



ASME International

Volume 10 Issue 1

The Bay Connection

San Francisco Section News

Newsletter of the San Francisco Section of the American Society of Mechanical Engineers

Sept/Oct 2001

San Francisco Section of
The American Society of Mechanical Engineers
Presents:

Biomechanics

Occupant Kinematics & Injury Biomechanics, Specifically Related to Automotive Trauma & Vehicular Rollovers

About the Topic

Biomechanics is the application of the principles of engineering, physics and medicine to the human body. In the study of biomechanics, one examines the properties and injury mechanisms of soft and hard tissues, the design of medical devices, occupant kinematics, and safety issues, among other things. The presentation will cover occupant kinematics and injury biomechanics, specifically related to automotive trauma and vehicular rollovers.

About the Speakers

Elaine R. Serina, Ph.D., P.E., is a Managing Engineer in biomechanics, accident reconstruction, and engineering design at Piziali and Associates, Inc., in San Carlos. Dr. Serina received her B.S., M.S., and Ph.D. in mechanical engineering at the University of California – Berkeley, with an emphasis on biomechanics. She has done extensive research in the areas of ergonomics, medical devices, kinematics of human movement, and analytical modeling of tissues.

Elizabeth H. Raphael, M.D., F.A.C.E.P., is a clinical Assistant Professor in the Department of Surgery, Division of Emergency Medicine, at Stanford University Hospital and a Managing Engineer in biomechanics at Piziali and Associates, Inc., in San Carlos. Dr. Raphael received her M.D. from Wayne State University School of Medicine and a S.B. in Mechanical Engineering from MIT.

Event Information

Where: Scott's Jack London Square (Harbor View B dining area)
2 Broadway, Oakland, California 94607
(510) 444-3456

When: Wednesday, October 3, 2001

Schedule of events:

6:00 p.m. – 6:30 p.m. No-host cocktails

6:30 p.m. – 7:30 p.m. Dinner

7:30 p.m. – 8:30 p.m. Presentation

8:30 p.m. – 9:00 p.m. Question and Answer Session/Closing Remark

For RSVP & Direction Information refer to page 3. (cont'd on next column)

Menu Choices : 1. Grilled salmon alla bella, 2. Chicken Piccata (Each entrée comes with a house salad, dessert, and tea or coffee)
COST: Cost: \$30.00 for ASME members. \$35.00 for non-members. \$20.00 for ASME student section members.

Calendar of Events

Sept 15 th	Geometric Dimensioning & Tolerancing (San Jose State) - details on page 2
Oct 3 rd	Biomechanics (Oakland)
November 7 th	Amtrak
December 5 th	A Day at the Capital (Sacramento)
December 11 th	Richmond Refinery Tour
January 8 th	ASEE EDGD Workshop @ UC-Berkeley (details on page 3)
February	Distinguished Speaker - TBD
March	Crab Feed Meeting @ UC-Berkeley

Chairman's Message

We are starting a new season. Judging by the many comments that were received from the San Francisco Section members, it is clear that last season was a great success. This was mostly due to the leadership that Dr. Manuchehr Shirmohamadi provided, as well as the valuable contributions that were made by the executive committee and the committee chairpersons.

Some thought that if they nominated a new chairman with the same first name as Dr. Shirmohamadi, as rare as it is, it might lead to a better chance for success. Although I have shortened my name to Manuch, the validity of the theory remains to be seen. The more relevant factor that leads to a much higher chance for success is that many of the same capable and experienced members of the previous committee are continuing to devote their energy and time to managing the affairs of our San Francisco Section of ASME.

We met recently and found volunteer leaders for each activity. Each committee would benefit tremendously, if you would take the time to review the list (provided in this newsletter), find one or two areas that are dear to your heart, and contact the committee chairperson to share your views. With your comments and participation, each committee can operate as a team, and we all know that teams are more effective than individuals. (cont'd on page 2)

INSIDE THIS ISSUE

- 2001 ASME Mechanical Engineering Congress
- ASEE EDGD Workshops
- Pre-College Action Grants Available
- Professional Development Course in San Jose

ENGINEERS WEEK 2002

Now is the time to start planning your Engineers Week 2002 activities. Why not plan a visit to the local elementary, middle, or high school in your community to talk about the rewards of being an engineer? Videos with corresponding posters and classroom handouts targeted to each age group are available through InfoCentral.

- *Engineering is For Everyone is aimed at elementary school students*
- *Mothers of Invention is aimed at middle school students*
- *Career Encounters is for high school students*

*Call InfoCentral today to order your videos:
1-800-843-2763*

(Chairman'scont'd from cover page)

We also have discussed a renewed and more energized effort to communicate and work closely with the student sections in our area. We feel, strongly, that students can benefit from a more frequent association with the professional members. At the same time the more experienced members can gain from the new and innovative ideas provided by the students. We are contacting each student section to encourage their ASME president and the faculty advisor to attend our executive committee meetings.

There are two areas that require a lot of energy to manage and are most visible to the membership. One area is the newsletter and the other area is the "programs" such as dinners and tours. We need your opinion for both areas.

We have come up with a format for this newsletter and are considering future options to distribute it electronically to those who can and are interest in receiving it as such. Regular mailings

would continue for those who do not or cannot receive it through e-mail. We also seek short and relevant articles and announcements from the membership.

As far as the programs are concerned, we have taken your last year's comments and are working hard to identify and select speakers and tours for our monthly presentations. Due to timing requirements, we have lined up the first few events, but would be very interested in finding out what areas are of most interest to you. I would encourage you to contact our program chairman or any other member of our working group to suggest ideas for our meetings. We also would like to have as many of you attend the dinner meetings as possible. Good speakers need good audiences.

The Bottom Line: We are excited about the new season and are volunteering our time and energy to make it one that fits your needs. Please help us to be successful in our mission to serve you.

Manuch Nikanjam

Professional Development Course in San Jose

Geometric Dimensioning & Tolerancing

Date: Saturday, September 15, 2001

Time: 9:00 am – 4:00 pm
(Registration begins at 8:30 am)

Place: San Jose State University
Engineering Bldg.

FEE: \$80 ASME Members, \$120 Non-ASME Members
\$30 ASME Student Members
(Fee includes printed notes & refreshments)

The seminar is presented in four sections. The first section begins by asking and answering the questions: (1) what is the science of GD&T, (2) what is it for, and (3) how does it work. Section two presents detailed definitions of the functional rules of the current standard and illustrates their application. Section three is dedicated to investigating those tools and rules in the standard, which fail to perform useful functions, and must therefore be avoided or used with great caution. Section four illustrates how to "encode the function of each feature of a CAD model using Smart GD&T methods.

For more information and registration call: ASME Western Regional Office at (800) 624-9002 or contact davisl@asme.org.

2001 Gustus L. Larson Memorial Award Recipient

ASME International has selected Professor Arunava Majumdar of the Department of Mechanical Engineering, University of California-Berkeley as the 2001 Gustus L. Larson Memorial Award Recipient. This award was established by Pi Tau Sigma and the American Society of Mechanical Engineers in 1973 to honor engineering graduates who have demonstrated outstanding achievements in mechanical engineering within ten to twenty years following graduation.

The award consists of a \$1,000 honorarium, certificate, and travel supplement for two days. Formal presentation of the award is scheduled to take place at the Members and Students Luncheon, Wednesday, November 14, during the ASME International Mechanical Engineering Congress and Exposition, November 11-16, 2001, at the New York Hilton Hotel & Towers in New York.

Special Workshops held in conjunction with the 56th Midyear Meeting and Conference of the ASEE Engineering Design Graphics Divion (EDGD)

Workshop # 1

Specification of Regular and Curved Surfaces for Fabrication:
Workshop on Geometric Dimensioning and Tolerancing
9 am – 5 pm, Sunday, Jan 6, 2002, Berkeley Marina, Radison Hotel

Workshop # 2

3 D Solids Modeling Software:
Hands-on Workshop Using the Most Popular Professional Modeling Software
9 am – 4 pm, Wednesday 9 January 2002, Rooms 2105-2107 Etcheverry Hall, UC Berkeley Campus

\$100 Registration fee for each workshop, fee waived for registered attendees of the EDGD Midyear Meeting.

Information: Contact Prof. Dennis K. Lieu
(510) 642-4014, dlieu@newton.berkeley.edu

Meeting Website: www.me.berkeley.edu/edgd-midyear

ASME International San Francisco Section

ARTICLE C.5.1.2 of the Constitution of the American Society of Mechanical Engineers (revised to March 18, 2000) states: The provisions of the Constitution and By-Laws and Society Policies established by the Board of Governors of the Society shall govern the procedure of all units of the Society but no action or obligation of such units shall be considered an action or obligation of the society as a whole. This provision shall be imprinted on any publication issued by such units

S. F. Executive Committee for 2001 - 2002

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Pre-College Action Grants Available!

Up to \$1,500 To Team With Teachers and Schools.

The Program Funds ASME Sections & Student Sections on a competitive basis for innovative projects and activities that directly support the efforts of Pre-College classroom teachers in science, math, education and technology.

Log onto www.asme.org/educate/k12 for application criteria and review.

Deadline for applications is Sept. 30, 2001

(Biomechanics...cont'd from cover page)

RSVP is Required

Reservations are on a first-come, first-serve basis. Please contact Paul Cruel to confirm 1) the number of people attending and the 2) choice of entrée selected no later than Wednesday, September 26, 2001. Attendance is limited to 30 people. You will be billed \$30 if, after making RSVP, you are unable to attend the meeting. This is due to Scott's firm attendance policy. Thank you in advance. For making RSVP please refer to,

Voice: (510) 741-6134, Email: hammadurabi@medscape.com,

Or Voice: (415) 721-4478, Email: Faulkner100@cs.com

Direction

From San Francisco or the North: Take 580 towards Hayward to 980; exit 11th/12th Street.

Go straight on Brush, left on 5th, right on Broadway, then four blocks to Jack London Square.

From the South: Take 880 North to the Broadway exit; left on Broadway, then four blocks to Jack London Square.

From the East: Take Highway 24 to 580 towards Hayward, to 980 (downtown Oakland). Take the 11th/12th Street exit, go straight on Brush, left on 5th, right on Broadway, then four blocks to Jack London Square.

We value your contributions. Please submit your comments and suggestions or any news items to the San Francisco Section of ASME through Chair's email address.

Interested in volunteering with the San Francisco Section?

Contact the Chair directly, attend an executive committee meeting or talk to a committee member at one of our events. For voicemail, call (415) 721-4478 or contact us through our website at www.sf.asme.org and get involved!



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Focus on Nanotechnology

Explore the design, synthesis, manipulation, and control of micro- and nano-scale systems with an array of technical sessions and special presentations, including:

Nano-Structures and Nano-Scale Devices
Miniature Energy Systems
Nano-and Micro-scale Modeling and Technology for Electronic Packaging
Nano-and Micro-Mechanics
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Advances in Applied Mechanics for New Technology
For More Information, see:

<http://www.asme.org/congress>