METAL PROCESSING INSTITUTE
ACRC/CHTE SPRING MEETING AGENDA
June 5-6, 2012

WPI Campus Center – Odeum A and B

Tuesday, June 5, 2012 (Steering Committee and Board Members Only)

1:30– 3:30 p.m. ACRC Steering Committee Meeting
Chairman’s Room, Campus Center

4:00 – 6:00 p.m. CHTE Board Members Meeting
Chairman’s Room Campus Center

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

Wednesday, June 6, 2012 (Campus Center)

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
  • Eck Industries
  • ThermoTool Corporation

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 – FINAL REPORT  
(N. Sun)

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

11:45 a.m.  Alternate Eutectic Systems for Aluminum Casting Alloys – NEW PROJECT  
(M. Makhlouf )

12:00 p.m.  Really Clean Aluminum – NEW PROJECT  
(D. Apelian)

12:15 p.m.  High Performance Nano-Composites: Superior Weapons through Casting  
(L. Wang)

CHTE Project Presentations in Odeum B

10:30 a.m.  Nitriding and Carbonitriding – Fundamentals, Modeling, and Process 
Optimization – FINAL REPORT  
(M. Yang, R. D. Sisson)

11:00 a.m.  NDT Testing for Hardness & Carburization Case Depth  
(L. Zhang, R. D. Sisson)

11:30 a.m.  Atmosphere vs. Vacuum Carburizing  
(R. D. Sisson)

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

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

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

| ACRC          | Alternate Eutectic Systems for Aluminum Casting Alloys – NEW PROJECT  
|               | (L. Wu, M. Makhlouf)  
|               | *Mid-Century Room, Campus Center*  
|               | Really Clean Aluminum  
|               | (S. Hudson and D. Apelian)  
|               | *Chairman’s Room, Campus Center* |
| CHTE          | Discussion on Selected Two New Projects  
|               | (R. Sisson)  
|               | *Hagglund 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)  
|               | *Mid-Century Room, Campus Center* |
| CHTE          | NDT Testing for Hardness and Carburization Case Depth  
|               | (R. Sisson)  
|               | *Hagglund Room, Campus Center* |

4:00 p.m.       Reconvene in Odeum A-B
4:15 p.m.       Meeting Adjourns
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