

COMPRES

COnsortium for Materials Properties Research in Earth
Sciences



Newsletter
June 2018

COMPRES Workshop on Synchrotron Infrared Spectroscopy on Materials in Extreme Environments Held on May 22-23, 2018, Brookhaven National Laboratory



Group photo from day-2 of the workshop, organizers Larry Carr and Zhenxian Liu (front row, right to left).



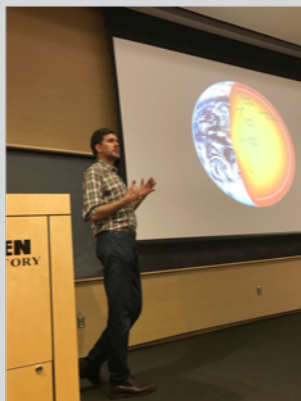
Carl Agee standing above the FIS beamline cabin at NSLS-II

Last month around 40 participants of the COMPRES user community attended a 2-day workshop at Brookhaven National Laboratory to debut the new Frontier Synchrotron Infrared Spectroscopy Beamline under Extreme Conditions (FIS) at the National Synchrotron Light Source II (NSLS-II) that will be online and taking general users this summer 2018.

As a new and state-of-art integrated synchrotron IR facility, FIS will be a COMPRES showcase for earth science and high-pressure research communities worldwide and a unique resource for the COMPRES user community. With the implementation of new developments and upgrades, the facility will allow for a wide range of micro-spectroscopic studies at broad range of pressures (over 300 GPa) and temperatures (from 5 Kelvin to several thousand K). Coupled with the synchrotron IR radiation, this facility will also provide diffraction-limited observation of diamond-cell samples in cryostats or under laser heated hot spots from the far to mid-IR spectral range. The new capabilities will greatly promote our users' research projects to address problems ranging from outer solar system bodies to the Earth's core.

Please contact Zhenxian Liu for information on the FIS user program:
zxliu@bnl.gov

Speakers at the FIS workshop included: Zhenxian Liu (GWU), Larry Carr (BNL), Carl Agee (UNM), Andrei, Fluerasu (BNL), Alvin Acerbo (BNL), Janice Musfeldt (Tennessee), Oliver Tschauner (UNLV), Kanani Lee (Yale), Sarah Arveson (Yale), Steve Jacobsen (Northwestern), Dan Shim (ASU), Elizabeth Thompson (Northwestern), Joshua Townsend (SNL), Jin Zhang (UNM), Bin Chen (Hawaii), Yong Song (UWO), and John Tse (Saskatchewan)



Steve Jacobsen
"Using NSLS-II Infrared Light to Probe the Origin of Earth's Water"



Dan Shim
"New dense hydrous silica phases stable in the Earth's deep mantle"



Jin Zhang
"The anisotropic elastic properties of upper mantle minerals"



Bin Chen
"Elasticity of single crystal ice VII synthesized in externally-heated diamond anvil cells"

LESS THAN 3 WEEKS UNTIL THE ANNUAL MEETING REGISTRATION AND LODGING DEADLINES

Pre-Meeting Field Trip to Mount Taylor Area: July 13, 2018 at 5pm MDT

Registration for the Annual Meeting: July 13, 2018 at 5pm MDT

Lodging reservations: July 13, 2018 at 5pm MDT

To register for the annual meeting and the pre-meeting field trip please [click here](#)

To make lodging reservations at Tamaya [click here](#)

For detailed information on the pre-meeting field trip to the Mount Taylor area [click here](#)



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