

Executive Summary

This is... This is a summary of the 103rd AmeriTAC meeting and related meetings held at the Marriott Inner Harbor, Baltimore, MD, on 25-27 October 2010.

Attendance & Participation

Here are the attendance and participation statistics for the meeting:

- 79 Total Attendance including Project Team, Project Development Committee, and AmeriTAC Meetings.
 - 30 Member Companies represented
 - 3 Potential Members
 - Edlon – Lisa Desai and George Hanna
 - Tricor Metals – James Fletcher, Pete Philippon, and Chuck Young
 - W. L. Gore – John Czerwinski and Vijay Garikipati
 - 5 Guests
 - Aginova Inc. – Ashok Sabata
 - Argonne National Laboratory – Ken Natesan
 - SFSA – Malcolm Blair
 - Sonomatic Inc. – David Dechene
 - Vision Point System – Brad Shaw
 - 53 Forum Questions submitted and discussed
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Presentation – Wireless Devices in Plants for Tracking and Sensing

Ashok Sabata of Aginova gave a presentation titled “Wireless Devices in Plants for Tracking and Sensing.” Wireless technologies for monitoring and tracking in industrial environments have reached the maturity and cost point where their widespread use is possible. Sabata reviewed two different wireless technologies, RFID and Wireless Sensing. The selection of the technology is very much dependent on the application.

Presentation – Predicting Materials Performance Using Advance Data Analysis for US Navy Systems

Brad Shaw of Vision Points System gave a presentation titled “Predicting Materials Performance Using Advance Data Analysis for US Navy Systems.” Corrosion is one of the largest maintenance issues in terms of cost and time for the US Military. The US Navy laboratory system investigates new materials and maintenance procedures to reduce cost and maintain readiness for the US Marine Corps and US Navy. The purpose of this investigation was to validate the use of advanced data analytics to predict coatings performance based on laboratory and natural marine exposure testing. As a result, a Corrosion and Coatings Report and Data Depot (CCRDD) was created from coatings and corrosion reports/data by US Navy laboratories for the purpose of identifying improved materials, bench marking scientific models, recognizing the true qualifying performance metrics, and modeling the relationship between materials and their corrosion performance. This presentation was a summary of the results from this investigation.

2 Training Seminars were Conducted

These two special training seminars were held:

- **Statistical Analysis of NDE Data Training Seminar** – Becht Engineering completed their work on the NDE statistics project. This training session reviewed the project and trained members to use the statistical analysis spreadsheet tool.
 - **Manufacture of Today’s CRAs Seminar** – The 3-hour presentation/panel discussion discussed how recent changes in manufacturing processes for austenitic stainless steels affect their properties, microstructure, and surface quality.
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2 Projects Approved

The BOD approved and funded 2 projects:

- Extension of Data Retrieval Services (\$38K)
 - Casting Quality Prediction for 5%, 9%, and 12% Cr Alloys (\$10K)
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11 New Project Teams Formed

11 new potential project teams formed during AmeriTAC 103:

- Prediction and Detection of Hydride Formation in Titanium (pa)
 - Compliance with Imposed RBI (pb)
 - Design, Installation, Maintenance and Inspection of Plastic Lined Pipe (pc)
 - Embedded Sensors (pd)
 - Remote Monitoring via RC Helicopter (pe)
 - Inspection and Evaluation of Old Equipment – Lost Papers (pf)
 - Quantitative Methods to Evaluate Non-Metals (pg)
 - Evaluation of Tools Used in Other Industries like Medical, Security, etc. (ph)
 - Terahertz imaging – No. 2 (pi)
 - Static Dissipation of Fluoropolymer Linings (pj)
 - Permeation through Polymers (pk)
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Future Meetings

Here are the MTI meetings scheduled to date:

- AmeriTAC 104, San Antonio, 21-24 February 2011
 - FRP Training, Hong Kong, 14-15 April 2011
 - EuroTAC 2011, Leverkusen, 29-30 March 2011
 - AmeriTAC 105, St. Louis, 6-9 June 2011
 - AsiaTAC 2011, Shanghai, 21-23 September 2011
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Project Team Meetings

These 18 project teams met during AmeriTAC 103. Project numbers are in parentheses with alphabetic (ab) denoting potential projects and numerical (123-08) denoting funded projects.

- Advanced Corrosion Testing Design (op)
 - Data Retrieval Services Projects (189-08 and ol)
 - Demolition of Obsolete Equipment (197-10)
 - Duplex Alloy Microstructures (200-10)
 - Fabrication and Manufacturing Video Library (os)
 - Failure Analysis of FRP (np)
 - Fiber Insulation Properties (182-07)
 - Global FRP Standards Review (oh)
 - High Temperature Alloy Microstructure Atlas (192-09)
 - Hydride Formation in Alpha Titanium and Titanium Alloys (194-09)
 - Metals – Who Makes What (or)
 - Metal Dusting Projects (188-08 and 198-10)
 - NDE HD Alumina Bricks (oa)
 - Pneumatic Leak Testing of Heat Exchanger Tubing (199-10)
 - Rouging Phase 2 (187-08)
 - SiC Heat Exchanger Evaluation (oi)
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Project Development Committee Meetings

Project Development Committees (PDC match members' needs with new and existing technologies to identify new potential projects. These 4 PDCs met during AmeriTAC 103:

- Ceramics PDC
- Integrity and Condition Assessment PDC
- Metals PDC
- Polymers PDC