



American Society of Mechanical Engineers - Fox Valley Section

Crashworthiness of Locomotives

Presenter: Anand Prabhakaran, VP-Engineering, Sharma & Associates, Inc.

**IIT Rice Campus, Wheaton, IL
Wednesday, October 1, 2008**

Given the mass and strength of a locomotive compared to most other obstacles that are likely to be in its path, few of us give much thought to the protection of a locomotive in a crash. However, given the seriousness of some potential on-track collisions, crashworthiness of locomotives and protection of locomotive engineers is an important consideration in locomotive design. Modern locomotives have substantial crashworthiness built into their cabs, underframes, and fuel tanks. This presentation provides an introduction to the topic and discusses locomotive crashworthiness standards as well as, recent research and testing that have been conducted by the Federal Government. Related videos from locomotive crash tests and crashworthiness simulations will be presented. Crash resistance of passenger rail cars will also be briefly addressed.

Anand Prabhakaran has been working with Sharma & Associates, Inc. since 1995. He has a Master's degree in Structural Engineering and specializes in train equipment and rail infrastructure engineering. Sharma & Associates, Inc. provides product development, design, R&D, vehicle dynamics, analysis & testing services to the railroad and heavy engineering industries.

LOCATION AND DIRECTIONS:

Illinois Institute of Technology Rice campus
201 East Loop Road
Wheaton, Illinois 60187-8489
www.rice.iit.edu

From I-88(East-West Toll way), take the Naperville Road exit. At the traffic light, turn left onto Naperville Road and continue north for 1½ miles to Rt. 56/Butterfield Road. Turn right onto Rt. 56/Butterfield Road and proceed 1/4 mile to the first traffic light (East Loop Road). Turn left on to East Loop Road, (Big Bowl Restaurant and Phillip's 66 Gas station on the corners); the campus will be on your right about a block north of Butterfield Road.

SCHEDULE: 5:30 to 6:30PM Registration & Light Dinner of sandwiches, 6:30 PM Presentation

COST: \$10.00 payable at the door, by check or cash

RESERVATIONS:

Send e-mail to mmurray@packereng.com with the subject 'ASME Meeting' and include your name, phone number, ASME membership number, company name, address. If you do not have e-mail access, call (630) 505-5722, and leave a message stating this is a reservation for the ASME Meeting on October 1 and include the above information.

DEADLINE:

5 PM on Friday, September 26, 2008. Please cancel if your plans change.

Young Engineer Career Development Panel – November 2008

Fox Valley Section (FVS) is planning a career development event directed at both Young Engineers and Veteran Engineers. The event will be held November 12 at IIT Rice Campus. The theme of the event is “Balancing your technical and managerial skills” and will feature discussions from various industry and academic representatives focusing on career growth and development, industry trends and direction, best practices, etc. If there are any topics of interest that you would like to hear discussed at this event, please let us know. Also, if you would like to be part of the panel or would like to recommend somebody else to the panel, please let us know.

Clean up of Your Email Addresses

The Fox Valley Section currently has 844 members and our records show that 154 (about 18%) of you don't have an email address and a untold number of you have changed your internet provider or internet address. As most of you know, we have been sending most of our communications to you by email. It is your responsibility to revise your email address in the ASME database. To do this you can e-mail the changes to infocentral@asme.org; or call Information Central at 800-843-2763.

Local Section Donations

Thank you to all of the members who made voluntary donations to our section when you renewed your membership. Please be assured your donations will be put to good use in supporting our local programs.

Section Participation

We always welcome your input on FVS programs and section activities. Please feel free to contact us with your suggestions, comments, and concerns about the same. We look forward to your ideas and participation. Also, we are looking for volunteers who can help us with various programs and activities. Please feel to contact any of the section officers for additional information.