



HEMI

MEDE

MATERIALS IN EXTREME
DYNAMIC ENVIRONMENTS

MEDE Fall Meeting, October 15-16, 2015

Poster Guidance for Metals CMRG

The objectives of the poster session are to:

- Provide a forum to promote cross-CMRG and program-wide collaboration
- Enhance the sharing of knowledge between the Consortium and ARL
- Satisfy program review requirements and allow the leadership to assess progress

All currently funded MEDE PIs (or their designated representative) are required to present a poster at the Fall Meeting.

Metals CMRG poster content should be approximately composed of:

- 1/4 focused on how this task fits within the CMRG science flow chart, and how it supports the overall CMRG goals
 - Contact your CMRG Co-leads for science flow chart details
 - 1/2 focused on current results, CY2015
 - 1/4 focused on what you plan to do in CY2016
 - Section on what data/information do I need from other task(s)
 - Section on what data/information can/do I provide to other task(s)
 - Admin section which includes publications and presentations that have resulted from this research
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- Poster titles should match the 2015 task titles (see next page)
 - Posters should not exceed 36" x 48" in dimensions
 - Poster backing board and clips will be provided on site
 - Posters will be on display for the entire Fall Meeting
 - Each poster needs to be registered on Eventbrite by **only one contributor**. To avoid duplication please coordinate with all authors prior to poster registration. The deadline to register is October 5, 2015.
 - If have already registered for the Fall Meeting you can log in or sign up for an Eventbrite account to amend or add a poster to your current registration. Please note, if creating an Eventbrite account be sure to use the email address where your received your ticket.
 - If you have questions, please contact Katie Vaught (kvaught1@jhu.edu)

2015 Metals CMRG Tasks

A poster should be presented for each one of these tasks.

Title	Institution(s)	Task PI(s)
Deformation Mechanisms in Shocked Pure and Alloyed Mg Single Crystals	WSU	Gupta
In Situ X-Ray Diffraction and Imaging During Dynamic Loading	JHU	Hufnagel
High Rate DTEM Mechanical Testing	JHU	Weihls
High Strain Rate Characterization of Magnesium	JHU	Ramesh
Thermo-mechanical Behavior of Magnesium Alloys	Caltech	Ravichandran
TEM Characterization of Dislocation Structures in Mg	JHU	Hemker
Dynamic Microscale Tensile Testing of Magnesium	NMT	Kimberley
Coarse-grained DFT	Caltech	Bhattacharya
Continuum Models for Plasticity-Twinning Interactions in Magnesium	Caltech	Kochmann
Atomistic and Discrete Dislocation Dynamics Modeling of Mechanical Twinning and Plasticity in Magnesium	JHU	El-Awady
MD of Nucleation and Motion Defects or Atomistic Modeling of Defect Structure and Mobility in Magnesium	JHU	Falk, Cammarata
DD FEM (predict twinning using FEM)	LLNL	Arsenlis
Hot Quasi-continuum Methods	Caltech	Ortiz
Thermo-mechanical Processing of Magnesium and Magnesium Alloys	JHU	Weihls
Partial Task: Development and implementation of an atomistically-informed dynamic void growth model for general loading conditions	UTSA	Wilkerson