



DESIGN

Design Engineering Division Newsletter

Kon-Well Wang, Editor

Summer 2002

Chair's Message



Tom Chase

The Design Engineering Division (DED) consists of 38,000 members with one thing in common: a passion for mechanical design.

We are fortunate to work in a profession which provides endless challenges whose solutions require a careful balance of science, creativity and a good dose of professional judgment. Simply put, design is exciting!

The DED's mission is to develop, promote, encourage and support the technical excellence and professional success of every one of our 38,000 members. We have but one resource to achieve that lofty mission: our volunteers!

As a member of the DED, you have access to the efforts of a long list of talented, knowledgeable, and dedicated volunteers. Nevertheless, we are avidly seeking the input of one more critical contributor to our mission: YOU!

If you're early in your design engineering career, the DED can provide support for you by way of our conferences, journals and Technical Committees. (You'll find references for them elsewhere in this newsletter or at our web site:

<http://www.asme.org/divisions/ded.>)

We invite you to help us by getting

involved with a Technical Committee. Or, simply contact any of the DED execs to let us know how we can serve you better.

If you are at mid-career, our conferences and journals are great ways to keep up with changing technology. The DED can provide valuable networking opportunities for those who are changing jobs. We especially hope that you will get involved with the Technical Committee closest to your interests, so we can learn from you! We are fortunate to have many able volunteers from academia; we'd especially benefit from more members from industry and government labs!

If you're one of our valued senior members, our members provide a superb pool of energetic talent for your company, group or school. You can help us by presenting a talk or tutorial at one of our conferences, or help our Awards Chair (Prof. Farrokh Mistree, farrokh.mistree@me.gatech.edu) identify a deserving recipient for one of the Division's prestigious awards! (Of course, you are welcome to become involved with our committees, too!)

And not to forget our valued student members. Thanks to the efforts of Ms. Stacy Dees and Prof. Pierre Larochelle, the DED now has a world-class student web site (follow the Student Web Site link from our home page). Conference registration for our student members is free! The conferences are a great place to meet your next employer or advisor. Participate in one of our many student competitions. And, please tell us how we can attract you to the DED after graduation!

DED CALENDAR OF EVENTS

September 29 - October 2, 2002
ASME International Design Engineering Technical Conferences
Sheraton Hotel
Montreal, Quebec, CANADA
Web link:
<http://www.caip.rutgers.edu/ASME2002/index.html>

March 3 - March 4, 2003
National Manufacturing Week Conference
McCormick Place
Chicago, IL
Web link:
<http://www.asme.org/nmw/index.html>

September 2-6, 2003
ASME International Design Engineering Technical Conferences
Chicago Marriott, Downtown
Chicago, IL
Web link:
<http://www.me.uic.edu/detc2003>

September 28-October 3, 2004
ASME International Design Engineering Technical Conferences
Hilton Salt Lake City Center
Salt Lake City, UT

(continued on page 2)

Chair's Message

(continued from page 1)

Our 2002 International Design Engineering Technical Conferences, hosted in Montreal on September 29 through October 2 by Professor Kazem Kazerounian, features special programs to foster communication between our members from industry and academia. We hope to see you there! We're also working to expand our industry-oriented activities at the National Manufacturing Week Show in Chicago every March. Several of our committees hold activities at the IMECE.

The DED provides a fantastic opportunity to get to know some wonderful people. I must take this opportunity to acknowledge the long-time mentorship of our out-going Chair, Dr. Dan Segalman, as well as the tireless efforts of the entire executive committee. Our journals are in skilled hands under the editorship of Professors Larry Bergman, Lung-Wen Tsai and Toshio Fukuda. Our conferences thrive under the caring direction of our Technical Committees (with a special thanks to Professors Dean Mook and Bala Balachandran for a tremendously successful IDETC in 2001).

However, this is NOT an exclusive club: if you love design, please join us!!!

Tom Chase

Greetings from the Past Chair

This has been a difficult year for the nation and most of those difficulties were witnessed up close by members of the Design Division of ASME.

September 11 occurred while the Design Engineering Technical Conference was taking place in Pittsburgh. Mid-morning during the second day of the conference, word spread that an airplane had hit the World Trade Center. Later more of the story circulated and some participants abandoned the technical sessions to watch events unfold on the large-screen television in the hotel lobby. Everyone seemed to need company. Some participants doggedly continued with the presenting and listening to papers—intent not to yield purposeful activities to the acts of terrorists.

That incident illustrated that the American Society of Mechanical Engineers, International is both very American and very international. The Americans—native and immigrant—and our foreign guests all responded with shock, bewilderment, and anger. There was a consensus that we had a duty to continue, and

we did continue. This was particularly difficult for those of us with friends and relatives in New York or Washington. I have special respect of the ASME staff, based in Manhattan, for having stuck it out at the conference to the end.

The nation continued to show fortitude and ASME demonstrated that attitude by proceeding with the IMECE in New York City two months after the terrorist attacks. Many in the local organizing committee were still grieving the loss of one of their more active members in the twin towers attack. Some of our sessions missed speakers because of travel restrictions resulting from another airplane crash in Queens that happened early in the conference week. Still, the conference pressed forward and lived up to its reputation as the premier mechanical engineering technical conference in the world.

Our nation and our professional society each persevered in the face of serious challenge and did what needed to be done. What success the Design Division has achieved over this past year is due to the efforts its volunteers and the support of ASME staff. This is a good team.

Dan Segalman

Members Elected to Fellow

During the past Society year the following members of our Division have been elected to the Fellow grade of membership: Neil Anderson, Jonathan Cagan, Malcolm J. Crocker, L. Ike Ezekoye, Glen E. Johnson, J. Michael McCarthy, David Newland, Gordon R. Pennock, Jonathan Wickert

Our congratulations to these members and our thanks to those who took the trouble to nominate and support them. The Design Engineering Division is one of the Society's largest divisions and yet we have the smallest percentage of Fellows. Complete information on nominations as well as the names of all living Fellows can be found at www.asme.org/member/fellow.

Richard A. Hirsch

Journal of Vibration and Acoustics

The Journal of Vibration and Acoustics will undergo several changes in 2002. First, we welcome two new

associate editors to the Editorial Board: Chin An Tan of Wayne State University and Richard Keltie of North Carolina State University. Chin is well known within DED and is the retiring Chair of the Technical Committee on Vibration and Sound. Richard joins Jerry Ginsberg and Roger Ohayon on the Board as a representative of the Noise Control and Acoustics Division (NCAD). This will be Richard's second appointment to the Editorial Board of JVA. He served previously during Dan Inman's editorship. With Mike Friswell agreeing to serve a second three-year term, the number of associate editors for the coming year will be thirteen. The masthead of the Journal will undergo a significant change this year, reflecting the participation of NCAD membership on the Editorial Board. Thanks to the diligent efforts of the associate editors, the time from manuscript receipt to publication saw improvement in 2000, with a mean of approximately 18 months. Improving this statistic will require effort on the part of editors, reviewers and authors. We encourage authors to expeditiously respond to reviews and to return corrected page proofs. With the current backlog at little more than one issue, this is an excellent opportunity to quickly bring manuscripts to press. Let me take this opportunity to thank the authors, reviewers, editors and staff who helped to make the past year a successful one for JVA. I hope we can do even better in the coming year. As always, your comments and suggestions are welcome.

Larry Bergman, Editor

Prove your GD&T (Y14.5) Knowledge -

Geometric Dimensioning and Tolerancing Professional (GDTP) Certification. ASME GDTP Certification provides the means to ensure proficiency in the understanding and application of the geometric dimensioning and tolerancing principles as in the ASME Y14.5 standard.

Certified individuals include: Design Engineers, Drafters, Metrologists, CAD/CAM/CAE Specialists, Manufacturing Engineer, Quality Engineers, Checkers, Process Engineers.

Contact Bill Nothofer, PH: 212-591-8033, or Email: nothoferw@asme.org, Website: www.asme.org/cns/accreditation.

*Bill Nothofer
ASME International*

2002 ASME International Design Engineering Technical Conferences & Computers and Information in Engineering Conference

September 29–October 2, 2002
Le Centre Sheraton Hotel • Montreal, Quebec, Canada



- 22nd Computers and Information in Engineering Conference
- 28th Design Automation Conference
- 7th Annual Design for Manufacturing Conference
- 14th International Conference on Design Theory and Methodology
- 27th Biennial Mechanisms and Robotics Conference
- Symposium on Integrated Systems Design
- Symposium on Engineering Design and Culture
- Special Panel on Risk-Based Design: Realities and Challenges

TECHNOLOGY TRANSFER TUTORIAL PROGRAM

Sunday, September 29th—Select engineering experts are offering conference attendees an exciting program of tutorials, specially tailored to industrial attendees (additional fees apply). Learn about the latest developments in design, manufacturing and mechanisms. Detailed descriptions are available on the conference web site.

WHO SHOULD ATTEND

The 2002 ASME DETC & CIE Conference will attract a wide variety of engineering professionals:

- Mechanical Design Industrial Practitioners: A program of workshops and tutorials for technology transfer will complement the technical program of hundreds of papers addressing the latest developments in the areas of vibration and noise, mechanical design, and information technology.
- International Mechanical Design Community: Special recognition will be made of papers contributed by cooperating technical societies who co-sponsor the program.
- Mechanical Engineering Researchers: The conference is a premier forum for peer-reviewed presentation of the latest research findings. Conference papers may be submitted simultaneously for potential publication in ASME transactions journals.
- Mechanical Engineering Educators: Educators and practitioners are particularly encouraged to attend.

General Conference Chair

Prof. Kazem Kazerounian
Department of Mechanical Engineering
The University of Connecticut
Tel: (860)486-2251
Fax: (860)486-5088
Email: kazem@enr.uconn.edu

Technical Program Chair

Prof. Jahangir Rastegar
Department of Mechanical Engineering
The State University of New York
Tel: (516) 632-8314
Fax: (516) 632-8544
Email: Jahangir.Rastegar@sunysb.edu

Visit the conference web sites for more information and registration:

**www.asme.org/conf/detc02/
or www.caip.rutgers.edu/ASME2002/org.html**

Announcement and Call for Papers

The 2003 ASME International Design Engineering Technical Conferences and the Computers and Information in Engineering Conference (IDETC/CIE) September 2-6, 2003 in Chicago, Illinois At Downtown Marriott



General Conference Chair:

Prof. Ahmed Shabana

Department of Mechanical Engineering
University of Illinois at Chicago
842 West Taylor Street
Chicago, Illinois 60607-7022
Tel: (312) 996-3600 Fax: (312) 413-0447
E-mail: shabana@uic.edu

General Conference Program Chair:

Prof. Tom Royston

Department of Mechanical Engineering
University of Illinois at Chicago
842 West Taylor Street
Chicago, Illinois 60607-7022
Tel: (312) 413-7951 Fax: (312) 413-0447
E-mail: troyston@uic.edu

Paper due date: January 24, 2003

Acceptance notice: March 28, 2003

Final submission due: April 25, 2003

*Please see the web site for mailing address of the paper review chairs for each conference: www.me.uic.edu/detc2003
For inquiries concerning general conference arrangements, please contact the general conference chairman and program chairman.
For inquiries concerning an individual technical conference, please contact the respective chairperson.*

The 2003 ASME International DETC/CIE consists of the following conferences:

19th ASME Biennial Conference on Mechanical Vibration and Noise

Conference chair: Prof. Ahmed Shabana

Department of Mechanical Engineering
University of Illinois at Chicago
842 West Taylor Street
Chicago, Illinois 60607-7022
Tel: (312) 996-3600 Fax: (312) 413-0447
E-mail: shabana@uic.edu

29th Design Automation Conference

Conference chair: Prof. Georges Fadel

Department of Mechanical Engineering
Clemson University
202 Fluor Daniel EIB
Clemson, SC 29634-0921
Tel: (864) 656-5620 Fax: (864) 656-4435
Email: gfadel@ces.clemson.edu

23rd Computers and Information in Engineering Conference

Conference chair: Dr. Ashwani K. Gupta

University of Maryland
Department of Mechanical Engineering
College Park, MD 20742
Tel: (301) 405-5276 Fax: (301) 314-9477
E-mail: akgupta@eng.umd.edu

8th Design for Manufacturing Conference

Conference chair: Prof. S.K. Gupta

Department of Mechanical Engineering
University of Maryland
College Park, MD 20742
Tel: (301) 405-5306
E-mail: skgupta@eng.umd.edu

15th International Conference on Design Theory and Methodology

Conference chair: Prof. Clive L. Dym

Department of Engineering
Harvey Mudd College
Claremont, CA 91711-5990
Tel: (909) 621-8019 Fax: (909) 621-8967
Email: clive_dym@hmc.edu

9th International Power Transmission and Gearing Conference

Conference chair: Dr. David Lewicki

U.S. Army Research Lab—NASA Glenn Research Center
21000 Brookpark Rd.—M.S. 23-3
Cleveland, Ohio 44135 USA
Tel: (216) 433-3970 Fax: (216) 433-3954
Email: david.g.lewicki@grc.nasa.gov

16th Reliability, Stress Analysis and Failure Prevention Conference

Conference chair: Prof. Erol Sancaktar

Polymer Engineering
University of Akron
Akron, OH 44325-0301
Tel: (330) 972-5508 Fax: (330) 258-2339
Email: erol@uakron.edu

Committee Reports

Design Automation Committee

The current organization of the committee is as follows: Chair—John E. Renaud, Conference Chair—Alejandro Diaz, Paper Review Chair—Georges Fadel, International Paper Review Chair—Kenji Shimada, Past Chair—Judy Vance.

The 27th Design Automation Conference (DAC) held in Pittsburgh, coincided with the terrible tragedy of September 11. Conference attendees will no doubt always remember the crowd of attendees surrounding the hotel's lobby televisions and watching the tragedy unfold in real time. For those of you who are among the many that have experienced personal loss, please accept my heartfelt sympathies.

Every year the Black and Decker Company sponsors the DAC Best Paper Award. I want to applaud this year's winners Dr. K.K. Choi and his student Byeng D. Youn of the University of Iowa for their paper "Hybrid Analysis Method for Reliability-Based Design Optimization." Please join me in commending Dr. Choi for donating his \$500 award to the September 11th relief fund on behalf of the Design Automation Committee.

The conference was very well attended. We held 36 sessions where 149 papers were presented. In odd calendar years, the conference is pleased to host a track of sessions devoted to the field of mechanism design and theory. The mechanisms track featured six sessions, including two on compliant mechanism design and a special symposium on Mechanisms for Medical Applications that featured twelve papers in three sessions. I want to thank Karim A. Malek for serving as mechanism's liaison. I would also like to thank Hiroshi Yamakawa (Pacific Rim Papers Chair) and Samir Ben Chaabane (European Papers Chair).

We were pleased to co-host plenary speaker James Antaki of the University of Pittsburgh and AntakaMatics, Inc. Dr. Antaki's presentation on the "Design of Spare Parts for the Human Body" provided a detailed look at the use of design automation and optimization in application to a truly multidisciplinary system, an artificial heart. His presentation focused on the daunting task of the replacement of deteriorated, or damaged body parts. This is particularly true for the development of cardiovascular devices. Jim shared some of the history, challenges and recent accomplishments in the field of artificial organ design. We also sponsored one tutorial "Friction Induced Vibration and Noise", presented by Kambiz Farhang of SIU.

We are currently planning our program

for the 2002 DAC to be held in Montreal. Information about the 2002 Design Automation Conference can be found at <http://www.me.washington.edu/~asme-da/2002DAC/>.

John E. Renaud, Chair

Special Committee on K-12 Awareness in Design

Thank you to all of you who visited Elementary, Middle, and High Schools during Engineer's Week. This is something each of us can also do during the rest of the year. The following are some interesting web sites for you to review when preparing for your next visit to your local schools.

www.asme.org/education/precollege
www.eweek.org
<http://kids.msfc.nasa.gov>
<http://jfg.girlscouts.org/Why/sciact/stactive.htm>
www.discoverengineering.org/eweek/index.html

Are you interested in organizing a Girl Scout badge workshop at your factory or local science museum? Lockheed Martin Aeronautics Company recently sponsored a badge workshop at the SciTrek Science Museum in Atlanta. Junior Girl Scouts earned their Aerospace badge. The Cadette and Senior Girl Scouts worked on Interest Project career requirements. Contact me, and I can share with you our plans and lessons learned to help you get started with your own workshop. It is a very rewarding opportunity for both the Engineers and Girl Scouts.

Kathy Jacobson, Chair

DED Student Affairs Committee

The Committee's major activity this past year began at the National Design Conference in Chicago March 4-7, 2001.

A request was made to the DED Executive Committee for approval and financial support to create a DED Student Center web page. The web page has been completed and is now linked to the Design Engineering Division's homepage:

<http://www.asme.org/divisions/ded/index.html>. The Purpose of the DED Student Center is to create a significant presence on the DED homepage that is informative and attractive to students.

The DED Student Center seeks to: welcome students, educate students about your Design Division, inform students about the DED technical activities, inform students about DED sponsored contests competitions, and to add exciting graphics and animations to the DED website that appropriately promote engineering

design and the DED. We encourage you to visit the DED Student Center- if you have any comments or suggestions send them along to the Student Affairs Chair (pierrel@fit.edu) and who knows you may even learn a few things about your own Division!

The Student Affairs Committee actively seeks out opportunities to involve and serve students. We do this by performing various projects such as: creating and maintaining the DED Student Center website or by serving on the ASME Student Design Contest Committee (this committee is responsible for creating and conducting ASME's annual student design contest):

<http://www.asme.org/students/Competitions/designcontest/index.html>.

If projects such as these appeal to you, we encourage you to become active on the committee by contacting the Chair, Pierre Larochelle, at the email address above.

Pierre M. Larochelle, Chair

Design Theory and Methodology

The Thirteenth International Conference on Design theory and Methodology was held September 9-12, 2001 in Pittsburgh. Conference Chair Janet Allen did a superb job of organizing the conference. Paper Chair Spencer Magleby reported 63 papers submitted and 37 accepted. DTM again ran a single track of sessions, with an average attendance on Monday of over 90. The Xerox/Design Research Institute Best Paper Award was presented to "Product Development Process Modeling Using Advanced Simulation" by Soo-Haeng Cho and Steven D. Eppinger. The committee would like to acknowledge Xerox for their generous and continuing support of this award.

The Design Theory and Methodology Committee is looking forward to the Fourteenth DTM Conference in Montreal. 2002 Conference Chair is Spencer Magleby from Brigham Young University and Paper Chair is Clive Dym from Harvey Mudd College.

Robert Paasch, Chair

RSAFP Committee

The Reliability, Stress Analysis, and Failure Prevention (RSAFP) Committee of the Design Engineering Division participated in 2001 International Mechanical Engineering Congress and Exposition with a focus on threaded and riveted connections, composites, the design process, as well as the application of FEA techniques in those arenas. Four sessions

Committee Reports continued

were organized, and 15 papers were presented in these sessions. Many of the presenters came from overseas countries including Japan, Germany, Belgium and Uzbekistan. The sessions of the RSAFP program were entitled:

Bolted and Riveted Connections: Chair:

Dr. E. Sancaktar; Vice-Chair: Dr. T. Sawa;

Adhesive Joints: Chair: Dr. E. Sancaktar; Vice-Chair: Dr. T. Sawa;

General RSAFP and Design Problems: Chair: Dr. E. Sancaktar; Vice-Chair: Dr. T. Sawa;

Composite Materials and Components: Chair: Dr. T. Sawa; Vice-Chair: Dr. E. Sancaktar.

Twelve papers presented in that program were contained in the Proceedings cd-rom for the Congress.

The RSAFP Committee will be participating at the IMECE 2002, as well as at the International Design Engineering Technical Conferences to be held in Chicago, Illinois, September 2-6, 2003. Call for papers for these Symposia can be found at <http://www.poly-eng.uakron.edu/Sancaktar.htm>

Erol Sancaktar, Chair

Power Transmission and Gearing Committee

David Lewicki of the U.S. Army Research Laboratory, NASA Glenn Research Center is the new chairman of the Power Transmission and Gearing Committee. Thanks to Jon Mancuso, former chairman, on his efforts in the past couple years. The Power Transmission and Gearing Committee is participating in the 2003 Design Engineering Technical Conference, Chicago, Illinois, September 2-6, 2003, with its 9th International ASME Power Transmission and Gearing Conference.

Top gear and transmission researchers from around the world attend this conference providing access to their latest work and time for individual discussion. The website for additional information of the conference is: <http://asme gear.eng.ohio-state.edu/>. Congratulations to Neil Anderson, past chairman of the Power Transmission and Gearing Committee. Neil has recently been elected to ASME Fellow.

David Lewicki, Chair

TCVS Activities

In 2001, the TCVS (Technical Committee on Vibration and Sound) held meetings on March 4 (in Chicago) and September 11 (in Pittsburgh during the 2001 IDETC).

At the March meeting, the committee voted on the following. New members—Jeff Dohner (renewed; Sandia Lab), Shirley Dyke (Washington University), Brian Feeny (Michigan State), and Sotirios Natsiavas (Aristotle University, Greece) were elected to serve a three-year term from July 1, 2001 to June 30, 2004. Den Hartog Award—Professor Y. K. Lin (Florida Atlantic University) for contributions to the field of random vibration. Myklestad Award—Dr. V. I. Mel'nikov (Bolgoliubov Laboratory of Theoretical Physics, Russia) for development of the "Melnikov Technique" in nonlinear vibration. The awards were presented at the Vibration luncheon during the 2001 IDETC. The past year was very busy for TCVS in connection with the preparation of the 2001 IDETC and the organization of sessions for IMECE. Our main activities are summarized as follows.

2001 IDETC and Vibration Conference:

The 2001 IDETC was successful with papers presented in a wide spectrum of the design discipline. As part of the Vibration Conference, three plenary keynote lectures were delivered: "Random Vibration Theory: Its Development and Present Status" by Den Hartog Award recipient, Y. K. Lin; "Can the Mechanical Engineer Ignore Nonlinear Phenomena?" by A. Nayfeh (Virginia Tech); "Inner Ear Dynamics" by Professor Charles Steele (Stanford University). Also, Myklestad Award recipient, Dr. Mel'nikov, was invited to deliver a lecture on "Some Recent Achievements in Nonlinear Dynamics".

IMECE Activities:

TCVS sponsored two symposia in 2001: "Vibration and Control of Mechanical Systems" (9 sessions) organized by A. Luo, H. Rahnejat, and H. Hamidzadeh; "Friction/Vibration Phenomena" (2 sessions) organized by K. Farhang. Proposals for 2002 symposia on "Fluid-Structure Interactions", "Active Control of Vibration and Noise", and "Dynamics, Acoustics, and Simulation" have been received and about 15 sessions have been requested.

2003 IDETC:

Preparations for the 2003 IDETC and Vibration Conference are underway. The Conference Chair, A. Shabana (University of Illinois, Chicago), has selected the conference venue to be at the Downtown Chicago Marriot on Michigan Avenue. K. W. Wang (Penn State) and J. Renaud (Notre Dame) are the Conference Vice-Chairs, T. Royston (University of Illinois, Chicago) is the Program Chair, and R. Parker (Ohio State) is the Program Vice-Chair. Professors Shabana and Royston will be responsible for local arrangements. A conference web site has been set up at www.me.uic.edu/DETC2003.

2001 Design Show:

TCVS sponsored three sessions in the Design Show during the National Manufacturing Week in Chicago. Sessions 1 and 2 were on FEA and SEA: Analysis, theory, and applicability, with two presentations: "Finite Element Analysis, A Method for Analyzing Structural and Acoustic Environments" by Greg Moore of MSC Nastran, and "Statistical Energy Analysis, A Design Evaluation Tool for Noise and Vibration Engineering" by Michael Bloor of Vibro-Acoustic Sciences, Inc. Session 3 was on the applications in structural dynamics with one presentation "Applications in Structural Dynamics at Sandia National Laboratories" by Clay W. C. Fulcher of Sandia Labs.

The home page of TCVS is at www.me.psu.edu/tcvs where information on committee members, meetings, minutes, and other activities are posted.

Chin An Tan, Chair

Vehicle Design Committee

The Vehicle Design Committee is strongly committed to its objectives that are to facilitate dissemination of advanced knowledge and new technologies related to vehicle design among the members of the mechanical engineering community through organizations of symposia and other information exchange mechanisms. The advances in the areas of Vehicle Dynamics, Stability and Control of Light and Heavy Vehicles, Vehicle Design, Off-road Vehicles Technology, Vehicle Control and Navigation Systems, Vehicle/Road and Vehicle/Human Interactions, Crash Research and Occupant Safety, Weigh in Motion Technology, and Intelligent Transport Systems will be specifically emphasized.

The Vehicle Design Committee has organized a symposium entitled "Advanced Vehicle Technologies" held during The International Mechanical Engineering Congress and Exposition on November 11-16, 2001 in New York, USA. Over 25 Papers on innovative analytical, computational, and experimental investigations in control, dynamics, and design of full vehicle systems and their sub-assemblies, were presented. Four sessions were organized: Session 1 Advanced Design Methods in Vehicle Development (organized by: Dr. Massimiliano GOBBI (Technical University of Milano, Italy)); Session 2 Driver-Vehicle-Environment Interactions (organized by: Dr. Ion Stiharu (Concordia University, Canada)); Session 3 Advances in Chassis Dynamics and Control (organized by: Dr. John Wagner (Clemson University, USA)); and Session 4 Advanced Vehicle Simulation and Virtual Proving Ground (organized by:

Committee Reports continued

Dr. Brian Gilmore (Deere and Company Technical Center, USA)). The four successful sessions included papers from the Academic, Governmental, and Industrial organizations.

The Vehicle Design Committee is organizing a symposium entitled "Advanced Vehicle Technologies" to be held during the International Mechanical Engineering Congress and Exposition in New Orleans, Louisiana, November 17-22, 2002, USA. 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.

Moustafa.El-Gindy, Chair

Mechanisms Committee

The web site of the ASME Mechanisms Committee has been updated and moved to the following address.

<http://www.asme.org/divisions/ded/mechcomm/> The web page contains the ASME DETC information from 1996 to 2003, the ASME Mechanisms Committee awards, the Design Engineering Divisional awards, ASME Society awards, the meeting minutes and the bylaw of the Mechanisms Committee, and other related document. Any comments and suggestions are welcome. Thanks to Dr. Charles Wampler for updating the web page.

Lung-Wen Tsai, Chair

2002 ASME International Mechanical Engineering Congress & Exposition

<http://www.asme.org/congress/>
November 17 - 22, 2002

Hilton New Orleans Riverside/
Ernest Morial Convention Center

Join thousands of engineers in New Orleans in November 2002 and stay current with advances in nanotechnology, photonics, biomedical technology, energy, electrical systems design, engineering business management, transportation, MEMS, and other rapidly changing fields. Expect a technical program that embraces change and reflects the multidisciplinary approach required to meet the demands of today's workplace.

At technical sessions, forums, tutorials, workshops, exhibits, tours, and social events, you can network, learn new techniques, receive updates, and explore the perspectives of engineers from different companies, industries, and countries around the world.

ASME International and Unicomm Launch R&D Expo as Part of Annual Congress

ASME's International Mechanical Engineering Congress to launch the inaugural R&D Expo, the first event focused exclusively on Research and Development will take place November 18-20, 2002, at the Ernest Morial Convention Center in New Orleans, La, with world-class trade show management company Unicomm, LLC.

The R&D Expo provides businesses with the tools to economically accelerate product development within budgetary realities to harvest increased Return on Investment (ROI).

Exhibit categories include: Analysis Instruments, Instrumentation Products, Automation & Robotics, Basic Lab Equipment, Chemicals, Chromatography, Gas & SFC, PLC/IC Separation, Computer Hardware & Peripherals, Software, Research Contractors, Education Materials, Testing Equipment, Electronic components, Filtration Equipment, Mechanical Devices, Meters & Monitors, Microscopes & Imaging Equipment, Lasers and Electro-Optics, Vacuum Equipment, Safety Devices, and many more.

According to the National Science Foundation, R&D spending in the USA exceeded \$287 billion last year and is growing at an annual rate of more than 10 percent. With both government and industry investing heavily in new discovery, the R&D process is becoming increasingly visible at the enterprise level. As the Association of University Technology Managers reports, invention disclosures are up 59 percent and new patent applications have increased 164 percent during the past eight years.

Join us in New Orleans for the first exciting show specifically focusing on the R&D industry!

Deepest Sympathies

It is our deepest regret that we announce the passing of Joseph Duffy on March 12, 2002 in Gainesville, FL. He is survived by his loving wife Anne, daughter Janet, son John, grandchildren, extended family, and many close friends from around the world. He was born in Birkenhead England in 1937, the first child of a ship plater and a housewife. He attended St. Anselm's College and the University of Liverpool, where he earned a B.Eng in Mechanical Engineering with first class honors in 1959 and a Ph.D. in Mech. Engr. in 1963. He served at several universities, including Liverpool Polytechnic, and Rensselaer Polytechnic Institute. Appointed as a professor at the University of Florida in 1979, he became Director of the Center for Intelligent Machines and Robotics, and a Graduate Research Professor in 1985 and 1986, respectively.

He received numerous honors for his contributions to the field of Mechanical Engineering. He was made a Fellow of the ASME in 1990 and was honored with the Machine Design Award in 2000 for "eminent achievement in the field of machine design" and "... for long-term promotion of research by extensive publications in journals and conferences together with the publication of three books containing a widely referenced body of knowledge on the geometry and kinematics of mechanisms and robotics." He authored or co-authored over 150 papers, several of which were recognized with best paper awards. He co-wrote three books, was awarded a patent, and gave over 30 invited lectures around the world. His career culminated with his service at the National Reconnaissance Office in Virginia for several years developing spacecraft subsystems. He had a unique ability to translate his academic creativity into engineering solutions. This gift gained him the great admiration and respect of his peers. His most recent achievements included co-hosting the Ball 2000 Symposium at Trinity College in Cambridge England and receiving a Director's Innovative Initiative Award granted by the National Reconnaissance Office and Harris Corporation.

His passion for his craft was surpassed by his love for his family and his deep faith. Both were with him at the end and provided him great comfort. His grandchildren were his pride and joy. He is watching them now and will do so forever. He will be remembered for his love of life, his sense of humor, and his great generosity. He will be deeply missed.

Harvey Lipkin

DED TECHNICAL COMMITTEE CHAIRS

Design Automation Committee

John E. Renaud, Ph.D.
Aerospace and Mechanical Engineering
Department
380 Fitzpatrick Hall
University of Notre Dame
Notre Dame, IN 46556-5637
Phone: (219)631-8616
FAX: (219)631-8341
Email: John.E.Renaud.2@nd.edu

Design Education

Jesa Kreiner, Ph.D., P.E.
Department of Mechanical Engineering
California State University, Fullerton
800 N State College Blvd
Fullerton, CA 92834
Phone: (714)278-3726
FAX: (714)278-3876
Email: kreiner@fullerton.edu

Design for Manufacturing

Robert H. Sturges, Ph.D.
Industrial and Systems Engineering
Virginia Polytechnic Institute
111 Durham Hall
Blacksburg, VA 24061
Phone: (540)231-7420
FAX: (540)231-3322
Email: sturges@vt.edu

Design Theory and Methodology

Robert K. Paasch, Ph.D.
Mechanical Engineering Department
204 Rogers Hall
Oregon State University
Corvallis, OR 97331
Phone: (541)737-7019
FAX: (541)737-2600
Email: paasch@engr.orst.edu

Fastening and Joining

Anthony Luscher, Ph.D.
Department of Mechanical Engineering
Ohio State University
206 West 18th Ave
Columbus, OH 43210-1107
Phone: (614)292-4474
FAX: (614)292-3163
Email: luscher.3@osu.edu

Mechanisms

Lung-Wen Tsai, Ph.D.
Department of Mechanical Engineering
University of California
Riverside, CA 92521
Phone: (909)787-2128
FAX: (909)787-2899
Email: lwtsai@engr.ucr.edu

Power Transmission and Gearing

Dr. David G. Lewicki
U.S. Army Research Laboratory at NASA
Glenn Research Center, Lewis Field
21000 Brookpark Road, MS 23-3
Cleveland, OH 44135
Phone: (216)433-3970
FAX: (216)433-3954
Email: david.g.lewicki@grc.nasa.gov

Reliability, Stress Analysis and Failure Prevention

Erol Sancaktar, Ph.D.
Department of Polymer Engineering
The University of Akron
Akron, OH 44325-0301
Phone: (330)972-5508
FAX: (330)258-2339
Email: erol@uakron.edu

Vehicle Design

Moustafa El-Gindy, Ph.D.
Pennsylvania Transportation Institute
The Pennsylvania State University
201 Research Office Building
University Park, PA 16802
Phone: (814)863-7930
FAX: (814)865-3039
Email: mxe15@psu.edu

Vibration and Sound

Ray P. S. Han, Ph.D.
Department of Mechanical Engineering
The University of Iowa
3026 Seamans Center
Iowa City, IA 52242-1527
Phone: (319)335-5683
FAX: (319)335-5669
Email: ray-han@uiowa.edu

DED EXECUTIVE COMMITTEE, 2002-2003 Chair

Thomas R. Chase, Ph.D.
Mechanical Engineering Department
University of Minnesota
111 Church St SE
Minneapolis, MN 55455
Phone: (612)625-0308
FAX: (612)625-9395
Email: trchase@me.umn.edu

Vice Chair / Treasurer

Bahram Ravani, Ph.D.
Department of Mechanical & Aero-
nautical Engineering
University of California, Davis
Davis, CA 95616
Phone: (530)754-6130
FAX: (530)752-4158
Email: bravani@ucdavis.edu

Technical Committee Executive

Krishna C. Gupta, Ph.D.
Mechanical Engineering Department
University of Illinois at Chicago
M/C 251
842 W Taylor St ERF 2055
Chicago, IL 60607-7022
Phone: (312)996-3427
FAX: (312)413-0447
Email: kcgupta@uic.edu

DETC Executive

Subhash C. Sinha, Ph.D.
Department of Mechanical Engineering
Auburn University
201 Ross Hall
Auburn, AL 36849-5341
Phone: (334)844-3325
FAX: (334)844-3307
Email: ssinha@eng.auburn.edu

Secretary

Shapour Azarm, Ph.D.
Mechanical Engineering Department
3145 Martin Hall
University of Maryland
College Park, MD 20742-3035
Phone: (301)405-5250
FAX: (301)314-9477
Email: azarm@eng.umd.edu

NDEC Chair

Richard A. Hirsch, P.E.
8220 Marcie Drive
Baltimore, MD 21208-1944
Phone: (410)486-4058
Email: hirschr@asme.org

Past Chair

Daniel Segalman, Ph.D.
Sandia National Laboratories
PO Box 5800, Mail Stop 0847
Albuquerque, NM 87184-0847
Phone: (505)844-0972
FAX: (505)844-9297
Email: djsegal@sandia.gov

Staff Support

Fred M. Goldfarb
Manager, Technical Programs
ASME International
Three Park Avenue, MS-22W3
New York, NY 10016-5990
Phone: (212)591-7470
FAX: (212)591-7671
Email: goldfarbf@asme.org

DED Web Site

[http://www.asme.org/
divisions/ded](http://www.asme.org/divisions/ded)