Berkeley workshop on micromechanics & materials behavior

Bridging the gaps

***2017 – 6.-7.3.2017, Berkeley, CA, USA***

**Monday**

**8:30am-8:45am:** Peter Hosemann/Daniel Kiener *WELCOME*

**8:45am-9:15am**: Daniel Kiener

*Recent developments towards flow curve determination using different nanoindentation approaches*

**9:15am-9:35am** Anya Prasitthipayong

*Size Effects in Ion-irradiated 800H Steel at High Temperatures Utilizing Nanoindentation and Microcompression Testing*

**9:35am-9:55am:** Hi Vo

*Utilizing In-situ Microtensile Testing to Evaluate Mechanical Property Changes Due to Ion-beam Irradiation,*

**9:55am-10:15am** Irmgard Weißensteiner

*Co-Cr-W - A biocompatible alloy characterized by means of correlative microscopy and nanoindentation experiments*

**10:15am-10:35am** Manuel Petersmann

*Full-field microstructure modelling - Crystallographic concepts for phase transformations and plasticity*

**10:35-10:50 Break**

**10:50am-11:20 am** Verena Maier-Kiener

*On the influence of crystal orientation and testing temperature on the local mechanical properties of High Entropy Alloys*

**11:20am -11:40am** Manuel Gruber

*Small-scale mechanical characterization of LiTaO3 and LiNbO3 single crystals*

**11:40am-12:00am:** J. Kabel

*Micro-Mechancial Interphase Property Evaluation for SiC-SiC Composites :*

**12:00-12:20pm**: Yun Yang

*A TEM Study of Microstructure of Hi-Nicalon Type S SiC Composite beyond Ultimate Shear Strength*

**12:20-1:50pm Lunch break on your own.**

**1:50pm-2:20pm** Robert Kolasinski,:

*Materials damage in plasma facing components*

**2:20pm-2:50am** Hosemann or Frazer

*Small Scale Mechanical Testing on He Bubble Containing and Irradiated Materials*

**2:50pm-3:10pm** Cameron Howard;

*Mechanical Characterization of In Service Inconel X-750 Annulus Spacers*

**3:10pm-3:30pm** David Frazer;

*Small Scale Mechanical Testing of UO2 at Elevated Temperatures:*

**3:30pm-3:50pm:** Thomas Leitner

*Fatigue crack growth of nanocrystalline and ultrafine-grained metals produced by severe plastic deformation*

**3:50pm: Adjourn; Evening on your own.**

**Tuesday:**

**9:00am-9:25am:** A. Minor

*New Directions in Electron Microscopy at Berkeley*

**9:25m-9:40am:** Tom Pekin

*In situ Strain Mapping of Planar Slip in 304 SS*

**9:40am-10:00am:** Rachel Traylor

*Investigations of FCC Titanium*

**10:00am-10:20am** Benjamin Schuh

*Microstructural Investigations of a Nanocrystalline TiZrHfNbTa High-entropy Alloy*

**10:20am-10:40am** Katharina Leitner

*Grain boundary segregation in Molybdenum and its alloys*

**10:40-11:00 Break**

**11:00am-11:20am** Lisa Krämer

*Bulk metallic glass composites produced via Severe Plastic Deformation*

**11:20am-11:40am** Reinhard Fritz

*Contribution of Grain Boundaries on the Strength Scaling Behaviour of Submicron-Sized, Ultrafine-grained BCC Metals*

**11:40am-12:00pm** Ashley Reichardt

*Characterization of Maraging Steel to Austenitic Stainless Steel Gradient Components Fabricated with Laser Deposition;*

**12:00pm-12:20pm:** Miroslav Popovic; TBD

*Microstructural Characterization of Oxide Layers Formed on Fe-Cr-Al-steels during the Exposure to Heavy Liquid Metals,*