

Project Development Committee Updates:

New Materials PDC: Several project teams were formed within the different sections of the PDC. Please review the following and if you are interested in being a part of any of these teams, please let the St. Louis office know so you can be added to their rosters.

Metals:

- Hydriding Resistant Titanium Alloy

Ceramics:

- Remote Visual Inspection of Ceramic Vessels
- Performance Data on Ceramic Fiber Insulation
- Chemical Degradation of Refractories in Reactive Gas Service

Polymers:

- Flame Sprayed/Field Coatings
- Elastomer Specifications
- Thin Film Insulating Coatings
- Embedded Sensors

Project Team Updates:

Modernization of ASTM Specifications for Unalloyed Titanium (151-02): MTI has successfully completed Project 151 after a four year effort.

Member companies have recognized that titanium Grade 2 and its variants are nearly always 15-16% stronger than the ASTM Standards and ASME Codes require. MTI hired Jim McMaster, who accumulated more than 5000 data points demonstrating this fact. As a result of Jim's and the Project Team's efforts, the ASME issued a code case recognizing higher strength ('H') grades of titanium that have increased allowable stresses. This Code Case (2497-2) applies to titanium Grades 2, 7, 16, and 26.

At its meeting last month, ASTM also accepted these grades and will publish it in hard copy form in the 2007 issue of the applicable standards. These standards will be available online in the next few months.

Based on an estimate of \$100 million dollars in pressure vessel purchases using these grades of titanium, the industry should save approximately \$8 million dollars annually, and the use of the ASME Code should become more attractive to operating companies outside of North America.

Rouging (167-05): This Project Team did not meet at TAC 90, but the equipment has been installed and data collection has begun. A brief interim report has been posted on the MTI website for those who might be interested in the progress of this project.

TAC Meeting Presentations:

- **Hexavalent Chromium & the Use of Corrosion Resistant Materials:** Impact of OSHA's New PEL – Elisabeth Torsner/Outokumpu
- **Hurricane Damage:** A Panel Discussion on the Effects of Hurricane Damage to the Chemical & Petrochemical Industries – Panel Members:
 - Roger Armstrong/Monsanto
 - Al Cilluffa/Monsanto
 - Tim Jenkins/Akzo Nobel
 - Bob Sherwood/Air Products
- **ASSET (Alloy Selection System for Elevated Temperatures)** – Randy John/Shell Global Solutions

MTI Meeting Attendance Statistics:

- 74 Attendees
- 36 Member Companies
- 2 Potential Members
 - KBR – Jim Sievert
 - Virginia Sealing Products – James Frew & Paul Malgee
- 3 Special Guests:
 - Prof. Joseph Newkirk – School of Materials, Energy & Earth Resources – University of Missouri-Rolla
 - Z. (John) Zhou – Alberta Research Council Inc.
 - Roland Goodman – American Petroleum Institute

Upcoming MTI Meetings:

- **TAC 91** – October 23-26, 2006 at Dallas-Addison Marriott Quorum by the Galleria, Dallas, TX
- **TAC 92** – February 26 – March 2, 2007 at San Luis Resort, Galveston, TX
- **EuroTAC 2007** – April 2007 – Date and location to be determined
- **TAC 93** – June 4-7, 2007 – Minneapolis Airport Marriott, Minneapolis, MN

New MTI Member – P.A. INC.

DR/TAC: Otis Galloway

Address: 6626 Gulf Freeway, Houston, TX 77087

Tel: 713-540-4900

API Meeting Report – Spring Conference May 3-5,

2006: The SCC investigation of carbon steel in ethanol has found evidence of cracking in all grades of ethanol/gasoline mixtures. API is concerned that when filling stations start adding E85 pumps and put this mixture in existing tanks that some failures might occur. No cracking has been found in 10% methanol/gasoline mixtures.

The Inspection Subcommittee of API will be working to add recommended inspection techniques to the current API 571 document that describes failure mechanism types. The Materials and Corrosion Subcommittee will retain approval over the types of failures. This document should also be of interest to the chemical industry.

Some instances of stress relaxation cracking have been observed recently and a review of the recommended procedures for controlling this failure mechanism has been proposed. The TNO project results remain confidential to the JIP that sponsored the work.

Metal dusting in continuous catalytic reformers has been reported by Shell. API was interested to know if the work done by MTI would be applicable to environments in the refining industry. This was referred to the MTI Metal Dusting steering committee.

New Oak Ridge Representative: During the past several years, Dr. Peter Angelini has been a welcome and regular attendee at MTI meetings. Peter represented the Oak Ridge Lab and served as a liaison with Dr. Sara Dillich at DOE headquarters in Washington.

In May, Dr. Angelini retired from Oak Ridge. Dr. Sharon Robinson has been appointed to take Peter's responsibilities. Because the changes were very recent, Sharon was not able to attend the June MTI meeting but is planning to attend future meetings.

The appointment of Sharon Robinson to take Peter Angelini's duties is good news for MTI. It means that MTI will continue its long term relationship with Oak Ridge and that DOE will continue to have a regular liaison person with MTI and the Oak Ridge Laboratory.

MTI Fellows:

- **Reception** to honor MTI Fellows is planned this evening from 5:30 to 7:30 p.m. at the Palm Court of the Millennium Hotel. The following MTI Fellows will be present: Bob Puyear and Galen Hodge.
- **Congratulations** to recent MTI Fellows Award Winner – Bob McTamaney of Carter, Ledyard & Milburn!
- **Special MTI Fellows Area** was added to the MTI website. Click on the navigation button, "MTI Fellows," before logging into the Member Area to obtain a nomination form or to read about our MTI Fellows:
 - Sheldon Dean (2001)
 - Paul Dillon (2001)
 - George Elder (2004)
 - Galen Hodge (2001)
 - Greg Kobrin (2005)
 - Bert Krisher (2001)
 - Bob McTamaney (2006)
 - Warren Pollock (2004)
 - Bob Puyear (2002)

Retirement News: Bob Sherwood of Air Products plans to retire at the end of June. Best of luck and many thanks to Bob for his long service and dedication to MTI. Beginning in July, Bob may be contacted at his home email, flexane@aol.com.

Did You Know?

- You can print the Member Directory from the MTI website. Log into the Member Area and click on the Directory tab. Under the "Member Companies" heading, click on the "Browse Directory" link and then again on the "Print Members" link.
- There is a Calendar tab in the Member Area of the MTI website. This calendar lists the dates and locations of MTI's future meetings. It also includes some other meetings that may be of interest to our MTI members.

MTI website: <http://www.mti-global.org>

MTI Publications: To order MTI publications, click on the Store tab of the MTI website. Be sure to place your order from the MTI Member Order Area to receive the member discount of 50% off the list price. You may also submit an order by contacting Mike Ross at 304-522-0086 or rossbus@aol.com.