



Thursday, September 17, 2009  
Oak Ridge Chapter of ASM International's  
*Fellows Night*

## "Design Challenges of the International Space Station."

**Dr. Daniel P. Dennies**  
*Boeing Company*

Assembly of the International Space Station (ISS) sprang to life in 2000 with multiple launches of the United States Space Shuttle fleet and Russian launch vehicles. This activity included the arrival of the first crew, Expedition One, on 2 November 2000. The presentation covers system and partner information concerning the International Space Station Program, the current status of the ISS assembly, and some of the major design challenges of this self-contained system, including gravity, power, air and water.

### *Speaker Bio*

Dr. Daniel P. Dennies is a Technical Fellow for the Boeing Company and has 30 years experience as a metallurgist and performing failure investigations. He authored the book "How to Organize and Run a Failure Investigation," released in September 2005. The majority of his career has been in the aerospace industry working on projects such as the Space Shuttle Main Engine, the National Launch System, the National Aerospace Plane, expendable launch systems like Delta and Titan, B1, C-17, the International Space Station, and, most recently, proprietary projects and the Ares program. He has been a member of ASMI for 32 years and is a 2002 ASM Fellow. He is also the recipient of the 2004 Allan Ray Putman Award from ASMI. Dan received the 2005 Orange County Engineering Council Prestigious Engineering Achievement Award. He is also a 1999 honoree of the coveted NASA Silver Snoopy Award. He was a founding Materials Mentor for the Eisenman Materials Camp for Students in 2000 and has attended a Materials Camp for Students as a Materials Mentor each year since. He is the originator and coordinator of the Materials Camp for Teachers in LA, which was started in 2004. Dan is active on the local level as member of the LA Chapter executive board. He is also active on the national level as a Board of Trustee for the ASMI Society and a past Board of Trustee for the ASMI Education Foundation. Dan has a BS in Metallurgical Engineering from California Polytechnic State University, an MS in Materials Engineering from USC and a PhD in Materials Science and Engineering from University of California at Davis. In addition, he has an MBA from Pepperdine University and he is a California State Registered Professional Engineer.

### **Registration (Guests Welcome!)**

Cost: \$20; Season pass: \$75

ASM Fellows: Dinner \$15;

Season pass \$65  
(tonight only)

Students: Free (RSVP by Sept. 11<sup>th</sup>);  
\$5 if RSVP late

**RSVP by noon on Friday Sept. 11<sup>th</sup>**

Contact:: Jun Qu

(865)-576-9304 or qujn@ornl.gov

### **Rothchild's Conference Center**

8807 Kingston Pike  
(865) 690-0103

Thursday, September 17<sup>th</sup>

### Schedule

5:30 pm– Social Hour

6:30 pm– Dinner

7:30 pm– Talk

Oak Ridge Chapter of ASM International  
2009-2010 Technical Calendar

**MARK YOUR CALENDER !**

**October 22<sup>nd</sup>:** National Involvement Night

*Frauke Hogue*

“Failure Analysis”

@ Rothchild Catering Center

**November 19<sup>th</sup>:** Student Poster Night

@ Venue TBD

**January 21<sup>st</sup>:** Guest Night

*Peter J. Blau*

“The Nature of Friction: From nano-films to earthquakes”

@ Rothchild Catering Center

**February 18<sup>th</sup>:** Industry Night

**March 25<sup>th</sup>:** Past Chair’s Night

*Ann Marie Sastry – tentative*

Topic: Advanced Battery Storage

@ Rothchild Catering Center

**April TBA:** Educational Symposium

**May 20<sup>th</sup>:** Awards Night

*Rogelio Sullivan - tentative*

“Future Renewable Electric Energy Delivery and Management”

@ Rothchild Catering Center