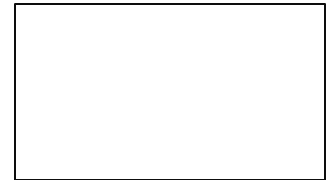


The American Society of Mechanical Engineers - CAM Section  
3741 Woodford Ave. NW Apt. 4  
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American Society of Mechanical Engineers



## CAM NEWSLETTER

Canton - Alliance - Massillon Section  
April, 2002 Volume 53, Issue 7

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CAM Section Homepage:

<http://www.uakron.edu/asmecam.html>

### Board or Committee Members

Mondays, at either 6:00 p.m. or 6:30 p.m. at Stark  
State College ATC Room 114

April 15, 2002

May 20, 2002

(location and time subject to change)

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**Unemployed Members**

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ASME International

# CAM Section News

Volume 53 Issue 7 April, 2002

## April Program: Technology Today

April 15, 2002

Belden Village Holiday Inn

For the April dinner meeting we are pleased have two employees of The Timken Company speak on their experiences with today's advanced technologies. Krich Sawamiphakdi, Senior Research Specialist – Thermal Treatment, will speak on various finite element modeling approaches for manufacturing processes. Praveen Pauskar, Development Specialist – Manufacturing Technology, will speak on cold forging in the United States. See page 2 for more information on our two speakers and their topics.

<b>Agenda:</b>	5:30 – 6:00	C.A.M. Section Board Meeting
	6:00 – 6:30	Arrival and Social
	6:30 – 7:15	Dinner
	7:15 – 7:30	ASME Honors and Awards
	7:30	Start of Technology Today Program

As seen in the agenda, the evening will also serve as the Honors and Awards night. ASME Membership Certificates will be given to C.A.M. Section members celebrating their 25<sup>th</sup> year and 50<sup>th</sup> year ASME anniversaries.

The meal choices will be marinated chicken and baked scrod. The cost will be \$10.00 for ASME members and guests, and \$8.00 for students. Contact John Dougherty, C.A.M. Section Chairman, at 330-471-2066 for reservations and/or additional information.

## Take me out to the ball game ...



Your C.A.M. Section of ASME is sponsoring a day out at the ballpark! Come watch the Akron Areos take on the Norwich Navigators on May 19, 2002 at Canal Park in Akron. Festivities will begin at 1:05pm with a pre-game all you can eat "picnic in the park". Game time is at 2:05pm. The cost for lunch and game will be \$12.00 for adults and \$9.00 for kids 12 and under. Reservations are needed by May 3, 2002. See the colored insert for detailed event and reservation information.



## **KRICH SAWAMIPHAKDI**

Krich Sawamiphakdi is a senior research specialist in Thermal Treatment, R&D Manufacturing Technology, Timken Research, The Timken Company. His research interest is in the area of applications and development of computer programs using finite element method and advanced numerical method in steel casting processes, bar and tube making processes, metal forming processes, surface improvement processes and thermal treatment processes. His interest is also in the development of future plan for applying research to develop new products and processes as well as to improve of existing products and processes. He has been active in the area of finite element analysis for more than twenty-five years. He has been involved in a manufacturing process modeling since he joined The Timken Company in 1986. He has published more than thirty technical papers and received Meritorious Award for best bar products & forgings paper in the Mechanical Working and Steel Processing conference in 2000.

He received a bachelor degree in Civil Engineering from Chulalongkorn University, Thailand in 1967, MSCE and Ph.D. in Civil Engineering from The University of Akron. He is a member of ASME, ASM International and Iron and Steel Society.

### **Presentation Topic: Finite Element Modeling of Manufacturing Processes**

The presentation will include general overview of different finite element approaches for manufacturing processes. Each approach has its own advantage and disadvantage in applying to a certain manufacturing process. Several examples of bulk forming and incremental forming processes will be presented to demonstrate the applications of finite element analysis in verifying and/or improving the design of process tooling and processing parameters. Some analysis results were compared to available in-plant data and/or experimental data. The comparison of analysis results and computational time using different finite element approaches will be presented to demonstrate their advantages, disadvantages and limitations. The presentation will also include the animation of manufacturing modeling.

## **PRAVEEN PAUSKAR**

Praveen Pauskar began his career with The Timken Company in 1998. He graduated from the Indian Institute of Technology, Bombay with a Bachelor of Technology degree in Mechanical Engineering in 1991. Subsequently, he earned M.S. and Ph.D. degrees in Industrial and Systems Engineering with specialization in Metal Forming from the Ohio State University. Praveen has been an active member of the scientific community over the past several years authoring several technical papers in metal forming. Among his recognitions for contribution to metal forming research are: the Silver Anvil Award by the Forging Industry Association in 1994, the Ohio State University Presidential Fellowship in 1998 and the best research paper awards in the Bar Steel and Forging Division of the Mechanical Working and Steel Processing Conference in 1998 and 2000.

### **Presentation Topic: Cold Forging in the United States of America – State of the Art, Trends and Future Developments**

The cold forging industry in the United States has undergone a series of transformations over the years. Many of the changes have been due to advances in technology, changing market conditions and competition from overseas and competing processes. This paper discusses the state of the art in cold forging technology in the United States as well as some of the changes that have taken place over the last decade in light of changing market conditions and demands. The paper also includes a discussion of recent advances in materials, machine tool technology, automation, emerging forming technologies, tools for process simulation the impact these advances have had towards attaining the ultimate goal – that is forming complex parts and hard to form materials to net shape.

### **Voices Of Innovation**

A new daily public radio program, "Voices of Innovation," launched by the American Association of Engineering Societies with generous support from ASME, will feature some 200 engineers in 2-minute programs that explore and celebrate the world of engineering. The program will begin airing in April 2002. To be considered for one of the programs, engineers need to submit a story idea form, which is available at [www.voicesofinnovation.org](http://www.voicesofinnovation.org).

### **Contribute to the ME Today Newsletter!**

If you are interesting in publishing a non-technical article that will be helpful to other mechanical engineers, 0-10 years in the workforce, please submit your proposals and ideas to [youngengineers@asme.org](mailto:youngengineers@asme.org).

Mail or fax proposals to: ASME International, Cheryl Hasan, Three Park Avenue New York, NY 10016. Fax: 212.591.7437

### **Partners In Mechanical Engineering Grants Available!**

Sponsored by the board on Minorities and Women (BMW), the Partners in Mechanical Engineering program provides funding on a first-come, first-served basis to ASME Sections for projects and/or activities that support collaboration with local sections or chapters of organizations that support women and underrepresented minority groups in engineering.

Grants range from \$500 to \$1000 depending upon the size and scope of the project or activity. Proposals may be submitted at any time of the year.

To request a copy of the application form, contact Mary James Legatski in the ASME Washington Center at 202-785-7380 or at [legatskim@asme.org](mailto:legatskim@asme.org). An application may be filed on-line at [www.asme.org/bmw/partners.html](http://www.asme.org/bmw/partners.html).

## **Continuing Education Institute in Service To You**

Introduced in 1995, ASME International's In-Company Programs have grown exponentially. Our success is due to our loyal customers who turn to ASME to receive information that keeps them ahead of their competition and their employees on the cutting edge of innovation. ASME has created the Continuing Education Institute (CEI) to expand this aspect of professional development while offering the same quality programs.

In order to meet the ever-changing needs of today's engineering professionals, CEI periodically surveys industry leaders in order to develop groundbreaking new courses and innovative tracks. Thus, CEI adds value and expands its diverse inventory of continuing education courses. CEI is working diligently to adapt to the needs of the engineering industry offering courses ranging from development and maintenance of bioprocess equipment to statistical tolerancing.

The quality of CEI's courses is the reason companies continue to use them as a valuable tool to reach their goal of improved productivity. Benefits include expert training from industry leaders who will provide hands-on and problem-solving activities to further enhance learning. In addition, In-Company Programs provide flexibility and maximum cost effectiveness to meet organizational needs.

CEI continues to respond to our customers and members by upgrading current courses and developing new ones to meet the changes in industry. Customers can choose from a wide range of topics, which include ASME codes and standards, design and manufacturing, engineering management and more. ASME In-Company Training Programs can be tailored to meet each individual company's needs. For more information on ASME courses, please contact Elite Rubin at 212-591-7752 or via e-mail at [rubine@asme.org](mailto:rubine@asme.org)

## Here's Your Opportunity to Propose Individuals for Society Office

The future success of the Society depends on the effective utilization of the knowledge and abilities of its individual members. If the Society is to improve or refine its present programs, it is essential that the members continue to select new officers who are capable, dedicated individuals with exceptional leadership qualities.

The 2002 Nominating Committee, consisting of 38 voting members, urges that you submit your proposals now. As part of its selection process, the Committee will study each of the written proposals submitted on behalf of all proposed nominees for office and will interview the proposed nominees and their supporters.

The Nominating Committee will select 13 nominees for Vice Presidential positions for the 2003-2006 term. There will be five Regional Vice President positions (I, VII, IX, XI and XIII); three Engineering Vice President positions (Engineering & Technology Management, Environment & Transportation, and Int'l Gas Turbine Institute); two Codes and Standards Vice President positions (Conformity Assessment, and Safety Codes & Standards); and three other Vice President positions (Engineering Education, Government Relations and Member Interests & Development).

The Nominating Committee will select three nominees for the member-at-large positions on the Board of Governors for the 2003-2006 term, and a nominee for President for the 2003-2004 term.

If, as a member of ASME, you are interested in submitting a proposal for any one of the above elective offices, please contact Rita M. Patterson, secretary, 2002 Nominating Committee, at 409-772-9071, rita.patterson@utmb.edu. The nomination package is available at <http://www.asme.org/honors> or copies may be obtained from Gilda A. DiTullio at ASME Headquarters at 212-591-7736, ditulliog@asme.org. The deadline for submitting completed proposal forms is April 15, 2002.

### ASME MEMBERSHIP RENEWAL BONUS!!

All ASME Student Members who graduated 2001 will receive a complimentary copy of *The Unwritten Laws of Engineering*.

Fully revised and updated edition of the 1944 classic, serves as a crucial compilation of "house rules," or a professional code. It addresses three areas: what the beginner needs to learn at once, laws relating chiefly to engineering executives, and purely personal considerations for engineers. Packed with contemporary examples, this new volume is a must for those entering the engineering field or those interested in improving their professional effectiveness.

<http://www.asmeny.org/cgi-bin/WEB017C?594215+0001+00+00000+801624>

Edited by: James G. Skakoon and W.J. King.

### **2001-2002 Member-Get-A-Member Campaign**

Help ASME International serve the needs of the mechanical engineering community by sponsoring new members. With each new member, you recruit, 50 percent of the first year's dues will be spent on scholarships for mechanical engineering students.

For complete program details, log onto <http://www.asme.org/membershipdrive>

### **Influence the Future of Engineering – Become a Mentor!**

It's easy to sign up. Just go to [www.asme.org/ementoring](http://www.asme.org/ementoring) and click on "Become a Mentor."

For more information about mentoring, or to view the mentor already online, please visit [www.asme.org/ementoring](http://www.asme.org/ementoring) or contact Deidra Hackley, coordinator, student programs at [hackleyd@asme.org](mailto:hackleyd@asme.org) or 212-591-7852.

**Into bicycling? Like to design and build things?**

## **Challenge Your Ingenuity and Endurance in the HPV Challenge!**

For the first time, the Human Powered Vehicle competition (HPV) will be held in two locations in 2002. The HPV competition will be held in Reno, Nev., April 26-28 and in Blacksburg, VA, May 17-19. Teams are encouraged to participate in either or both locations.

HPV is a real-world experience in product development – and an opportunity for an engineering capstone design project that requires a full spectrum of engineering skills from design to manufacturing and testing. Each team completes an in-depth report, and presents a summary of the vehicle design and testing for judging by experienced engineers. Teams demonstrate the capability and safety of the vehicle through sprint and endurance events.

Designs may include one or more entries in three vehicle classes – single-rider, multiperson and utility vehicles. Competition awards include cash prizes for best overall scores in each of the three vehicle classes. Prizes may be awarded to both the student teams and the Mechanical Engineering departments they represent.

The rules for the competition are posted at, [www.asme.org/hpv](http://www.asme.org/hpv). More details and registration information for each location will be posted on the site as they become available. If you are thinking of participating, or just love good competition, mark the dates on your calendar and make plans to attend!

## **‘The Art and Science of SIX SIGMA’ – Webcast**

<http://www.iil.com/technology/sixSigma.htm>

ASME Professional Development has negotiated a \$100 discount for ASME members on ‘The Art & Science of SIX SIGMA.’

If you'd like to learn how Six Sigma has delivered unprecedented returns to hundreds of organizations, this 3-part satellite learning series is a must see. Led by Dr. Mikel J. Harry in his first ever satellite broadcast, the program will lay out the proven road map for deploying ‘Six Sigma’ in any organization. Listen to the best practices and lessons learned from DuPont Corporation, and Ford Motor Company, as their Corporate Champions join Dr. Harry during the second part of the series to share insights into their respective Six Sigma Initiatives. Take advantage of the opportunity to bring ‘Six Sigma’ practices to your organization.

**Date and time:** April 9-11, from 11a.m.-2:00pm

**Price for all three sessions:** \$650-\$100 ASME Member Discount = **\$550**

**CEU Credits:** .9 **PDU Credits:** 9 **ASQ RU Credits:** .9

**To get your discount,** use coupon number (ASME01) on the IIL registration page

For more information on business and project management courses and programs from the Continuing Education Institute, log on to

<http://www.asme.org/education/disted/distance.htm>