



International Research Conference on  
**Structure and Thermodynamics of  
Oxides at High Temperature**

October 20 – 22, 2016 | University of California, Davis

**Thursday October 20, 2016**

**Location: Putah Creek Lodge**

<b>8:00 – 9:00 AM</b>	<b>GSAS-II Workshop Registration and Coffee</b>
<b>9:00 AM – 12:00 PM</b>	<b>Brian Toby GSAS-II Workshop</b>
<b>12:00 – 1:00 PM</b>	<b>Lunch and NETZSCH/Setaram Workshop Registration</b>
<b>1:00 – 3:00 PM</b>	<b>NETZSCH Workshop</b>
<b>3:00 – 3:30 PM</b>	<b>Break</b>
<b>3:30 – 5:30 PM</b>	<b>Setaram Workshop</b>
<b>5:30 – 7:30 PM</b>	<b>Reception</b>

**Friday October 21, 2016**

**Location: Walter A. Buehler Alumni Center**

<b>8:00 – 8:30 AM</b>	<b>Registration &amp; Coffee</b>
<b>8:30 – 8:45 AM</b>	<b>Alexandra Navrotsky</b> Opening Remarks
<b>8:45 – 12:00 PM</b>	<b>Richard Weber</b> “Using Containerless Techniques to study Materials in Extreme and Non-Equilibrium Conditions”
	<b>Paul Nordine</b> “Deeply Undercooled Oxide Melts”

**Rainer Telle**

"Stable and Metastable Liquid Immiscibility in the  $ZrO_2$ - $SiO_2$  System Observed by Containerless Aero-Acoustic Levitation"

**Chris Benmore**

"Atomic Scale Disorder in  $UO_2$  at High Temperatures"

**12:00 – 1:00 PM**

**Lunch**

**1:00 – 3:00 PM**

**Marius Stan**

"Certainty and Uncertainty at High Temperatures"

**Shinji Kohara**

"Synchrotron X-Ray Measurements of Levitated Liquids and Glasses"

**3:00 – 3:15 PM**

**Break**

**3:15 – 5:00 PM**

**Joerg Neuefeind**

"Levitation Experiments with Neutrons at the Spallation Neutron Source"

**Dario Manara**

"Investigation of some nuclear and refractory materials under extreme conditions"

**5:00 – 7:00 PM**

**Poster Session and Reception**

*Cash Bar Available*

## Saturday October 22, 2016

### Location: Walter A. Buehler Alumni Center

8:00 – 8:30 AM

**Coffee**

8:30 – 11:30 AM

**Elizabeth Opila**

“Oxide Stability in High-Temperature High-Velocity Water Vapor”

**Randall Hay**

“SiO<sub>2</sub> Scale Structure and Defects Formed during Oxidation of SiC in High Temperature Air and Stream”

**Erica Corall**

“Oxide scale formation in carbide and boride ceramics composites at high temperature under low flow and high flow velocity environments”

11:30 – 1:30 PM

**Lunch & Optional Lab Tour**

1:30 – 3:30 PM

**Nathan Jacobson**

“Thermodynamics of Oxides from Knudsen Effusion Mass Spectrometry”

**Waltraud Kriven**

“In-Situ High Temperature Synchrotron Diffraction Studies of Oxide Ceramics”

3:20 – 3:35 PM

**Break**

3:35 – 6:00 PM

**Martin Wilding**

“High Energy X-Ray Diffraction Studies of Stable and Supercooled Carbonate, Sulfate and Silicate Liquids”

**Masatomo Yashima**

“Precise Structure Analysis of Oxide Materials through Neutron and Synchrotron Powder Diffractometry up to 1830K”

**Sergey Ushakov**

“Thermal Analysis Above 2000 °C”

6:00 – 6:15 PM

**Closing Remarks**