Tuesday, June 2, 2015

8:30 – 10:30 a.m.  **ACRC Steering Committee Meeting**  
*Chairman’s Room, Campus Center*

11:00 – 1:00 p.m.  **CHTE Board Meeting**  
*Taylor Room, Campus Center*  
*Lunch will be brought in (Working Lunch)*

11:00 -12:00 p.m.  **ACRC Steering Committee**  
Meet with ACRC Students (S. Kelly: Aluminum Scrap Project; A. Birt: Laser Assisted Cold Spray Project)  
Followed by lunch from 12:00 to 1:00 p.m.  
*Chairman’s Room, Campus Center*

1:00 p.m.  **Registration - Odeum A & B, Campus Center**

1:30 p.m.  
- Welcome and Updates – *D. Apelian*  
- President’s Welcome – *L. Leshin*  
- Opening Remarks from ACRC Chair – *K. Anderson*  
- Opening Remarks from CHTE Chair – *S. Ferdon*  
- Remarks and video re 30th (ACRC) and 15th Anniversary (CHTE) Celebration - *D. Weiss and M. Nallen*

2:15 p.m.  
- Overview of the ACRC Research Portfolio – *M. Makhlof*  
- Overview of the CHTE Research Portfolio – *R. D. Sisson*  
- Overview of CR3 Research Portfolio – *B. Mishra*

3:15 p.m.  **Break**

3:30 – 5:30 p.m.  **Project Presentations for ACRC and CHTE**

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

3:30 p.m. Clean Aluminum Processing
S. Hudson, D. Apelian

4:00 p.m. Aluminum Nano-Composites for Elevated Temperature Applications
I. Anza, M. Makhlouf

4:30 p.m. Alternate Eutectic Systems for Aluminum Casting Alloys
T. Koutsoukis, M. Makhlouf

5:00 p.m. Dissimilar Metal Casting
C. Soderhjelm, D. Apelian

CHTE Project Presentations – Hagglund Room

3:30 p.m. NDT Testing for Hardness & Carburization Case Depth
L. Zhang, R. D. Sisson

3:50 p.m. Life Improvements to Alloys and Fixtures
A. Wang and R. D. Sisson

4:10 p.m. Induction Tempering vs. Furnace Tempering
X. Cai, R. D. Sisson

4:30 p.m. Gas Quench Steel Hardenability Standard
Y. Lu, R. D. Sisson, K. Rong

4:50 p.m. The Influence of Temperature on the Austenite Grain Size, Hardness and Microstructure of 4140 Steel
R. Zhang, A. Bhokarikar, R. D. Sisson

5:00 p.m. X-Ray Diffraction Analysis of the Structure of Martensite and Tempered Martensite
H. Yu, Y. Lu, X. Cai, R. D. Sisson

6:00 p.m. Local Craft Beer and Lobster Bake
Under the tent (Quadrangle)
Wednesday, June 3, 2015

8:00 a.m. Breakfast
Lobby area outside of Odeum A & B

8:15 a.m. Industry Presentations

- Fiat-Chrysler Automobiles – Theresa Klix
- Boeing – Russ Cochran

9:30 a.m. David Spencer, wTe
"Collaboration: Challenges and Opportunities"

10:00 – 1:00 p.m. Project Presentations for ACRC and CHTE

10:00 – 11:30 a.m. Focus Groups – Session A

| ACRC                                      | Aluminum Nano Composites for Elevated Temperature Applications  
|-------------------------------------------|--------------------------------------------------------------------- 
|                                            | I. Anza and M. Makhlouf                                              
|                                            | Mid-Century Room                                                      
|                                            | Clean Aluminum Processing                                            
|                                            | S. Hudson and D. Apelian                                              
|                                            | Odeum A & B                                                           

| CHTE                                      | NDT Testing for Hardness and Carburization Case Depth               
|-------------------------------------------|--------------------------------------------------------------------- 
|                                            | L. Zhang and R. D. Sisson                                           
|                                            | Improvements to Life of Alloys and Fixtures                        
|                                            | A. Wang and R. D. Sisson                                            
|                                            | Hagglund Room                                                        |
### 11:30 – 1:00 p.m. Focus Groups – Session B

| ACRC | Alternate Eutectic Systems for Aluminum Casting Alloys  
T. Koutsoukis and M. Makhlouf  
Mid-Century Room  

Dissimilar Metal Casting  
C. Soderhjelm, D. Apelian  
Odeum A & B |
|---|---|
| CHTE | Induction Tempering vs. Furnace Tempering  
X. Cai and R. D. Sisson  

Gas Quench Steel Hardenability Standard  
Y. Lu, R.D. Sisson and K. Rong  
Hagglund Room |

### 1:00 – 2:30 p.m. Lunch and Awards - Odeum C, WPI Campus Center

### 2:30 – 3:30 p.m. Debrief made by Chairs of Focus Groups

**ACRC in Odeum A & B**
- **Aluminum Nano Composites for Elevated Temperature Applications**
- **Clean Aluminum Processing**
- **Alternate Eutectic Systems for Aluminum Casting Alloys**
- **Dissimilar Metal Casting**

**CHTE in Hagglund Room**
- **NDT Testing for Hardness and Carburization Case Depth**
- **Improvements to Life of Alloys and Fixtures**
- **Induction Tempering vs. Furnace Tempering**
- **Gas Quench Steel Hardenability Standard**

### 3:30 p.m. Adjourn