



David Shapiro, Co-Editor

Dave Smith, Co-Editor

# Newsletter

## TECHNICAL PRESENTATION

*In cooperation with*

Design Engineering Technical Chapter

**Topic:** Parametric Design and Optimization of  
The Disk Forging Process

**Speaker:** Dr. Ramesh Gambheera (GE GRC)

**Thursday, January 16, 2003**

6:00 PM to 8:45 PM

**Meal:** At the Surf and Turf in Scotia

Members: \$18.00

Non-members: \$20.00

Please indicate your choice of dinner when making your reservation to attend this event.

**Contact:** Please contact Fred Willett at [Fwillett@pti-gt.com](mailto:Fwillett@pti-gt.com) by January 14<sup>th</sup> if you plan to attend.

**Directions:** The Turf Tavern is located in Scotia, NY. The location is 40 Mohawk Avenue (Route 5), Scotia, NY. Exit 4C from 890 will take you to Route 5, a left turn at the first light will take you over the Western Gateway Bridge into Scotia. The Turf Tavern is on the right side of the road.

### ASME International Hudson-Mohawk Section Officers

Chair: Fred Willett (518) 347-0271 [Fwillett@pti-gt.com](mailto:Fwillett@pti-gt.com)

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## TECHNICAL PRESENTATION

**Topic:** The disk forging process is a complex & costly process with significant challenges in process forming. This talk will focus primarily on the use of parametric design & optimization of die design to meet the process constraints. An innovative approach combining a solid modeler/process simulation tool using a commercial optimizer is presented. Application to a typical industrial disk forging problem is also discussed.

**About the Speaker:** Dr. Gambheera is currently a senior staff engineer at the Energy and Propulsion lab at GE's Global Research Center (GRC) in Schenectady, NY. His research work includes development of advanced design and analysis techniques for industrial problems. Prior to joining GE, Dr. Gambheera worked as a senior research engineer at Hibbitt, Karlsson and Sorensen Inc (ABAQUS) at Providence, RI. He received his Ph.D. from Purdue University in West Lafayette, IN and his M.S. from Indian Institute of Technology, Madras, India.

**Dinner Selections:** Chicken Florentine  
Roast Top Sirloin of Beef  
Baked Scrod

## Section Newsletter

The Hudson Mohawk newsletter will be posted at:  
[www.asme.org/sections/hudson-mohawk](http://www.asme.org/sections/hudson-mohawk).

## Capitol District FIRST Robotic Team

Team 250 (Capital District Robotics) just completed their inter-team competition. You would be quite amazed at the ingenuity of our team members. They had to design and build small autonomous robots to negotiate an obstacle course designed by the adult mentors. This was done to prepare the team members for the grueling six weeks for designing and building the robot for regional and national competitions.

Our support consists of both financial and technical assistance. The kickoff meeting for the 2003 competition will consist of a video presentation on Saturday, January 4, 2003, with a team meeting planned for Sunday,

January 5. The regional competition will be held over the weekend of March 14-15 in Hartford, CT, giving the team six weeks to design and build their robot.

For additional information on how you can get involved, visit the website at: [www.usfirst.org](http://www.usfirst.org) or [www.team250.org](http://www.team250.org). You can also contact Ms. Deb Saulsbery at: [d.saulsbery@team250.org](mailto:d.saulsbery@team250.org).

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## Message from the Chair

Happy New Year to all! We have an excellent program schedule set up to finish out the 2002-2003 year. We'll have a joint meeting with AIAA in February, a Tour of Benet Labs (Watervliet Arsenal) in March, an ASME Distinguished Lecturer in April, and a special guest speaker for our Honors & Awards dinner in May. Our February and April meetings will be held in conjunction with the student sections at RPI and Union College, respectively. For those members with children considering an engineering career, I urge you and your young guests to attend. Prospective engineers will have a rare chance to interact with a broad range of people in the field: students, faculty, practicing engineers, and retired engineers.

ASME is seeking applications for congressional fellowships. Once chosen as a congressional fellow, an ASME member selects his or her congressional assignment through interviews with congressional offices, with assistance from the ASME government relations staff, and with reference to the issues identified in the Public Policy Agenda of ASME.

All Fellowship Applicants must be:

- A U.S. citizen
- ASME member at the time of application.

The following credentials are encouraged:

- at least five years of professional experience;
- advanced engineering degree;
- professional engineer registration; and
- public policy experience.

For further information, check out [www.asme.org](http://www.asme.org) or call me.

The Council of Engineering (COE) now administers the Calvin W. Rice Lecture Award. Nominations for this prestigious award will be reviewed and a Lecturer selected by a committee composed of the Chair of the COE Honors and Awards Committee and two Technical Group Vice Presidents. Please contact me if you would like more information. Nominations are due in January.

I look forward to seeing you at one of our upcoming meetings.

Fred T. Willett  
Chair  
Hudson-Mohawk Section

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**THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS  
HUDSON MOHAWK SECTION**

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