

# COMPRES

CONsortium for Materials Properties Research in Earth  
Sciences



Newsletter  
October 2018

## COMPRES Annual Meeting SAVE THE DATE! August 2-5, 2019



We are pleased to announce that the 2019 COMPRES Annual Meeting will be held on August 2-5, 2019 at the Big Sky Resort, Montana, USA. <http://compres.us/events/annual-meeting/2019/2019-compres-annual-meeting-general-information>

Friday 8/2. Arrival day with 5 PM poster session + reception, followed by 7 PM dinner.  
Saturday 8/3. Full day of meeting  
Sunday 8/4. Full day of meeting  
Monday 8/5. Morning meeting, noon departure.

More details on registration and program will be posted in early 2019. We anticipate offering one or more pre-meeting COMPRES supported workshops to be held on Friday 8/2, with resort check-in on Thursday 8/1. We also plan to offer a pre-meeting all-day field trip to Yellowstone National Park on Thursday 8/1, with resort check-in on Wednesday 7/31. Meeting Questions? Contact Beth Ha: [beth3ha@unm.edu](mailto:beth3ha@unm.edu). See you in Montana, August 2019!

## Upcoming and Recent COMPRES Workshops

### **“Nuclear Resonant Inelastic X-ray Scattering and Data Analysis”** **November 2-5, 2018, Advanced Photon Source, Argonne National Lab** **Workshop Organizers: Wenli Bi, Ercan Alp, Jay Bass**

This two-and-half-day COMPRES workshop is to educate current and potential scientific users in nuclear resonant inelastic x-ray scattering (NRIXS) and data analysis. NRIXS is a powerful tool to provide information on vibrational and elastic properties, such as the phonon density of states, sound velocities and isotope fractionation in Fe-bearing planetary materials under extreme pressure and temperature conditions.

Speakers will include: John Tse, Wolfgang Sturhahn, Jennifer Jackson, Nicholas Dauphas, Anat Shahar, and Jiyong Zhao.

**For registration info contact:** Wenli Bi [wbi@aps.anl.gov](mailto:wbi@aps.anl.gov)



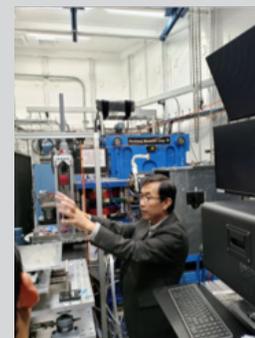
# COMPRES Workshop: “Envisioning the Next Generation of In-situ Synchrotron X-ray Techniques in Large-Volume High Pressure Apparatus for Mineral and Rock Physics”

September 28-30, 2018, Advanced Photon Source, Argonne National Lab



Over 40 participants attended this two and a half day COMPRES workshop and explored how cutting edge synchrotron techniques, including those that can characterize the 3D distribution of properties such as phase, density, grain orientation or stress states can be integrated into large volume apparatus experiments. The workshop reviewed the state of the art for both imaging and other synchrotron tools coupled with large volume high pressure capabilities and explored which techniques are most likely to yield new insights into transport properties in geologic materials and are most likely to be successfully adapted to high pressure environments. Such technological advances would benefit researchers working on rock deformation at both high and moderate pressure (above ambient), as well as those working on the kinetics of a wide variety of earth processes from melting and phase transformations to solution and precipitation in the control of porosity.

Workshop Agenda: <https://pburnley.faculty.unlv.edu/Workshop%20Agenda.pdf>



Some of the speakers at the Workshop: (L-R above) Don Weidner, Shun Karato, Pamela Burnley, David Kohlstedt, Yanbin Wang. (L-R below) Bill Durham, Andreas Kronenberg, Terry Tullis, Wenlu Zhu, Phil Skemer.



Contact: Dr. Carl Agee  
COMPRES President  
agee@unm.edu  
505-750-7172  
[www.compres.us](http://www.compres.us)



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