors and Editorial Advisory Board members. This is particularly important in journals targeting an international audience. Today's scientific research takes place in a global context and an internationally diverse journal is more likely to have importance in the international community of researchers.

As the global distribution of Web of Science expands into virtually every region on earth, the importance of **regional scholarship** to our emerging regional user community also grows. Selection criteria for regional journals are the same as for international journals although citation analyses play a somewhat different role in the outcome. For example, the importance of the regional journal would be measured more in terms of the specificity of its content. Will it enrich our coverage of a particular subject or provide studies with a specific regional perspective?

Many excellent regional journals target a local rather than an international audience. Therefore, the emphasis on extensive international diversity is less than for internationally focused journals.

All regional journals selected must be publishing on time, have English-language bibliographic information (title, abstract, keywords), and be peer reviewed. Cited references must be in the Roman alphabet.

Citation Analysis

The Thomson Scientific evaluation process is unique in that Thomson Scientific editors have a wealth of citation data available to them. The importance of interpreting and understanding these data correctly cannot be emphasized too strongly. Using quantitative citation data to measure impact is meaningful only in the context of journals in the same general discipline. For example, smaller fields like crystallography do not generate as many articles or citations as do larger fields such as biotechnology or genetics. Likewise, in some areas, particularly in the arts and humanities, it may take a relatively long time for an article to attract a meaningful number of citations. But in other areas, such as the life sciences, it is not unusual for citations to accrue rapidly and peak after two or three years.⁷ These facts must be taken into consideration if citation data are to be used correctly.

Citation analyses takes place on at least two levels. We look for citations to the journal itself, as expressed by Impact Factor and/or total citations received. We also examine the citation record of the contributing authors, a useful study in evaluating new journals where a citation history at the journal level does not yet exist.

Likewise, established journals that are not covered are often re-evaluated. These journals can experience new growth in citation impact resulting from changes such as translation into English, change in editorial focus, change in Publisher, medium, etc.

Because Thomson Scientific captures all cited references from each of the 9,300 journals covered, citation information is available on journals not covered as well as those that are covered.

Self-citation rates are also taken into consideration. The self-cited rate relates a journal's self-citations to the number of times it is cited by all journals, including itself. For example, journal X was cited 15,000 times by all journals, including the 2,000 times it cited itself. Its self-cited rate is 2/15 or 13.3%.

A high volume of self-citation is not unusual or unwarranted in journals that are leaders in a field because of the consistently high quality of the papers they publish, and/or because of the uniqueness or novelty of their subject matter. Ideally, authors reference the prior publications that are most relevant to their current results, independently of the source journal in which the work was published. However, there are journals where the observed rate of self-citation is a dominant influence in the total level of citation. For these journals, self-citation has the potential to distort the true role of the title as a participant in the literature of its subject.⁸

Eighty per cent of all journals listed in the JCR Science Edition have self-citation rates less than or equal to 20%. This shows that self citation is quite normal for most journals and is expected. Significant deviation from this normal rate, however, prompts an examination by Thomson

Scientific to determine if excessive self-citations are being used to artificially inflate the Impact Factor. If we determine that self-citations are being used improperly, the journal's Impact Factor will not be published and the journal may be considered for deselection from the Web of Science.

1. Garfield, E., How ISI Selects Journals for Coverage: Quantitative and Qualitative Considerations. Current Contents, May 28, 1990.
2. Garfield, E., Citation Indexing (New York: John Wiley & Sons, 1979)
3. Ibid.
4. Garfield, E., The Significant Scientific Literature Appears in a Small Core of Journals. The Scientist V10 (17), Sept. 2, 1996.
5. Garfield, E., How ISI Selects Journals for Coverage: Quantitative and Qualitative Considerations. Current Contents, May 28, 1990.
6. Ibid.
7. Ibid.
8. McVeigh, M., Journal Self- Citation in the Journal Citation Reports – Science Edition. 2002. <http://scientific.thomson.com/free/essays/journalcitationreports/selfcitation2002/>

*ASME Journal of Computing & Info Science (JCISE)_
Report to Sponsoring Divisions (DED + CIE)
August, 2007*

Special Projects

1. Identified best papers from CIE/DETC07 and invited authors to submit revised versions to JCISE; this includes DAC, DTM, DFM and CIE papers.
2. Two special issues appeared in 2007: Advances in Computer aided manufacturing (Guest ed: SK Gupta & Jon Corney) and Computational Metrology (Guest eds: Anath Fischer)
3. Two special issues planned for 2008: Engineering Informatics (E. Subrahmaniam, R. Sudarasan), Haptics in Virtual Reality (Jim Oliver & T. Kesavadas)
4. Boosting Impact Factor by suggesting that authors of accepted papers include recent JCISE papers in their reference list. To support this effort we are creating a Reference database of JCISE articles organized by areas, sub-areas (3 levels)

Current Status and Outlook

The journal is now in steady state with a healthy backlog. The issues have been coming out on time for about 4 years now. One concern is that not enough papers from CIE and DETC (DAC, DFM, DTM) conferences are being submitted to JCISE. The Editor is making continued effort to get Program Chairs from these conferences to put a mechanism in place to create a direct path from the conferences to the journal.

ISI included JCISE in its data collection in 2004; after 3 years of this process the first Impact factors for JCISE became available in 2007 (for the 2004-2006 period). JCISE impact factor is comparable to that of ASME Transaction on Manufacturing and ASME transactions on Vibration & Acoustics; it is better than many long established journals such as AIEDAM, IJCIM and JMS.

Journal	Impact factor	Immediacy Index	Half life
JCISE	0.531	0.022	3.6*
Int J CIM	0.383	.029	5.8
ASME Manuf Sci Transac	0.536	0.025	5.4
AIEDAM	0.405	0.00	7.4
Int J Adv Manuf Tech	0.418	.023	4.8
Res Eng Design	0.667	0.143	7.5
J Manuf Sys	0.150	0	>10
Adv in Eng Software	0.431	0.149	6.6
Computer aided Design (ElSevier)	1.446	0.312	7.9
J. Intel Manuf	0.598	0.107	6.2
Concurrent Eng Res & App	0.569	0.069	6.1

* not comparable to others because there is no data prior to 2001 (journal did not exist)

Rank	Abbreviated Journal Title <i>(linked to journal information)</i>	ISSN	Total Cites	Impact Factor	Immediacy Index	Articles	Cited Half-life
1	J APPL MECH-T ASME	0021-8936	6427	0.943	0.086	128	>10.0
2	J BIOMECH ENG-T ASME	0148-0731	3646	1.309	0.118	119	8.8
3	J COMPUT INF SCI ENG	1530-9827	108	0.531	0.022	45	3.6
4	J DYN SYST-T ASME	0022-0434	1193	0.658	0.008	120	9.7
5	J ELECTRON PACKAGING	1043-7398	442	0.487	0.033	60	5.5
6	J ENERG RESOUR-ASME	0195-0738	244	0.370	0.047	43	8.7
7	J ENG GAS TURB POWER	0742-4795	1006	0.304	0.045	110	9.4
8	J ENG MATER-T ASME	0094-4289	1297	1.239	0.053	75	>10.0
9	J FLUID ENG-T ASME	0098-2202	1855	0.678	0.068	161	9.6
10	J FUEL CELL SCI TECH	1550-624X	36	0.607	0.028	71	
11	J HEAT TRANS-T ASME	0022-1481	3992	0.886	0.153	144	>10.0
12	J MANUF SCI E-T ASME	1087-1357	780	0.536	0.025	118	5.4
13	J MECH DESIGN	1050-0472	1463	1.252	0.027	148	6.8
14	J OFFSHORE MECH ARCT	0892-7219	142	0.245	0.103	39	6.7
15	J PRESS VESS-T ASME	0094-9930	912	0.843	0.000	97	7.6
16	J SOL ENERG-T ASME	0199-6231	453	0.421	0.000	74	6.4
17	J TRIBOL-T ASME	0742-4787	1319	0.810	0.000	113	9.9
18	J TURBOMACH	0889-504X	1002	0.478	0.082	85	7.7
19	J VIB ACOUST	1048-9002	967	0.565	0.000	91	9.8
20	MECH ENG	0025-6501	384	0.107	0.016	64	>10.0

The big gorilla in this field is an Elsevier journal (CAD journal). It has been in publication since the 1960s, has very wide circulation internationally and it publishes 1200-1500 pages a year. Its quality is mixed: some good papers, some really bad papers. My sense is that their acceptance rate is extremely high (70-80%). They are publishing a lot of papers from China now. They do not have any page limit, page charges or color charges. Their paper and print quality is far superior to ours. These factors make it tough to compete with them. Also, ASME keeps putting unrelated subject ads in the back of the journal (e.g., Boiler Code) that hurts our image with CS folks. CAD journal has an impact factor of 1.173 (2005). JCISE impact factor will be published in 2007 for the first time.

We hope that eventually the high quality of papers in JCISE resulting from our thorough review process will have an impact in winning people over.

Associate Editors and Areas of Expertise

Name	Institution	Term 1 End Date	Term 2 End Date	Area of Research
Nicholas Patrikalakis	MIT	8/01-8/04	8/04-8/07	Comp. Geometry
Rich Crawford	UT Austin	6/02-6/05	1/06-12/08	RP, CAD
Jonathan Corney	Heroit-Watt Edinburgh UK	3/03-3/06	4/06-4/09	CAM, CAPP
Vadim Shapiro	Wisconsin	7/03-6/06	7/06-7/09	Solid modeling
Jan Vandenbrande	Boeing Co.	12/04-12/07		CAPD
Jim Oliver	Iowa State	5/05-5/08		Virtual Reality
Leo Joskowicz	Hebrew U, Israel	5/05-5/08		Artificial Intelligence
John Michopoulos	ONR	5/05-5/08		FEA, simulation
SK Gupta	Marlyand	1/06-12/08		CAM, features
Sean Callahan	Boeing Co.	3/06-3/09		PDM, Informatics
Kincho Law	Stanford	8/06-8/09		Informatics
Anath Fischer	Technion, Israel	1/07-12/09		CAGD, Comp metrology

Summary of Activity (January 1, 2003 – August 7, 2007)

	2001	2002	2003	2004	2005	2006	2007*
Submitted Papers	121	142	185	219	213	172	83*
Accepted Papers	40	50	55	57	42	44	7
Rejected Papers	35	24	62	69	67	33	3
Returned for Major revisions	38	54	54	63	69	51	5
Other [§]	8	14	14	30	35	39	15
Open Papers	0	0	0	0	0	5	63
Published Papers	44	41	44	43	45	44	22
Num. of Pages	384	352	372	398	400	428	184*

* partial for 2007 (until Aug 7th)

March & June issues only

§ includes duplicate submissions, papers rejected without review for those not within JCISE scope and withdrawn papers

Percentages (based on total decisions made in that year)

	y2001	y2002	y2003	y2004	y2005	y2006	Y2007
% Papers Accepted	33	35.2	29.7	26.0	19.7	33.1	45
% Papers Rejected	24.8	16.9	33.5	31.5	31.4	21.0	19

Reviewing (& publication) Time Averages
(Times in Months)

	2001	2002	2003	2004	2005	2006	2007
Submission to First Review		3.86	3.88	3.29	3.86	3.83	1.42
First Review To Resubmission	3.05	2.4	1.86	2.09	1.94	1.88	1.75
Resubmission to Second Review	2.29	2.58	3.48	3.26	3.31	3.68	2.17
Final decision to MS submission	1.76	1.00	1.13	2.81	1.96	1.05	3.0
MS Submission to Publication	2.19	2.67	3.67	6.19	4.72	6.5	n/a

** JCISE makes a final decision after a max of 2 review cycles

ASME Journal of Medical Devices
2007 ASME DED General Committee Meeting

Submitted by Editors:

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612.625.8580
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Gerald E. Miller, Ph.D.
Virginia Commonwealth University
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gemiller@vcu.edu

Special Projects

None

Current Status and Outlook

Third Issue nearly ready to be published.

A request is being made for 3 new Associate Editors.

<i>Danny Bluestein, PhD</i>	<i>Stony Brook University</i>
<i>Jaydev Prataprai Desai, PhD</i>	<i>University of Maryland</i>
<i>Cheng Dong, PhD</i>	<i>Pennsylvania State University</i>

Competition

There are no direct competitors to JMED. Some of the clinical specific publications do report device development, but not in any detailed form.

Associate Editors and Areas of Expertise

Name	Institution	Term 1 End Date	Term 2 End Date	Area of Research
<i>Ted Conway</i>	<i>Virginia Commonwealth University</i>	<i>01 Jan 09</i>	<i>NA</i>	<i>Rehabilitation Engr</i>
<i>Vijay Goel</i>	<i>University of Toledo</i>	<i>01 Jan 09</i>	<i>NA</i>	<i>Spine mechanics</i>
<i>Just Herder</i>	<i>Delft University of Technology</i>	<i>01 Jan 09</i>	<i>NA</i>	<i>Interactive Mechanisms, kinematics,</i>

				<i>rehabilitation devices, novel control strategies for medical devices</i>
<i>Paul A. Iaizzo</i>	<i>University of Minnesota</i>	<i>01 Jan 09</i>	<i>NA</i>	<i>Cardiovascular devices, Neurological devices, Minimally invasive devices, Human performance/force assessment, New medical sensors/actuators and Surgical Procedures</i>
<i>Hamid M. Lankarani</i>	<i>Wichita State University</i>	<i>01 Jan 09</i>	<i>NA</i>	<i>Crashworthiness, Occupant Protection of Transportation Systems, Biodynamics, Injury Biomechanics, Multibody Dynamics, Structures, Impact Dynamics</i>
<i>M.Y. Lee</i>	<i>Chang Gung University</i>	<i>01 Jan 09</i>	<i>NA</i>	<i>medical mechatronics, hospital automation, rehabilitation engineering, computer-aided medical modality development, technical aids design, medical rapid prototyping, Bio-MEMS</i>
<i>Amy L. Lerner</i>	<i>University of Rochester</i>	<i>01 Jan 09</i>	<i>NA</i>	<i>Biomechanics, Orthopedic Devices</i>
<i>James Moore</i>	<i>Texas A & M University</i>	<i>01 Jan 09</i>	<i>NA</i>	<i>Biofluid mechanics</i>
<i>Jahangir Rastegar</i>	<i>SUNSYB</i>	<i>01 Jan 09</i>	<i>NA</i>	<i>Kinematics, dynamics, vibration, controls and smart materials based actuators</i>
<i>Erol Sancaktar</i>	<i>University of Akron</i>	<i>01 Jan 09</i>	<i>NA</i>	<i>Research interests include mechanical behavior of adhesives, polymers, composites; materials characterization; viscoelasticity; fracture mechanics;</i>

				<i>experimental and theoretical solid mechanics; design and manufacture with novel materials</i>
<i>Foster B. Stulen</i>	<i>Ethicon Endo-Surgery</i>	<i>01 Jan 09</i>	<i>NA</i>	<i>Ultrasonics, Medical instrumentation Image guided intervention/treatment, Endoscopic/Laparoscopic devices, Medical device design processes, Medical device manufacturing, Human factors in medical devices.</i>

Journal of Medical Devices

Published Quarterly by ASME

VOLUME 1 • NUMBER 1 • MARCH 2007

RESEARCH PAPERS

Designing Strength-Proportional Hydraulic Resistance for an Elbow Flexion-Extension Exercise Machine
Brian A. Garner

A Redundant Accelerometric Cluster for the Measurement of Translational and Angular Acceleration and Angular Velocity of the Head
Paolo Cappa, Fabrizio Patanè, and Stefano Rossi

An In Vivo Mobile Robot for Surgical Vision and Task Assistance
Mark E. Rentschler, Jason Dumpert, Stephen R. Platt, Karl Iagnemma, Dmitry Oleynikov, and Shane M. Farritor

Modeling and Design of a Piezoelectric Forceps Actuator for Meso/Micro Grasping
Ken Susanto and Bingen Yang

An Inexpensive Weight Bearing Indicator Used for Rehabilitation of Patients With Lower Extremity Injuries
Daniel F. Walczyk and John P. Bartlet

Structural and Drug Diffusion Models of Conventional and Auxetic Drug-Eluting Stents
William Jacob S. Dolla, Brian A. Fricke, and Bryan R. Becker

A Removable Precision Device for In-Vivo Mechanical Compression of Rat Tail Intervertebral Discs
Justin M. Stinnett-Donnelly, Jeffrey J. MacLean, and James C. Iatridis

Design of an Endoscopic Biopsy Needle With Flexural Members
Stacy L. Figueredo, William R. Brugge, and Alexander H. Slocum

A Fluid Actuator for Thin-Film Electrodes
Benjamin Arcand, Sudeep Shyamsunder, and Craig Friedrich

Nanoporous Alumina Membranes for Enhancing Hemodialysis
Zhongping Huang, Weiming Zhang, Jianping Yu, and Dayong Gao

TECHNICAL BRIEFS

Mechanical Properties of a Biodegradable Balloon-expandable Stent From Poly-,L-lactide... for Peripheral Vascular Applications
Niels Grabow, Carsten M. Büniger, Katrin Sternberg, Steffen Mews, Kathleen Schmohl, and Klaus-Peter Schmitz

A First-Order Mechanical Device to Model Traumatized Craniovascular Biodynamics
Sean S. Kohles, Ryan W. Mangan, Edward Stan, and James McNames

Design, Build, and Test of a Bobsled Simulator for Olympic Athletes
Mark Wacker, Arthur Erdman, Troy Nickel, and Marie Guion Johnson

VOLUME 1 • NUMBER 2 • JUNE 2007

RESEARCH PAPERS

Flexible Prosthetic Vein Valve
Rahul D. Sathe and David N. Ku

Renal Artery Stent Bending Fatigue Analysis
H. M. Hsiao, S. Prabhu, A. Nikanorov, and M. Razavi

Measurement of Impact Loads Applied to an Implanted Drug Pump Connector in a Porcine Cadaver Specimen
Thomas C. Bischoff, Marty D. Martens, Matthew H. Adams, William J. Gallagher, and Paul A. Iaizzo

Modeling and Control Considerations for Powered Lower-Limb Orthoses: A Design Study for Assisted STS
Wesley R. Eby and Eric Kubica

General Uncertainty Analysis for Manual Wheelchair Propulsion Dynamics and Development of an Instrumented Wheel
M. Mallakzadeh and F. Sassani

Gravity-Balanced Arm Support With Energy-Free Adjustment
Wouter D. van Dorsser, Rogier Barents, Boudewijn M. Wisse, and Just L. Herder

Development of a Strain Transferring Sensor Housing for a Lumbar Spinal Fusion Detection System
J. W. Aegersold, W. P. Hnat, M. J. Voor, R. M. Puno, D. J. Jackson, J. T. Lin, K. M. Walsh, and J. F. Naber

A Theoretical and Experimental Investigation of Lateral Deformations in a Unilateral External Fixator
Kerem Ün, İbrahim D. Akçalı, and Mahir Gülşen

TECHNICAL BRIEFS

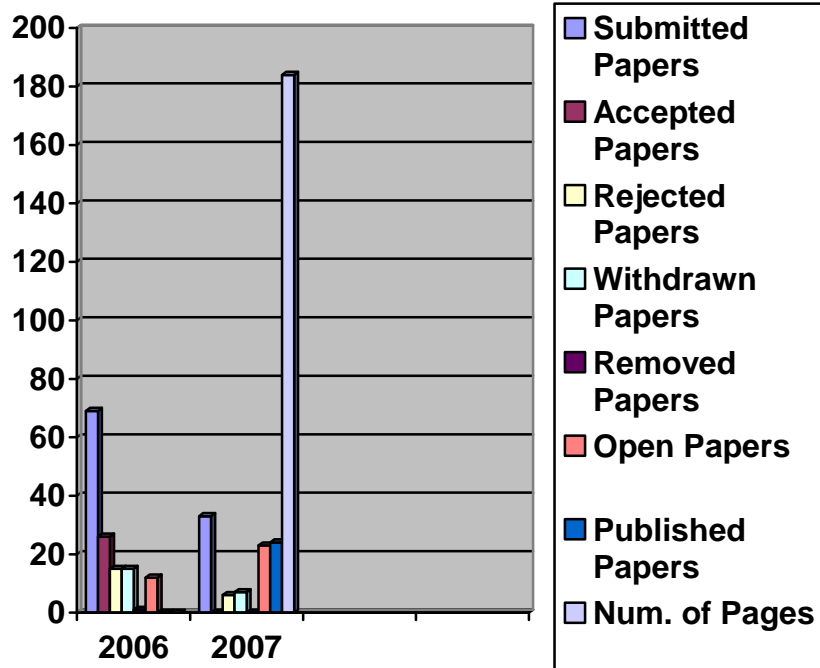
A New Methodology to Determine the Anatomical Center and Radius of Curved Joint Surfaces
Dominik C. Meyer, Norman Espinosa, Urs Lang, and Peter P. Koch

Application of the Finite Element Technique in the Design and Evaluation of the Artificial Facets for the Lumbar Spine
Miranda N. Shaw, Vijay K. Goel, Koichi Sairyo, Jayant Jangra, Ashok Biyani, and Nabil Ebraheim

Combined Statistical and Multiscale View on Ultrasonic Liver Images for Characterization
K. Mala, V. Sadasivam, and S. Alagappan

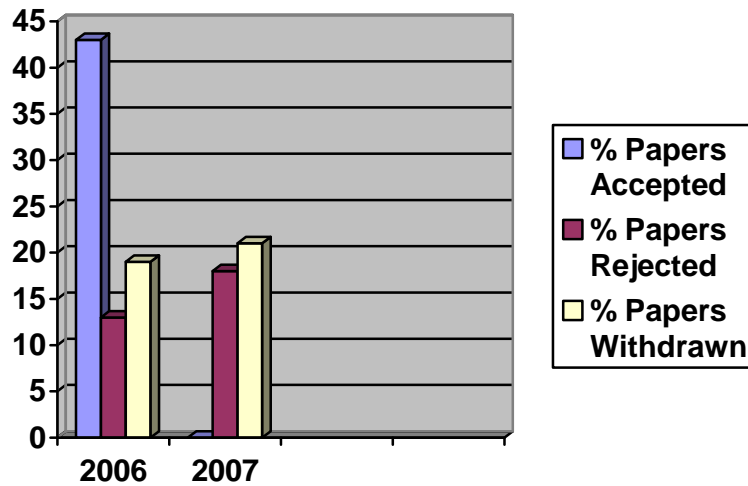
Summary of Activity

	2006	2007
Submitted Papers	69	33
Accepted Papers	26	0
Rejected Papers	15	6
Withdrawn Papers	15	7
Removed Papers	1	0
Open Papers	12	23
Published Papers	0	24
Num. of Pages	0	184



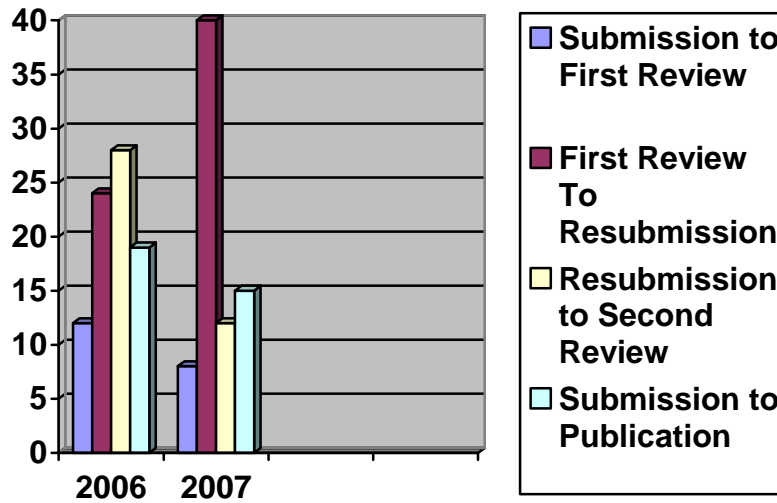
Percentages

	2006	2007
% Papers Accepted	43%	-----
% Papers Rejected	13%	18%
% Papers Withdrawn	19%	21%



Reviewing Timing
(Times in Days)

	2006	2007
Submission to First Review	12	8
First Review To Resubmission	24	40
Resubmission to Second Review	28	12
Submission to Publication	19	15



**Treasurer's report
Aug. 21, 2007**

Kazem Kazerounian

DED Accounts:

Account #	Account name	Balance Dec 31, 2006	Balance May 31, 07	Transactions After May	Projected balances Aug. 21st
4-0414-XXXX	All Accounts	688,437.52	788,655.08		734,343.56
		339,886.05	415,201.94	-5K -5K -1K -5K -5K	375,751.08
4-0414-0000	DED Custodial			-5K -5K -5K = -36K -450 -3000	

Award Accounts:

4-0414-5001	DAC COMM AWD	36,744.34	39,921.35	+5K +5K	49,921.35
4-0414-5002	ABBOT AWD	31,686.68	34,090.92		34,090.92
4-0414-5003	DAVINCI AWD	724.63	826.61		826.61
4-0414-5004	DEN. HART. AWD	33,530.44	36,076.43	+5K +5K -500	45,576.43
4-0414-5005	OUTSTD EDUC AW	335.12	360.66		
4-0414-5006	MECH&ROB AWD	14,778.95	16,084.73	-500 -500 -1000	14,084.73
4-0414-5007	MYKLESTAD AWD	12,900.25	13,883.12	+5K +5K -500	23,383.12
4-0414-5008	DTM COMM AWD	1,221.81	1,269.33	-500	769.33
4-0414-5009	N. YANG AWD	56,409.02	60,703.33	-1000	59,703.33
4-0414-5053	D'ALEMBERT AWD	17,243.76	18,568.60	+5K +5k -500	10,068.60
4-0414-5054	LYAPUNOV AWD	17,243.75	18,568.60	+5K +5k -500	10,068.60
4-04145010 *	PTG award	na	0.00	+5K + 5K -2000	8,000
4-04145011 *	M&R best pap AWD	na	0.00	+5K +5k -500	9,500
4-04145012 *	MNS Award	na	0.00	+1k +1k -500	1,500

* Established in August 2007

Committee Accounts:

4-0414-5032	DAC	12,189.29	12,964.44	-5K -1000	6964.44
4-0414-5034	M&R	7,907.32	10,683.76	-5K	5,683.76
4-0414-5035	DFM	15,902.37	17,017.81		17,017.81
4-0414-5036	DTM	16,863.48	18,055.74		18,055.74
4-0414-5037	RSAFP	3,949.07	4,215.45		4,215.45
4-0414-5038	D-EDUC	5,720.83	4,558.47		4,558.47
4-0414-5041	TCVC(Vib+Sound)	22,336.00	22,333.83	-5K -5K	10,333.83
4-0414-5042	PTG	11,450	12,273.44	-5K -1000	6,273.44
4-0414-5048	VDGN	1,820.98	1,933.60		1,933.60
4-0414-5049	F&J	1,866.01	1,997.43		1,997.43
4-0414-5050	MSND	23,537.34	25,021.36	-5K -5K -1000	14,021.36
4-0414-5060	MNS	2,195.16	2,044.13	-1K -1000	44.13

- -\$36K from DED division account is matched by \$36K from committees (per approval of the Exec committee and request of the committees) to establish new awards or increase the balances of the existing awards.

5K from DED Custodial + 5K from M&R for M&R Best Paper Award (new)
 5K from DED Custodial + 5K from PTG for PTG committee Award (new)
 1K from DED Custodial + 1K from MSN for MSN Committee Award (new)
 5K from DED Custodial + 5K from DAC for DAC Comm. Award
 5K from DED Custodial + 5K from TCVC for Den Hard Award
 5K from DED Custodial + 5K from TCVC for MYKLESTAD Award
 5K from DED Custodial + 5K from MSND for D'ALEMBERT Award
 5K from DED Custodial + 5K from MSND for LYAPUNOV Award
 1K from DED Custodial + 1K from MSN for MSN Committee Award (new)

- Revenue from 2006 is projected to be about \$ 32K to be yet distributed.
- Revenues from IMECE 2003, 2004, NMW 2003, IDETC 2004, IDETC 2005 are distributed and pushed down to committees. **Some discrepancies (\$3,304.60) to be worked out.**
- **It is not clear if NMW 2004 (\$7,519) and NMW 2005 (\$3,448) have been deposited to DED account yet.**
- **A number of other minor items needs to be followed up with ASME staff. However, the accounting staff are not very responsive. Request have been made by the previous treasurers and myself. Under the present mode of operation, it is IMPOSSIBLE to resolve these.**

2007 ASME International Design Engineering Technical Conferences and Computers in Engineering Conference

Rio All-Suite Hotel & Casino, Las Vegas, NV, September 4-7, 2007

Report to DED Executive Committee

Key websites:

<http://www.asmeconferences.org/IDETC07/>

<http://www.asmeconferences.org/IDETC07/ChairsMessage.cfm>

<http://www.asmeconferences.org/IDETC07/Keynote-NSF.cfm>

The 2007 IDETC/CIE consists of record-breaking **thirteen conferences**. Twelve conferences are organized by various technical committees in the ASME Design Engineering Division and the Computers and Information in Engineering Division. One conference is corporately organized with IEEE. These thirteen technical conferences are:

- 21st Biennial Conference on Mechanical Vibration and Noise (VIB)
- 27th Computers and Information in Engineering Conference (CIE)
- 2007 ASME/IEEE International Conference on Mechatronic and Embedded Systems and Applications (MESA07)
- 6th International Conference on Multibody Systems, Nonlinear Dynamics, and Control (MSNDC)
- 33rd Design Automation Conference (DAC)
- 10th ASME International Power Transmission and Gearing Conference (PTG)
- 19th Reliability, Stress Analysis, and Failure Prevention Conference (RSAFP)
- 31st Mechanisms and Robotics Conference (MECH)
- 1st International Conference on Micro- and Nanosystems (MNS)
- 4th Symposium on International Design and Design Education (DEC)
- 19th International Conference on Design Theory and Methodology (DTM)
- 12th Design for Manufacturing and the Life Cycle Conference (DFMLC)
- 9th International Conference on Advanced Vehicle and Tire Technologies (AVTT)

The 2007 IDETC/CIE initially received more than **1,700** abstracts (by February 20th) and accepted **1,439 abstracts** among the thirteen conferences. The total number of draft papers received was 1,409 and only **1,223** made the final technical program. There are **12 specific conference keynote lectures** and **10 tutorials/workshops** sponsored by various technical committees and conferences. In addition, a general conference welcome keynote lecture entitled “**Shaking the Money Tree - Funding at NSF**” reported by three NSF Program Directors (Dr. **Suhada Jayasuriya** - Control Systems, Dr. **Eduardo Misawa** - Dynamical Systems, and Dr. **Judy M. Vance** - Engineering Design of the NSF’s Civil, Mechanical and Manufacturing Innovation Division) is scheduled at 7:45 AM Wednesday morning. Accordingly, the Chairs proudly present a best-ever IDETC/CIE technical program to the design engineering community in Las Vegas. Note that a successful program depends on many

dedicated conference chairs, program chairs, symposium organizers, authors and reviewers. The Chairs would like to express their sincerest appreciation to these people who make this landmark IDETC/CIE07 a reality.

In addition to the excellent technical program, IDETC/CIE07 will offer **two receptions** respectively on Tuesday (9/4) and Wednesday (9/5) nights and division/conference/committee award dinners on Thursday (9/6) evening. 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 and especially all participating students at the Deans' Reception on UNLV campus. The IDETC/CIE will host the second reception at Rio and award dinners at **Caesars Palace** (please refer to the final program or web information for details).

A select number of new innovations and unique services (different from past practices) of current IDETC/CIE are highlighted here:

- The Conference will have a "Technical Program Opening Reception" on Wednesday morning with serving breakfast to ALL conference attendees. This will provide a great start and networking opportunity for the participants.
- The Technical Program Opening will be followed by a unique "General Session Keynote Speech" by NSF three Program Directors as detailed above. This is a great technical opening for the conference, and both general audience and students will greatly benefit.
- The Conference will offer 6 separate "Dinners Banquets" for all the thirteen conferences instead of the traditional luncheons.
- The Conference has hired 9 graduate students as "Student Volunteers" to help with a variety of tasks and activities during the Conference. They will be educated about their tasks and will be wearing a special t-shirt to be recognizable to all conference attendees. This is in line with ASME goal in involving more and more students in its conferences.

Again, the IDETC/CIE 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, authors, reviewers, student participants, ASME staffs (especially **Erin Dolan and Christina Perakis**), as well as various advisory and international committee members. Without these leaders, advisors, promoters, participants and facilitators, this record-setting IDETC/CIE is not possible. 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.

Horn-Sen (H.S.) Tzou, General Conference Chair
University of Kentucky, Lexington, KY

Nader Jalili, Technical Program Chair
Clemson University, Clemson, SC



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 Brooklyn Bridge](#), in New York City. The conference includes the following:

34th Design Automation Conference (DAC)

Conference Chair: Frank Liou, University of Missouri-Rolla;
Program Chair: Kazuhiro Saitou, University of Michigan

32nd Annual Mechanisms and Robotics Conference (MR)

Conference Chair: Qiaode Jeffrey Ge, Stony Brook University;
Program Chair: Pierre Laroche, Florida Institute of Technology

28th Computers and Information in Engineering Conference (CIE)

Conference Chair: Ravi Rangan, Centric Software Inc.;
Program Chair: Frederick Proctor, National Institute of Standards and Technology

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

Conference Chair: Li Shu, University of Toronto;
Program Chair: Bob Paasch, Oregon State University

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

Conference Chair: Peter Sandborn, University of Maryland, College Park

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

2nd International Conference on Micro- and Nanosystems (MNS)

In addition to technical papers and presentations, the conference will include plenary sessions, keynote lectures, and tutorials. Industry participation is particularly encouraged.

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.

All submissions must be made through the conference website: <http://www.asmeconferences.org/IDETC08>.

Important deadlines include

Draft Paper Due:	1/21/2008	Review Completion:	3/3/2008
Acceptance Notification:	3/24/2008	Final Paper Due:	4/28/2008

We look forward to welcoming you to New York in August, 2008.

Souran Manoochehri
General Conference Co-Chair
Stevens Institute of Technology
smanooch@stevens.edu

Jahangir Rastegar
General Conference Co-Chair
Stony Brook University
jahangir.rastegar@stonybrook.edu

Qiaode Jeffrey Ge
Technical Program Co-Chair
Stony Brook University
Qiaode.Ge@stonybrook.edu

Horea Ilies
Technical Program Co-Chair
University of Connecticut
ilies@engr.uconn.edu

IDETC 2009 Status Report August 21, 2007

1. Organization Committee Finalized

The conference organization committee consists of:

General Co-Chair	General Co-Chair	Program Co-Chair	Program Co-Chair
Kurt Anderson Rensselaer Polytechnic Institute Troy, NY 12180-3590 Tel: (518) 276-2339 E-mail: anderk5@rpi.edu	George Flowers Auburn University, AL 36849-5341 Tel: (334) 844-3330 E-Mail: flowergt@auburn.edu	Harry Dankowicz University of Illinois at Urbana-Champaign Urbana, IL 61801 Tel: (217) 244-1231 E-Mail: danko@uiuc.edu	Dane Quinn, University of Akron Akron, OH 44325-3903 Tel: (330) 972-6302 E-Mail: quinn@uakron.edu

2. Conference City, Venue, Dates and Hotel have been chosen and contract signed

- Conference City: San Diego, CA.
- Conference Dates: August 30-September 2, 2009
- Conference Venue: San Diego Convention Center (www.sdccc.org)
 - We have a total of 36 meeting rooms each day from Monday, August 31, 2009 through Wednesday, September 2, 2009
 - Additionally we have 8 meetings rooms for tutorials on Sunday, August 30, 2009
 - *Note, all of the rooms hold at least 120 people (theater style)
 - 1 authors breakfast each day (at convention center)
 - 6 lunches (the average size of a lunch is 300 ppl, so some of the rooms will need to be combined)
 - Coffee Breaks
 - Exhibits
 - Committee Meetings
 - Speaker Ready Room
 - Food & Beverage Minimum: \$100K (at the convention center)
- Conference Hotel: Omni Hotel – San Diego
(<http://www.omnihotels.com/FindAHotel/SanDiego.aspx>)
 - Conference room rate: \$189 (single/double) \
 - Room Nights Blocked: 1300 room nights
 - Required Pickup: 80% (1040 room nights)

3. Conference Reception

The reception venue is not yet set. The principal possibilities being considered are:

- i) On board the USS Midway Aircraft Carrier (<1 mile away) (but cannot be the evening of Tuesday September 1, 2009) (thus Monday or Wednesday are still options for the Midway).
- ii) Reception at Petco Park (where the Padres play). This Professional Baseball stadium is next to the conference hotel and is easily accessible by pedestrian “skywalk” directly connecting the hotel to the sports facility. We will not be able to confirm this possibility until the 2009 baseball schedule is set and we would only be able to have the reception there if the Padres are NOT in town.
- iii) Reception at the San Diego convention Center

Other options which have not yet been explored is something on Coronado peninsula across the San Diego Bay from the Conference center.

We will further discuss/review our options after the IDETC2007 event is completed.

4. Conference Webpage

IDETC 2009 website has been produced (<http://www.rpi.edu/~anderk5/IDETC2009/>) and will continue to be extended as more information becomes available. Currently this website provides a IDETC2009 overview, listing of contributing conferences and associated conference specific *Calls For Paper/Announcements*, a general *IDETC2009 Call For Papers*, venue and hotel information, as well as local attraction information.

5. Conference Announcement and Call For Papers

An initial conference announcement/call for papers has been produced and will be in the materials provided to IDETC2007 attendees in Las Vegas. This call for papers/announcement is downloadable from the above described conference website, and will be e-mailed all to IDETC 2007 and IDETC 2008 attendees as those lists come available.

Report Prepared by
Kurt S. Anderson and George Flowers



IDETC / CIE 2009

2009 International Design Engineering Technical Conferences and Computers and Information in Engineering Conference

San Diego, California
August 30 – September 2, 2009

Co-Chairs: George Flowers (flowegt@auburn.edu) & Kurt Anderson (anderk5@rpi.edu)

Affiliated Conferences, Conference Chairs and/or Program Chairs

1. **22nd Biennial Conference on Mechanical Vibration and Noise (VIB)** (TC of Vibration and Sound) – Conference Chair: George Flowers (flowegt@auburn.edu); Program Chair: Dane Quinn (quinn@uakron.edu)
2. **29th Computers and Information in Engineering Conference (CIE)** (Computers in Engineering Division) – Conference Chair: Fred Procter (frederick.proctor@nist.gov); Program Chair: Shuichi Fukuda (shufukuda@cdr.stanford.edu)
3. **2009 ASME/IEEE International Conference on Mechatronic and Embedded Systems and Applications (MESA07)**
4. **7th International Conference on Multibody Systems, Nonlinear Dynamics, and Control (MSNDC)** (Multibody Systems and Nonlinear Dynamics Committee) – Conference Chair: Kurt Anderson (anderk5@rpi.edu); Program Chair: Olivier Bauchau (Olivier.Bauchau@ae.gatech.edu)
5. **35th Design Automation Conference (DAC)** (Design Automation Committee) – Conference Chair: Kazuhiro Saitou (kazu@umich.edu); Program Chair: Zissimos Mourelatos (mourelat@oakland.edu)
6. **ASME Power Transmission and Gearing Conference (PTG)** (Power Transmission and Gearing Committee)
7. **20th Reliability, Stress Analysis, and Failure Prevention Conference (RSAFP)** (Reliability, Stress Analysis, and Failure Prevention Committee) – Conference Chair: Erol Sancaktar (erol@uakron.edu)
8. **33rd Mechanisms and Robotics Conference (MECH)** (Mechanisms and Robotics Committee) – Conference Chair: Pierre Larochelle (pierrel@fit.edu), Program Chair: Andrew Murray (murray@udayton.edu)
9. **3rd International Conference on Micro- and Nanosystems (MNS)** (Micro and Nano Systems Committee)
10. **6th Symposium on International Design and Design Education (DEC)** (Design Education Committee)
11. **21st International Conference on Design Theory and Methodology (DTM)** (Design Theory and Methodology Committee) – Conference Chair: Robert Paasch (paasch@engr.orst.edu)
12. **14th Design for Manufacturing and the Life Cycle Conference (DFMLC)** (Design for Manufacturing Committee)
13. **10th International Conference on Advanced Vehicle and Tire Technologies (AVTT)** – Conference Chair: Corina Sandu (csandu@vt.edu); Program Chair: Mohammad Elahinia (mohammad.elahinia@utoledo.edu)

IDETC 2010 Status Report **August 27, 2007**

The planning and organization of the IDETC 2010 in Montreal, Canada, is in the very early stages. This beautiful city was the location for the 2002 IDETC conference, a tremendous success. Montreal is easily accessible by air for all North Americans. The friendly downtown is filled with restaurants, museums, and the typical array of big city amusements. McGill, ETS, and the University of Montréal are strong local Universities, active conference participants, and willing to coordinate receptions and tours.

Conference Hotel: There are a number of choices for hotels in Montreal with conference accommodations: Delta, Marriott, Sheraton FourPoints, and Queen Elizabeth to name several. All these hotels are centrally located in the downtown area with convenient access to the metro and airport. There are no additional venue or tour arrangements to report.

Meeting with ASME staff: Larochelle and Murray, the Co-Chairs of the conference, will be meeting with Erin Dolan of ASME during the '07 IDETC. The meeting includes discussions of conference location, finances, and the conference web site/tool

An early commitment: Prof. Jorge Angeles of McGill University and his rather large and enthusiastic group of colleagues and students have agreed to facilitate the local arrangements that will ensure the conference's success.

Border Issues: US citizens visiting Canada will be required to have a passport as of September 30, 2007. As the Conference is three years out, our belief is that this restriction will not pose issues for either our domestic or international attendees.

Location Issues: Concerns were raised about Montreal as a venue for the 2010 Conference. Larochelle and Murray remain committed to bringing the conference to this historic city. In the event that the choice of Montreal will not be supported by the Design Engineering Division, other potential venues under consideration include Albuquerque, Saint Louis, and Indianapolis.

Report Prepared by:

Pierre Larochelle
General Conference Chair in 2010
Florida Institute of Technology

Andrew Murray
General Program Chair in 2010
University of Dayton

ASME Design Engineering Division General Committee Meeting
August 23, 2007

Constitution and Bylaws Committee Report
H. Lipkin

OLD BUSINESS

- 1) The most current version of the Constitution, Bylaws, and Operating Procedures of the Executive Committee (CBOP), approved by DED 19 March 2006, has been posted at the DED web site (<http://divisions.asme.org/ded/>).

NEW BUSINESS

- 1) No new revisions have been added to the CBOP this year.
- 2) For the next revision the following items should be considered:
 - a) Change references to DETC in the CBOP to IDETC in order to reflect current usage.
 - b) Part I, Art. IV, Par. 6 reads,

"The Division shall facilitate the publication of archival-quality papers in the field of design engineering in two journals of the Society: the *Journal of Mechanical Design* and the *Journal of Vibration and Acoustics*."

It is suggested to add the following journals that are listed on the DED web site:

Journal of Computing and Information Science in Engineering
IEEE/ASME Transactions on Mechatronics
Journal of Computational and Nonlinear Dynamics
Journal of Medical Devices

- 3) According to CBOP Part II, Art. II, Sec. 1, 3(a),

"The Constitution and Bylaws Committee shall consist of one or more members each of whom shall serve not more than three consecutive years on the committee."

The current chair, Harvey Lipkin, will have served three consecutive years ending 30 June 2008 and thus cannot be reappointed to the committee.

As a further point of information on committee reappointments according to the CBOP, members of the Standing, Technical, and Special Committees, other than the Constitution and Bylaws Committee, have no reappointment limitations to those committees.

NDEC/NMW 2007 Report for the DETC

August 22, 2007

National Manufacturing Week 2007

Prepared by: **Zissimos P. Mourelatos, Oakland University**

Starting this year, the NMW Technical Conference will be held in late September. This year's conference is in Rosemont, IL from 9/24 to 9/27.

The ASME Design Engineering Division submitted 5 abstracts (vs. 12 in 2006) for presentation. Canon Communications LLC, the new sponsoring company, accepted four of these abstracts.

Revenues for the conference are distributed based on attendance. At this point, we do not have attendance/revenue figures because the NMW registration is still ongoing. I will report detailed figures at our next meeting.

Details of 2007 NMW Conference

The overall technical conference organized by Canon, consists of 72 sessions, including free sessions (vs. 200 in 2006). ASME organized a total of 7 (vs. 31 in 2006) technical sessions. The drop in the number of sessions is in general, attributed to the new conference time which may have resulted in previous attendees missing the new submission deadline.

The **Design Engineering Division** organized the following 4 (out of 7) ASME sessions:

- "Cost Driven Design," 3-hr workshop by M. Hundal, Professor Emeritus, University of Vermont.
- "Lean Design for Lean Enterprise," 3-hr workshop by D. Mooney, President, Lean Design Inc.
- "A Structured Approach to Using Noise Factor Analysis and FMEA During the Development of Real Time Embedded Control Systems," presentation by P. Deniston, Ford Motor Company, in session entitled, "Embedded Control." The session consists of four presentations in total.
- "Integrated Product and Process Design for Suspension Components," presentation by Y.-C. Sheu, General Motors Corporation, in session entitled, "Automotive Design and Manufacturing." The session consists of four presentations in total.

I will attend this year's NMW Conference to get a "first-hand" opinion on how the conference is conducted, attendee interests, etc. The information will be helpful for enhancing DED's participation next year.

I would like to take this opportunity to thank John Renaud, previous NDEC Chair, for his help during my short transition, before the official start of my term on July 1st, 2007. Also, Noha El-Ghobashy of ASME is acknowledged for her prompt responsiveness to all appropriate matters.

Respectfully,

Zissimos P. Mourelatos,
NDEC Chair

Honors & Awards Committee
J. K. Davidson, Chair
Design Engineering Division
ASME

Report for meeting of September 5, 2007
Las Vegas, Nevada

1. The three awards (MD, daVinci, and Spira Educator) are selected by two committees: MD and daVinci by the entire DED H&A Committee, and the Spira Award by a subset of the H&A Committee and 3 from the DED Education Committee. The cooperation from the Education Committee was superb. This year, 2007, the committees that judged the awards were:

DED H&A

J. Davidson, Chr
Art Erdman
Crispin Hales
Alan Parkinson
Jeffrey Ge
Gordon Kirk

Spira Design Educator

J. Davidson, Chr
Alan Parkinson
Art Erdman
Clive Dym
Edmund Feldy
Alex Slocum.

To simplify matters within the DED, we have traditionally chosen to designate the entire DED H&A committee to BE the Society's committee that selects the Machine Design recipient, and we choose half of H&A to be half of the Society's Spira Committee. The Chair of the DED is the one who must ask the Society H&A Committee to change the roster of who is on these Society selection committees. Members of any Society honors and awards committee can serve at most two consecutive 3-year terms. Consequently, in June of this year Clive Dym and Alexander Slocum were each appointed to an additional 3-year term on the Spira Committee, and Art Erdman and Crispin Hales were each appointed to an additional 3-year term on the Machine Design Committee. The rosters of both committees for 2007-2008, as held by the Society H&A Committee, are attached. Note that my own appointment ends in June of 2008; I will work with Judy Vance to find a replacement.

2. The job of the H&A Committee is to select qualified candidates who meet the qualifications for the three awards. This year there were nominations for the Machine Design and Spira Design Educator Awards this year, but no nominations for the daVinci Award. Two of us made strong attempts to encourage nominations for the daVinci Award, but they failed.

3. We need more qualified nominations for all three of the awards, so I am hereby soliciting nominations for all of them. Nomination packets are carried over automatically for 3 years and then removed from consideration, unless renewed by the nominator. Qualifications for each award are listed on the DED website, along with the past recipients. Our Division website leads to the nomination materials (resume of candidate, a simple form for the nominator, and 5 letters of support). (Shayne Gooch has done a splendid job of organizing the DED website, including the H&A portion.) I hope that many of you will identify a worthy candidate for one of the awards and then undertake the nomination. Attached is a list of the awards that are handled by the DE Division. Also included in the list are the Technical Committee Awards that are typically presented at the IDETC's.

4. The Division enquired again about upgrading the Product Safety Award to a Society award, but the Society moratorium on new awards at that level remains in place. Consequently, although the endowment funds are available, the award remains a Division award.

J. K. Davidson, Chair
DED Honors & Awards Committee
August 25, 2007

**Design Engineering Division
Honors and Awards Committee
Machine Design Award
2007-2008**

Dr. Joseph K Davidson, P.E., Chair 2003-2005-2008
Department of Mechanical & Aerospace Engineering
Arizona State University
Tempe, AZ 85287-6106
480-965-3824 (office)
480-965-2412 (fax)
480-967-1796 (home)
j.davidson@asu.edu (e-mail)

Professor Alan R. Parkinson 2003-2006-2009
Department of Mechanical Engineering
Brigham Young University
435 CTB
Provo, UT 84602
801-422-6544 (office)
801-422-0516 (fax)
parkinson@byu.edu (e-mail)

Mr. Crispin Hales 2004-2007-2010
Hales & Gooch Ltd.
1000 Sheridan Road
Winnetka, IL 60093-1504
847-501-3765 (office)
847-501-4107 (fax)
crispin@halesgooch.com (e-mail)

Professor Arthur G. Erdman 2004-2007-2010
Department of Mechanical Engineering
University of Minnesota
111 Church Street SE
Minneapolis, MN 55455
612-625-8580 (voicemail)
612-625-9395 (fax)
agerdman@me.umn.edu (e-mail)

Qiaode Jeffrey Ge 2004-2008
Department of Mechanical Engineering
State University of New York
Stony Brook, NY 11794-0001
631-632-8315 (office)
631-632-8544 (fax)
qjge@yahoo.com (e-mail)

Gordon Kirk 2005-2008
Virginia Polytechnic Institute
Mech Engrg Dept - MC 0238
113 Randolph Hall
Blacksburg, VA 24061-0001
540-231-7478 (office)
540-231-9100 (fax)

gokirk@vt.edu (e-mail)

Six members recommended to COH by the DED for three-year terms commencing SAM and expiring SAM. No member may serve more than two consecutive three-year terms.

**Ruth & Joel Spira Outstanding Design Educator Award Subcommittee
2007-2008**

Joseph Davidson, PE, Chair Department of Mechanical & Aerospace Engineering Arizona State University Tempe Arizona 85287-6106 480-965-3824 (W) 480-965-2412 (F) j.davidson@asu.edu	H&A	2003-2005-2008
Clive L. Dym Department of Engineering Harvey Mudd College 301 Platt Boulevard Claremont CA 91711-5990 909-621-8853 (W) 909-621-8967 (F) clive_dym@hmc.edu	EC	2004-2007-2010
Arthur G. Erdman Department of Mechanical Engineering 111 Church St SE University of Minnesota Minneapolis, MN 55455 612-625-8580 (V) 612-625-9395 (F) agerdman@me.umn.edu	H&A	2004 –2006-2009
Edmund Feldy, PE Consultant Mechanical Design and Innovation Associates 2425 Pioneer Road Evanston, IL 60201 847-328-2924 (W) mdi-ecf@worldnet.att.net	EC	2003-2005-2008
Alan Parkinson Professor, Department of Mechanical Engineering Brigham Young University 435 CTB Provo, Utah 84602 801-422-6544 (W) 801-422-0516 (F) parkinson@byu.edu	H&A	2003-2006-2009
Alexander H. Slocum Department of Mechanical Engineering Massachusetts Institute Of Technology 77 Massachusetts Avenue Cambridge MA 02139 617-253-0012 (W) slocum@mit.edu	EC	2004-2007-2010

Spira Award
Page 2

Richard Ulvila
ASME International
345 East 47th Street, MS 7A
New York, NY 10017
212-591-7863 (V)
212- (F)
ulvilar@asme.org

LaShion Pettiford
ASME International
345 East 47th Street, MS 7A
New York, NY 10017
212-591-7387 (V)
212- (F)
PettifordL@asme.org

The Committee consists of six members. Chair of the DED Honors & Awards Committee; Chair of the DED Education Committee; two members from the DED Honors & Awards Committee and two members from the DED Education Committee. The Chair of the DED Honors & Awards Committee will serve as the Chair of the Ruth & Joel Spira Outstanding Design Educator Award Committee.

ASME DESIGN ENGINEERING DIVISION HONORS AND AWARDS

The ASME Design Engineering Division is the custodian of the following awards:

ASME (Society) Awards

*Selection by DED Committee & confirmed by ASME H&A
Presentation at the DED luncheon of IDETC*

- | | |
|---|--|
| Machine Design Award | This award recognizes eminent achievement or distinguished service in the field of machine design which is considered to include application, research, development, or the teaching of machine design. |
| Spira Outstanding Design Educator Award | This award is to be presented to a person who exemplifies the best in furthering engineering design education through his/her vision, interactions with students and industry, scholarship and impact on the next generation of engineers; a person who through his/her actions is a role model for other educators to emulate |

Division Awards

*Selection by DED Honors & Awards Committee
Presentation at the DED luncheon of IDETC*

- | | |
|--|--|
| Robert E. Abbot Award | Established in 1978 to recognize individuals who have served the Design Engineering Division beyond the call of duty.
Administrator: Design Engineering Division. |
| Leonardo Da Vinci Award | Eminent achievement in the design or invention of a product which is universally recognized as an important advance in machine design.
Administrator: Design Engineering Division. |
| Ralph Barnett-Carl Uzgiris Product Design Safety Award | This award is to recognize individuals who have made significant contributions to the design of safe products through teaching, research, and professional accomplishments.
Administrator: Design Engineering Division. |

Division-Technical Committee Awards

Selection by sub-committee of the TC

Presentation venue determined by the TC

- Design Automation Award The award is to recognize sustained meritorious contribution to the field of Design Automation.
Presentation: DED luncheon at IDETC.
- Jacob P. Den Hartog Award The award is to recognize lifelong contributions to the teaching and/or practice of vibration.
Presentation: Biennial Vibrations Conference.
- N.O. Myklestad Award The award is to recognize a major innovative contribution to Vibration Engineering.
Presentation: Biennial Vibrations Conference.
- Mechanisms & Robotics Award The award is to recognize cumulative contributions to the field of mechanism design or theory.
- A. T. Yang Award The award is to recognize the authors of an outstanding and deserving paper on theoretical kinematics which is presented at the annual ASME Conference on Mechanisms and Robotics.
- D'Alembert Award The award is to recognize lifelong contributions to the field of multibody system dynamics.
- Lyapunov Award The award is to recognize lifelong contributions to the field of nonlinear dynamics.
- Alfred Noble Prize The award is given for a technical paper of exceptional merit accepted by the Committee on Publications for publication in any of their technical publications provided that the author has not passed his/her 31st birthday at the time the paper is submitted.
Administrator: American Society of Civil Engineers. This is an intersociety award.

Awards from Other Divisions

- Worthington Medal For eminent achievement in the field of pumping machinery.
Administrator: Petroleum Division Awards Committee.

Nominations

The ASME Design Engineering Division Honors and Awards Committee invites you to recognize and reward the excellence embodied in your friends and colleagues by nominating them for one of our divisional awards. A formal nomination package should be prepared and submitted, according to the format provided in the template and notes below.

Particulars

Due date: January 15, 2008 for this year, but nominations may be submitted at any time

Forms and other information:

Mailing Address: Richard Ulvila, ASME International, 345 East 47th Street, MS 7A, New York, NY 10017. Telephone: 212-591-7863. Email: ulvilar@asme.org.
Else send directly to Joseph K. Davidson at Arizona State University.

Email: J.Davidson@asu.edu

Telephone: 480-965-3824

NOMINATION FOR ASME NATIONAL AWARDS

1 NAME OF AWARD

2 DATES: Submitted **Received by ASME**

3 FULL NAME OF NOMINEE **Date of Birth**

ASME Membership Grade of Nominee

Nominee's current position

Nominee's Address (Indicate whether home or business.)

Nominee's Citizenship

4 CITATION (35-40 word summary for nominee's qualifications.)

5 NOMINATORS (Names, ASME committee connections, professional acquaintanceships)

SPONSOR

6 REFERENCES (Names and addresses of five individuals acquainted with the nominee's qualification and requirements of the award who have written the attached letters. Please be advised that the Committee will not consider more than five reference letters.

ACHIEVEMENT AWARDS

Items 7-8 should be typed (double spaced) on separate pages and submitted with the preceding page as cover.

7 QUALIFICATIONS: Give complete statements of specific ways in which the nominee meets the requirements for this honor. Be sure to support all claims made on the individual's accomplishments in this regard.

8 PUBLICATIONS: List upto 15 in order of significance and comment on the most important up to a maximum of 5. Please cite those publications which specifically support the nominees achievements and establish a claim to the honor for which the individual is nominated. If there are no publications please so indicate.

9 US AND FOREIGN PATENTS: List no more than 15 in order of significance and comment on the most important upto a maximum of 5. As with publications, please cite those patents which specifically support the nominee's achievements and establish a claim to the honor for which the individual is nominated. In the event that the nominee holds no patents, please so indicate.

10 BRIEF BIOGRAPHY: Give birth date and place, citizenship, education, positions held, honors, ASME activities, and participation in other engineering societies. In listing positions held, include directorships of civic activities and industrial corporations. For a nominee having many honors, those honors should be included that support the achievements for which the individual is being nominated.

OUTSTANDING DESIGN EDUCATOR AWARD

Items 7-8 should be typed (double spaced) on separate pages and submitted with the preceding page as cover.

7 QUALIFICATIONS: Give complete statements of specific ways in which the nominee meets the requirements for this honor. Be sure to support all claims made on the individual's accomplishments in this regard.

8 BRIEF BIOGRAPHY: Indicate education institutions attended, positions held, honors, ASME activities, participation in other engineering societies and civic societies. Indicate publication record that is relevant to this award and comment on its relevance.

DED's Nominating Committee Chair's Report

August 20, 2007

As the chair of the nominating committee I will conduct the election for the new member of the Executive Committee. The procedure for this election is summarized in the attachment (see below), which has been approved by the Executive Committee.

The new member of the Executive Committee is elected for a six-year term starting on July 1, 2008. The new member starts with the position of the Secretary and, following a special rotation within the Executive Committee, serves as Chair in the fifth year.

Nominees should have substantial exposure to the Division affairs and examples of this are prior leadership roles in technical committees, IDETC organization, division sponsored/cosponsored journals, etc. Current office holders are not eligible unless their term of office will expire on or before June 30, 2008.

In the mean time, please think about potential candidates and have them nominated for this important position. I will begin seeking nomination later on this year. So, stay tuned!

Respectfully,

Shapour Azarm
Chair
Nominating Committee

Election Procedures for the Incoming DED Executive

1. Nominating Committee. A *Nominating Committee* will be named by the *Division Chair* by December. Its chair will be the *Immediate Past Division Chair*. It will have three other representative members: two from the *General Committee* and one from the *Advisory Committee*. (see *Bylaws Article I.2* and *Operating Procedures Article VII.1*)

2. Nominees. The *Nominating Committee* will develop a pool of nominees from prominent people with considerable prior experience with DED's activities (see *Constitution Article III.6*). Current officers of *Technical* or *Standing Committees*, or current *Technical Editors* of DED sponsored or cosponsored journals will not be eligible unless their terms end before the following July 1. Nominees must commit to a service obligation of six years.

3. Nominee Profiles. Prior to election, brief vita (~3 pages) and nominating letters (1-2) for each nominee will be provided to the seven members of the *Executive Committee*.

4. Voting Pool. Seven members of the *Executive Committee* will be eligible to vote (see *Constitution Article V.7* and *Bylaws Article I.2*). These members are: Five current officers

(elected) of DED, the *Immediate Past Chair*, and the *NDEC Chair* (see *Constitution Article V.1*). Although it is expected that all members of the *Executive Committee* will participate in this election, at least five members (quorum; *Bylaws Article III.1*) must be in the active voting pool to have a valid election.

5. Confidential Voting System. Sequential voting, with members in the active pool voting for only one candidate per round, will be conducted by the *Nominating Committee*. This process will be repeated, if necessary, after dropping the nominee with the smallest number of votes until a nominee has a majority of the votes cast from the active voting pool. E-mail and fax will be acceptable modes for confidential voting, but not the telephone.

6. Vote teller. *Teller* will not be a person from the active voting pool. A member of the *Nominating Committee* can be designated as vote *teller*. *Chair* of the *Nominating Committee* can serve as vote *teller* if he/she chooses not to be in the voting pool. *Teller* cannot break ties under any circumstances and run-off round(s) must be conducted if ties develop. *Teller* will preserve the confidential voting records for one year.

7. Notification. The *Division Chair* will inform the new member of his/her election and about his/her progression path (see *Constitution Article V.2*) within the *Executive Committee*. While the term of the new member will begin on the following July 1, he/she will be invited to attend the *Spring Meeting* of the *Executive Committee* as an observer.

Document approved by DED Executive Committee, September 10, 2006

ASME Design Engineering Division General Committee Meeting
August 23, 2007

US Council for the Theory of Machines and Mechanisms (USToMM)
H. Lipkin

OLD BUSINESS

There is no old business.

NEW BUSINESS

- 1) The committee wishes to thank the past chair, Gregory Chirikjian, for his service and leadership.
- 2) The 12th World Congress in Mechanism and Machine Science was held in Besançon, France during June 17-21, 2007. The report of the Congress has not yet been published but here are a few items:
 - a) There were over 700 attendees with a strong representation from the US.
 - b) More than 750 papers from 52 countries were submitted from which 535 were accepted. The proceedings are publicly available at www.iftomm.org.
 - c) The World Congress was a financial success since it was cash positive.
 - d) Candidatures for the IFToMM World Congress in 2011 were presented by the Mexican and German delegations, with Mexico selected by vote of the General Assembly.
 - e) Four member countries were expelled by vote of the General Assembly for nonpayment of subscription fees for an excessive period.
 - f) Marco Ceccarelli, Italy, is the incoming IFToMM president replacing Ken Waldron, US, who held the position for the last eight years.
- 3) USToMM is up to date with its IFToMM subscription fee for 2007.

Government Relations Report

January to August, 2007

Farhad Tahmasebi

Global Warming

- In what may signal a shift in legislative strategy dealing with regulation of greenhouse gas emissions, Senator Bernie Sanders became the third senator to introduce legislation aimed at curbing air pollution solely from power plants. "Power plants are the No. 1 source of global warming pollution in the United States," Sanders said. "While Congress must work toward an economy-wide approach to global warming, there is no reason that power plants should not begin reducing their greenhouse gas emissions now." According to Sanders, more than 40 percent of all greenhouse gases in the U.S. come from power plants. His bill, The Clean Power Act of 2007, would reduce power plant emissions of carbon dioxide, nitrogen oxide, sulfur dioxide and mercury.
- Senate Environment and Public Works Committee Chair Barbara Boxer recently wrote a letter to President Bush asking him to convene a summit among the 12 leading greenhouse gas emitting nations to discuss ways to reduce emissions. In her letter to the President, Boxer wrote, "Today, the United States is the world leader in greenhouse gas pollution, but lags behind in controlling emissions and in pressing forward on world negotiations. Bringing these heads of state to the White House to deal with this serious threat to our planet would send a much-needed signal to the world that the United States of America is ready to once again set an example to the world."
- The second in a series of 21 Synthesis and Assessment (S&A) reports has been released by the Department of Energy's (DOE) U.S. Climate Change Science Program (CCSP). CCSP was established in 2002 to integrate federal research on global environmental change within 13 federal agencies.

Alternative Fuels – Energy Efficiency

- Leaders of the Senate Energy and Natural Resources Committee, Senators Jeff Bingaman and Pete Domenici, introduced a new renewable fuels bill. S. 987, the "Biofuels for Energy Security and Transportation (BEST) Act" would require that 36 billion gallons of America's fuel supply come from renewable fuels by 2022, significantly higher than the current mandate of 7.5 billion gallons by 2012. The legislation is similar to President's Bush proposal of 35 billion gallons by 2017, but does not include non-renewable fuels derived from coal and natural gas. Bingaman stated the legislation will have a positive impact on U.S. energy security. "As our first committee hearing of the year demonstrated, the United States faces significant energy security challenges stemming from our dependence on foreign oil. Biologically derived fuels will have an important role to play in promoting our energy security," he said. S. 987 also set targets for the development of more advanced biofuels, such as cellulosic ethanol. "One of the main goals of this bill is to spur development of advanced biofuels, like cellulosic ethanol. This legislation sets an ambitious standard for advanced biofuels, combined with incentives to spur timely production," Domenici said.
- The Departments of Energy (DOE) and Agriculture have awarded \$8.3 million for biobased fuel research to accelerate the development of alternative fuel resources. In making the announcement, DOE Secretary Samuel Bodman said, "These research projects build upon DOE's strategic investments in genomics and biotechnology and strengthen our commitment to develop a robust bioenergy future vital to America's energy and economic security. The awards will be made through the Office of Biological and Environmental Research (OBER) in DOE's Office of Science (SC), and USDA's Cooperative State Research, Education and Extension Service (CSREES) National Research Initiative (NRI).
- "Global Trends in Sustainable Energy Investment 2007," a recent report from the United Nations Environment Program (UNEP), found that global investment in renewable energy reached \$70.9 billion in 2006, up 43 percent over the previous year. The trend appears to be continuing in 2007, with growth in investment in the wind, solar and biofuels sectors. The report attributes the boom in renewable energy investment to a range of global concerns including climate change, increasing energy demand, energy security and the persistently high price of oil.
- Energy Secretary Samuel Bodman has announced three partnerships selected to establish and operate the DOE's new Bioenergy Research Centers. These centers focus on accelerating basic research in the development of cellulosic ethanol and other biofuels, as well as making biofuel production competitive on a national scale by 2012.

- Lawmakers in the House of Representatives recently passed the long anticipated energy reform bill, the "New Direction For Energy Independence, National Security And Consumer Protection Act" (H.R.3221). The House-passed energy bill contains provisions to improve energy efficiency in home appliances, residential boilers, electric motors as well as set new standards for light bulbs. It would also seek to improve building energy efficiencies through a green building initiative as well as a "zero-energy commercial initiative," to create a carbon-neutral building.

Innovation and Competitiveness

- The House of Representatives overwhelmingly approved two bills to strengthen U.S. basic research and develop a corps of math and science teachers. Both bills were originally introduced by Chairman Bart Gordon of the House Science and Technology Committee. The two bills are: 1) H.R. 362, the 10,000 Teachers, 10 Million Minds Science and Math Scholarship Act, and 2) H.R. 363, Sowing the Seeds through Science and Engineering Research Act.
- Senator Max Baucus (D-MT), Chair of the Senate Finance Committee, has introduced legislation to create a research agency for advanced energy technologies. The Advanced Research Projects Agency - Energy, first discussed in the National Academy of Sciences report, "Rising Above the Gathering Storm," would be modeled after the Defense Advanced Research Projects Agency (DARPA). ARPA-E would be an independent agency, although it would be required to coordinate efforts with the DOE and other federal research agencies. The bill proposes that ARPA-E have a small staff of 250 people, of which a minimum of 180 should have technical expertise. Proposed funding for the new agency is \$300 million for FY 2008, \$600 million for FY 2009, \$1.1 billion for 2010, \$1.5 billion for 2011, and \$2.0 billion for 2012. Areas of anticipated research for ARPA-E include fusion, ethanol, nanotechnology, solar power, biomass and green buildings.
- The Congressional Budget Office (CBO), in response to a request from Senator Judd Gregg (R-NH), the Ranking Member of the Senate Budget Committee, has conducted and released an economic analysis of federal support of research and development (R&D). The 42-page report, Federal Support for Research and Development, found that "federal spending in support of basic research over the years has, on average, had a significantly positive return, according to the best available research."
- The Senate Subcommittee on Commerce Justice Science Appropriations approved their FY 2008 spending package on June 28th. The Committee appropriated \$54.6 billion for the National Science Foundation (NSF), National Institute of Standards and Technology (NIST), and National Atmospheric and Space Administration (NASA). This represents \$3.2 billion above the Administration FY 2008 request. Chairwoman Barbara Mikulski (D-MD) cited economic competitiveness as the reason to increase investment in basic science research. "If America is going to be more competitive, we must focus on funding and policies to develop new technologies that lead to new products and industries that create new jobs," said Senator Mikulski. "We need federal science agencies that foster innovation and make America more competitive. A country that doesn't innovate stagnates."
- The President signed the "America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education and Science (COMPETES) Act" into law. The House and Senate passed America COMPETES recently after months of negotiation.
- The National Science Board (NSB) has approved a national action plan for 21st Century Science, Technology, Engineering, and Math (STEM) education, which focuses on two key issues: increasing coordination of STEM education both horizontally among states and vertically through grade levels; and, increasing the supply of qualified K-12 STEM teachers. The NSB developed this plan based on a request from Congress in 2005.

NSF (National Science Foundation)

- The FY 2008 budget request for NSF is \$6.43 billion, an increase of almost \$409 million over the FY 2007 request. Included in that overall request are the following account-specific requests: (1) The Engineering Directorate is requesting \$566.89 million, an increase of 9.1 percent over the FY 2007 request. (2) \$750.60 million for Education and Human Resources. (3) \$5,131.69 million for Research and Related Activities, an increase of 7.7 percent over the FY 2007 request. (4) \$244.74 million for Major Research Equipment and Facilities Construction.
- The U.S. House of Representatives recently voted to strengthen support for basic science research, as well as for science, technology, engineering, and mathematics (STEM) education, as it

overwhelmingly approved H.R. 1867, the National Science Foundation Authorization Act of 2007. H.R. 1867 seeks to give NSF the authority that it needs to support America's vital science and technology enterprise.

- The Research and Science Education Subcommittee of the House Committee on Science and Technology recently held two hearings on the priorities to be considered in the upcoming reauthorization of the National Science Foundation (NSF). "If America wants to compete on the global marketplace, we have to invest in programs that work, increase research and education opportunities, and elevate standards," observed Subcommittee Chair Brian Baird (D-WA). "We must reinvigorate our efforts to increase opportunities for young people to study, and pursue careers in math and science."
- The National Science Foundation has released a preliminary analysis of its "Impact of Proposal and Award Management Mechanisms Work Group (IPAMM) - 2007 Proposer Survey." Of the 43,412 Principal Investigators who received the survey, 24,378 or 56 percent filed a response.

NIST (National Institute of Standards and Technology)

- The FY 2008 budget request for NIST is \$640.7 million, which breaks down as follows: (1) \$500.5 million for Scientific and Technical Research and Services, including \$92.4 million for NIST laboratory research and \$8.1 million for the Baldrige National Quality Award. Included in the overall amount are \$6 million for Enabling Nanotechnology from Discovery to Manufacture and \$5 million for Measurements and Standards for the Climate Change Science Program. (2) \$93.9 million for Construction and Research Facilities. (3) \$46.3 million for Industrial Technology Services to support the Hollings Manufacturing Extension Partnership.

NASA (National Aeronautics and Space Administration) – NOAA (National Oceanic and Atmospheric Administration)

- The FY 2008 budget request for NASA is \$17.3 billion, a 3.1 percent increase over the FY 2007 request. Those monies are allocated as follows: (1) \$10.483 billion for Science, Aeronautics and Exploration which includes the directorates of Science, Exploration Systems, Aeronautics Research and Cross-Agency Support Programs. (2) \$6.791 billion for Exploration Capabilities including the Space Shuttle, International Space Station and Space and Flight Support. (3) \$34.6 million for the Office of Inspector General.
- A House appropriation subcommittee voted on June 11, 2007 to give NASA and NOAA more money for 2008 than the White House was seeking for either agency.

DOE (Department of Energy)

- The House Appropriations Committee has passed a \$25.243 billion budget for the Department of Energy (DOE) in FY 2008, an increase of \$1.150 billion over FY 2007 and \$480 million over the Administration's request.
- The DOE and Department of Treasury have issued new instructions for applying for tax credits for advanced coal projects and gasification projects. For the 2007-2008 application round, the application deadline has been extended until October 31, 2007.
- The Department of Energy (DOE) and the Nuclear Regulatory Commission (NRC) have signed a memorandum of understanding (MOU) to establish increased cooperation on technological research and engineering studies related to the Global Nuclear Energy Partnership (GNEP).

EPA (Environmental Protection Agency)

- The FY 2008 budget request for EPA is \$7.2 billion. Of that amount, \$549.5 is allotted for enforcement operations, an increase of \$9.1 million over the FY 2007 amount. Among other key budget components are the following: (1) \$117.9 million for climate change programs. (2) \$44 million for Energy Star programs for commercial, residential and industrial sectors to continue voluntary government/industry partnerships. (3) \$5 million for the Asia Pacific Partnership to support international efforts to reduce greenhouse gas emissions. (4) \$4.4 million for Methane to Markets to promote methane recovery and use at landfills, coal mines and natural gas facilities. (5) \$123.8 million for Clean Air and related research. (6) \$10.2 million for Nanotechnology Research.
- The EPA has issued its final "Nanotechnology White Paper" to inform EPA management and stakeholders on the scientific issues associated with nanotechnology. The paper provides a basic

description of nanotechnology, EPA's interests in it, potential environmental benefits, risk assessment issues specific to nanotechnology and a discussion of responsible development of nanotechnology. The paper also includes a review of research needs for environmental applications and implications of nanotechnology, including prioritized research needs within risk assessment topic areas such as human health and transport.

DOT (Department of Transportation)

- Members of the Senate Appropriations Committee unanimously approved S. 1789, the Department of Transportation and Housing and Urban Development and Related Agencies FY 2008 appropriations measure late last week. The measure provides a total of \$65.7 billion to DOT, an amount \$2.57 billion more than approved for the current fiscal year and \$4.4 billion more than the Administration's request.

DOD (Department of Defense)

- Members of the House Defense Appropriations Subcommittee have recommended an 8.5 percent cut in 6.1 Basic Research, 6.2 Applied Research and 6.3 Advanced Technology Development programs. Despite the recommended cuts, the Subcommittee's budget recommendations exceed the Administration's requests in all but one instance. The recommendations also include a provision that would limit payment of indirect costs for basic research to 20 percent.

Report on the Design Society
Written for the ASME Design Engineering Division
August 2007

The Design Society is an international non-governmental, non-profit organisation focused on design research, design practice, and design education. The Design Society concentrates on activities that transcend national boundaries, and, where possible, will seek to complement national activities. The initiatives, themes, issues and questions addressed by the Design Society are discussed and disseminated through its conferences and workshops, along with their associated publications.

The goals of the Design Society are to contribute to a broad and established understanding of design, and to promote the use of knowledge about design for the good of humanity.

It aims to

- enhance and rationalise engineering design through design science
- develop and promote a common understanding of design activities
- support its members in consolidating, focusing and establishing theory and research methodology
- support the creation and development of a formal body of knowledge about design
- support the evaluation of research results and their implementation in education and industry
- promote interdisciplinary work in design and co-operation among researchers, managers, educators and practitioners
-

The Design society was constituted in March of 2000. It builds on prior work of the international society of design science, WDK. Founded in the early 1980's, WDK was an informally constituted international society based on a common interest in engineering design.

At this point, the Design Society has two primary objectives; to establish services that it can provide to its members, and to develop an effective infrastructure for delivering these services. Each year, the Society runs a major design conference. In the odd years, it holds the ICED Conferences (International Conference on Engineering Design) and in the even years it holds the DESIGN conferences. In late August of 2007, the International Conference on Engineering Design (ICED) will be held in Paris. More than 600 people are registered. Unfortunately, the meeting is scheduled just the week before IDETC in Las Vegas. Making both meetings will be difficult for many people. The Design Society tried to learn from the ASME the time of the 2007 IDETC so that scheduling problems could be avoided, but we were unable to get the dates in time to affect the outcome. The same problem may occur in 2009. We understand that the IDETC will meet in San Diego, but we have been unable to learn the dates of the meeting. At the ICED meeting in Paris we will set the 2009 ICED schedule. It would be most helpful if we could be informed of the 2009 IDETC dates as soon as possible.

In May of 2008, the Design Society will sponsor DESIGN'06 in Dubrovnik. The Design Society Special Interest Groups have been very active this year. In September, the Design Education Special Interest Group (DESIG) held a DESIG Conference in Salzburg. The Applied Engineering Design Science SIG met at AEDS'06 in Pilsen, Czech Republic, and NordDesign'06 met in Reykjavik, Iceland. Two new SIGs, Mechatronics and Human Behavior in Individual Design were established and have begun meeting.

Members of the ASME are welcome to participate in any of the Design Society conferences and SIG activities. They need not be Design Society members to do so, though we encourage membership in both societies.

To: General Committee, Design Engineering Division

From: Chair, Fellows Nomination Committee

Subj.: Report for the Period Ending September 2007

The following members of our Division have been elected to the Fellow Grade of membership since my last report:

David M. Anderson
Terry V. Baughn
Pranabesh D. Choudhury
William W. Clark
Alejandro R. Diaz
Clement Gosselin
David O. Kazmer
Jon M. Kriegel
C. Mavroidis
James H. Oliver
Henry J. Sommer
Vadim Shapiro
Ram D. Sriram

Congratulations to these members and to their sponsors.

Some recent changes to the nomination procedure are that the total nomination package shall be no more than 25 pages and that no more than 10 significant papers shall be listed. Keep in mind that the current deadlines are June 1 and December 1. These are the dates that forms are submitted to the Fellows Review Committee. Results can be expected in September and March.

Respectfully submitted,

Richard A. Hirsch, P.E.
Life Fellow

Publicity and Newsletter Committee

Jeremy J. Michalek <http://ddl.me.cmu.edu/ddwiki/index.php/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. This year's Newsletter was initiated in January with a draft completed in May and ASME layout, printing and mailing completed in August. The final newsletter mailing was later this year than desired, and I will set earlier deadlines for next year.

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 200 articles, 35000 page views and 75 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> <<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 <<mailto:jmichalek@cmu.edu>> .

ASME Design Engineering Division Information Management Report

August 2007

Summary

The Information Management Committee is responsible for the Design Engineering Division (DED) website. Activities have involved web site maintenance.

1. Introduction

The DED Information Management Committee provides reference information for ASME members via the DED web site. This includes information and links to technical committee home pages, conferences, journals, committee rosters and meeting minutes.

2. Activities March 2007 - August 2007

Activities have involved posting new information and updating links. Some of the more recent changes have included:

- Committee rosters were updated 01 July 2007;
- A new space has been created for the 'Darle W. Dudley Award' (For Outstanding Contributions to the Power Transmission and Gearing Community);
- A Wiki Edition of the 2007 Newsletter (produced by Jeremy Michalek and in addition to the pdf version) is now available from the Newsletter Archive page.

3. Further Work

Further work will involve the continued refinements to the HTML code to allow more efficient changes and updates to the web site in the future. Any comments or suggestions regarding the layout and functionality of the web site would be gratefully received.

Respectfully submitted, Shayne Gooch, Chair (2002 - present)

Shayne Gooch, Ph.D.
Visiting Fellow (April – December 07)
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AUSTRALIA
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Journal Relations Committee Report ASME Design Engineering Division Fall 2007

The objective of the DED Journal Relations Committee (JRC) is to facilitate increased impact of the journals affiliated with the Design Engineering Division. The committee will share best practices, decide appropriate metrics, and determine and implement strategies that will influence the journals' impact.

1. Overview of Committee's Objective and Plans

The committee is considering the following questions:

- What are appropriate metrics to help measure each journal's progress? (Examples of possible metrics include Impact Factor, number of subscribers, indexing services in which the journals are indexed, etc.)
- What can be done by the DED committees and editors to increase the impact of DED journals?
- What can be suggested for ASME to do to help increase the impact of DED journals?

In relation to these broad questions, the following issues are being considered:

- What education can be provided to authors, associate editors, reviewers, etc., that would increase their awareness and enlist their help in increasing the journals' impact.
- What can be shared with other committee members about what has been done that has been successful in increasing the impact of DED journals?
- Of all the things that might be done, which would have the greatest influence on increased impact? What strategies might be most efficient (i.e. have the greatest impact for the lowest resource input)?

Significant progress has been seen in some areas, as described in individual journal reports.

The questions considered by the previous committee are still relevant and are listed in the table below.

Evolution	Impact/Peers
<ul style="list-style-type: none"> • Does journal coverage evolve with new developments in the field? • Are multi- (and cross-) disciplinary topics covered? • Do the papers cover areas in the field in a balanced way? • How is the journal utilizing advanced and new technologies in enhancing handling of papers? • Is there any plan for special (or focused) issues on emerging topics? 	<ul style="list-style-type: none"> • Has some of the best research in the sub-fields covered by the journal in the last 5 years published in the journal? • How is the journal compared to other journals in the field? • What are the peer journals in the field? • What are the impact related numbers and how do they compare among the peer journals as well as all journals within Mechanical Engineering?
Review/Communication	Editorial/Nomination
<ul style="list-style-type: none"> • What is the time duration for review (both initial and follow-up rounds)? • What is the time duration for publication from acceptance? • What are the data on paper tracking, lost papers, and 	<ul style="list-style-type: none"> • What is the stature of the people on the editorial board of the journal? • Should the next TE nominated by the current TE (as in the past) or should the nomination be opened for others (e.g., TC's) to participate as well?

<p>delayed reviews?</p> <ul style="list-style-type: none"> • Are the page numbers allocated to the journal supported by the subscription numbers? • Are the journal's focus areas clearly communicated to the technical community? 	
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2. Proposal for a new Journal

Discussions have been ongoing during the past year regarding the formation of a new journal to be sponsored by the Design Engineering Division, entitled, *ASME Journal of Mechanisms, Machines and Mechatronic Systems*.

A formal proposal for the journal has been put forth by Michael McCarthy, current editor of the *Journal of Mechanical Design*, and Vijay Kumar, chair of the Mechanisms and Robotics technical committee. The proposal is currently being discussed among technical committees and the Executive Committee.

The proposed mission for the journal is to be an archival publication that documents fundamental research on the geometry, kinematics, dynamics, design, analysis, manufacture, and control of mechanisms, machines and mechatronic systems with a view to advancing the state-of-the-art in theory as well as practice and to encourage innovation in the design of mechanical systems.

The journal would primarily serve the research communities associated with the Mechanisms and Robotics, Power Transmission and Gearing, and Micro and Nano Systems technical committees of the DED. The rationale for its formation is to relieve the current publication pressure of *Journal of Mechanical Design* that arises from its high submission rate compared to available pages, and to enable it to expand to a broader range of topics in system design, optimization, decision theory and robust and risk-based design. The new journal would then provide an ASME-sponsored outlet for the topics mentioned above as well as unique integrative research that has no home among existing ASME journals.

*Report Submitted by William W. Clark
Chair of Journal Relations Committee*

ASME Design Division K-12 Awareness of Design Committee Report

September 5, 2007

Kathy Jacobson - Chair

Kathy.J.Jacobson@LMCO.com

770-494-7818

2007 program involvement:

The following are examples of activities that I have been involved with organizing to get kids excited about engineering, math & science. Contact me if you would like information on how you can implement similar programs for students in your area.

- Engineers Week Girl Scout Badge Workshop
 - Lockheed Martin sponsored the 7th Annual Girl Scout Badge Workshop for over 200 Girl Scouts and leaders during Engineers Week. Junior Girl Scouts earned their Aerospace badges, and the older girls worked on career related badge requirements. Both groups toured the Lockheed Martin aircraft assembly line as well. 30 women engineers from Lockheed Martin worked with the girls on their badge requirements.

- Science Olympiad
 - Continued coaching local middle school Science Olympiad team, with Dodgen MS team earning top 10 at state competition for 8th year in a row.
 - Initiated new Lockheed Martin Leadership Association Science Olympiad involvement. First activity in planning stage will be a workshop for local middle school kids and their coaches.

- Robotics for Girl Scouts
 - 5 Senior Girl Scouts and I participated in a meeting with the local Girl Scout Council board of directors where these girls demonstrated computer and robotic technology to the board and a large donor.

Resources:

Great web sites for activities to help you get K-12 school kids interested in Engineering.

ASME/Girl Scout Collaboration

http://www.asme.org/Education/PreCollege/Partnerships/Girl_Collaboration.cfm

ASME Pre-College Education

<http://www.asme.org/Education/PreCollege/>

Engineers Week

www.eweek.org

Science Olympiad

www.SOINC.org

ASME Design Engineering Division
Special Committee on International Licensing

Interim Report Submitted to Executive Committee
for September 2007 Meeting

Recommendation

Our committee members have completed our initial study on International Licensure by ASME and in light of paragraph A below, recommend abandonment of the approach.

The Special Sub-Committee Chair will be available at the DED meeting on Wednesday September 5, 2007 to answer any questions.

Background

In the last 6 months, NCEES has established an international engineering credential procedures approval group. Several state professional Licensing Boards have already signed up with NCEES.

Discussion

Pursuit of an ASME independent certifying board for foreign educated engineers in any form could suggest that ASME is challenging the NCEES path. Thus, further pursuit is fatally flawed, international commissions and agreements notwithstanding. We recommend abandonment.

Alternative Recommendation

ASME DED should pursue exploration of professional society certification of a design professional. It is recommended that the same committee examine creating a modification of the procedures generally similar to that utilized in the U.K. for Chartered Engineers. It is envisioned that the criteria would be heavily weighed to actual hands-on product design and not simply analysis. To make the certification meaningful, certain groups of engineers with narrow experience would necessarily be excluded: i.e. pure FEA analysts and certain teaching/research faculty. This certification would, in light of international normalization in standards and safety in particular, provide the ME profession with an opportunity to carry on where the universities leave off and enhance safety, life cycle design and international sourcing skills in design.