Tuesday, December 6, 2011 (Steering Committee and Board Members Only)

1:30 – 3:30 p.m.  CHTE Board Members Meeting  
Chairman’s Room, Campus Center

4:00 – 6:00 p.m.  ACRC Steering Committee Meeting  
Chairman’s Room, Campus Center

6:30 p.m.  Reception & Dinner (All Members)  
Higgins House, WPI Campus

Wednesday, December 7, 2011

7:30 a.m.  Registration and Breakfast  
Odeum A & B, WPI Campus Center

8:00 a.m.  Welcome – D. Apelian  
Opening Remarks from ACRC Chair – D. Weiss  
Opening Remarks from CHTE Chair – M. Nallen

8:45 a.m.  Corporate Presentations  
• Mercury Marine  
• Air Products

9:15 a.m.  Overview of the ACRC Research Portfolio – M. Makhlouf  
Overview of the CHTE Research Portfolio – R. Sisson

10:15 a.m.  Break

PLEASE NOTE:  
Combined Meetings are in black  
Items in blue refer to ACRC meetings  
Items in green refer to CHTE meetings
ACRC Project Presentations in Odeum A

10:30 a.m. Aluminum Nano-Composites for Elevated Temperature Applications
            (C. Borgonovo)

10:55 a.m. Friction Stir Processing of Aluminum Cast Alloys for High Performance Applications
            (N. Sun)

11:20 a.m. Predicting the Response of Aluminum Alloys to Heat Treatment
            (L. Wu)

11:45 a.m. High Performance Nano-Composites: Superior Weapons through Casting
            (M. Makhlouf)

12:00 p.m. Thermally Stable Casting Alloys
            (M. Makhlouf)

CHTE Project Presentations in Odeum B

10:30 a.m. Nitriding – Fundamentals, Modeling, and Process Optimization
            (M. Yang)

10:55 a.m. Carbonitriding – Fundamentals, Modeling and Process Optimization
            (Y. Xu, L. He)

11:20 a.m. Atmosphere vs. Vacuum Carburizing Fatigue Test Comparison
            (L. He, L. Zhang, Y. Wei)

11:45 a.m. NDT Testing for Hardness & Carburization Case Depth
            (L. Zhang, L. He)

12:00 p.m. Thermomechanical Processing of Light Alloys by Design – Applications of Computational Thermodynamics
            (D. Belsito)

12:30 p.m. Lunch in Odeum C, Campus Center

Luncheon Speaker: Mr. P. Morgan: "Morgan Construction Company: Revolutionizing the Rolling Mill Industry Worldwide"

The talk is followed by a tour of the exhibition in Gordon Library, WPI

2:00 – 3:00 p.m. Focus Group Meetings – Session I (see page 3)

3:00 – 4:00 p.m. Focus Group Meetings – Session II (see page 3)
4:00 p.m.  Reconvene in Odeum A-B
4:15 p.m.  Meeting Adjourns

Session I:  2:00 – 3:00 p.m.  Focus Group Meetings

| ACRC          | Friction Stir Processing of Aluminum Cast Alloys for High Performance Applications *(N. Sun and D. Apelian)*  
|              | *Chairman’s Room, Campus Center*  
|              | Predicting the Response of Aluminum Alloys to Heat Treatment *(L. Wu and M. Makhlouf)*  
|              | *Hagglund Room, Campus Center*  
| CHTE         | Atmosphere vs. Vacuum Carburizing Fatigue Test Comparison *(R. Sisson)*  
|              | *Mid-Century Room, Campus Center*  
|              | NDT Testing for Hardness and Carburization Case Depth *(R. Sisson)*  
|              | *Mid-Century Room, Campus Center*  

Session II:  3:00 – 4:00 p.m.  Focus Group Meetings

| ACRC          | Aluminum Nano Composites for Elevated Temperature Applications *(C. Borgonovo and M. Makhlouf)*  
|              | *Hagglund Room, Campus Center*  
| CHTE         | Nitriding – *Fundamentals, Modeling and Process Optimization* *(R. Sisson)*  
|              | *Mid-Century Room, Campus Center*  
|              | Carbonitriding – *Fundamentals, Modeling and Process Optimization* *(R. Sisson)*  
|              | *Mid-Century Room, Campus Center*  

WPI Campus Center - Meeting Rooms

Top Level:
- Odeum A, B, C
- Hagglund Room
- Mid-Century Room
- Peterson Room

Middle Level:
- Morgan Room

Bottom Level:
Taylor Room
Chairman’s Room