Tuesday, June 25, 2013 (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 26, 2013  Salisbury Laboratory, Room 115

7:30 a.m. Registration and Breakfast  
Salisbury Laboratory Lounge, 1st Floor

8:00 a.m. Welcome – D. Apelian  
Opening Remarks from ACRC Chair – K. Anderson  
Opening Remarks from CHTE Chair – M. Pershing

8:45 a.m. Corporate Presentations  
• ATEK Precision Castings, LLC  
• Surface Combustion

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 - Salisbury Labs, Room 105

10:30 a.m. Aluminum Nano-Composites for Elevated Temperature Applications – FINAL REPORT
(C. Borgonovo, M. Makhlouf)

11:00 a.m. Clean Aluminum Processing
(S. Hudson, D. Apelian)

11:30 a.m. Alternate Eutectic Systems for Aluminum Casting Alloys
(L. Wang, L. Wu, M. Makhlouf)

12:00 a.m. Thin Wall Castings – Casting Solutions for Readiness
(L. Wang, D. Apelian, M. Makhlouf)

CHTE Project Presentations - Salisbury Labs, Room 402

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

10:45 a.m. NDT Testing for Hardness & Carburization Case Depth
(L. Zhang, R. D. Sisson)

11:00 a.m. Atmosphere vs. Vacuum Carburizing Comparison
(L. Zhang, X. Cai, R. D. Sisson)

11.15 a.m. Improvements to Life of Alloys and Fixtures
(M. Yang and R. D. Sisson)

11:30 a.m. Heat Treat Energy Usage and Reduction Calculation
(Y. Lu and Y. K. Rong)

11:45 a.m. New Project Overviews (R. D. Sisson)
- Induction Tempering (10 minutes)
- Gas Quench Steel Hardenability Standard (10 minutes)

12:15 p.m. Lunch on WPI Campus Center Patio

2:00 – 3:00 p.m. Focus Group Meetings – Session I
Salisbury Labs, Rooms 406, 407, 402, 411

3:00 – 4:00 p.m. Focus Group Meetings – Session II
Salisbury Labs, Rooms 406, 407, 402, 411

4:00 p.m. Reconvene in Salisbury Labs, Room 115

4:15 p.m. Meeting Adjourns
### Session I: 2:00 – 3:00 p.m. Focus Group Meetings

| ACRC | Alternate Eutectic Systems for Aluminum Casting Alloys  
(L. Wang, L. Wu, M. Makhlouf)  
_Salisbury Labs, Room 406_  
Clean Aluminum Processing  
(S. Hudson and D. Apelian)  
_Salisbury Labs, Room 407_ |
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| CHTE | Heat Treat Energy Usage and Reduction Calculation  
(Y. Lu and Y.K. Rong)  
_Salisbury Labs, Room 402_  
Improvements to Life of Alloys and Fixtures  
(M. Yang and R. Sisson)  
_Salisbury Labs, Room 411_ |

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

| ACRC | Aluminum Nano Composites for Elevated Temperature Applications  
(C. Borgonovo and M. Makhlouf)  
_Salisbury Labs, Room 406_ |
|------|-------------------------------------------------------------------------------------------------|
| CHTE | NDT Testing for Hardness and Carburization Case Depth  
(L. Zhang and R. Sisson)  
_Salisbury Labs, Room 402_  
Induction Tempering  
Gas Quench Steel Hardenability Standard  
(R.D. Sisson)  
_Salisbury Labs, Room 411_ |