## COMPRES

COnsortium for Materials Properties Research in Earth Sciences



## Newsletter January 2018

In this and forthcoming newsletters we will highlight members of COMPRES and the high pressure community. In this issue we spotlight the research and careers of recently appointed tenure track assistant professors (Part III).



Fred A. Davis Assistant Professor (2015-present) Department of Earth and Environmental Sciences University of Minnesota fdavis@d.umn.edu https://scse.d.umn.edu/earth-environmental-sciences-department/faculty-staff/ dr-fred-davis

Fred Davis studies the minerals and melts that form in Earth's upper mantle to better understand the chemical complexity of Earth's interior and the history of exchange between the surface and the mantle that has led to this complexity. Fred's lab uses piston cylinder and gas-mixing furnaces to study lithological heterogeneity in basalt source-regions in Earth's mantle and the role of redox reactions between minerals and melts in setting phase equilibria in Earth's upper mantle.

Fred received a B.S. in Geological Sciences at the University of Missouri (2005), and a Ph.D. in Geology at the University of Minnesota (2012). He was a Peter Buck Postdoctoral Fellow at the Smithsonian Institution National Museum of Natural History from 2012-2015.



June Wicks Assistant Professor (2017-present) Department of Earth and Planetary Sciences Johns Hopkins University wicks@jhu.edu http://junewicks.rocks/

June Wicks uses a combination of dynamic and static compression techniques to study the properties of minerals at conditions of the interiors of Earth and Super Earths. She is particularly interested in pushing the boundaries of cutting edge techniques while pursuing questions about planetary diversity and its implications for the formation and evolution of planetary systems.

June received both her B.S. and Ph.D. from the Division of Geological and Planetary Sciences at the California Institute of Technology. After graduate school she was a Harry Hess Postdoctoral Fellow at the Department of Geosciences at Princeton University.



Alicia Cruz-Uribe Assistant Professor (2015-present) School of Earth and Climate Sciences University of Maine alicia.cruzuribe@maine.edu https://umaine.edu/earthclimate/people/alicia-cici-cruz-uribe/

Alicia (Cici) Cruz-Uribe is interested in the geochemical connection between the metamorphism that occurs in subducted oceanic crust and the geochemistry of arc volcanoes (i.e., understanding the geochemical fingerprint of subduction). Her recent experimental work has involved melting natural mélange materials from fossil subduction zones in order to test the feasibility of mélange diapir melting as the source material for arc volcanoes. This work has involved piston cylinder experiments at conditions relevant to mélange diapirs (1000-1300 °C and 1.5-2.5 GPa) and a large suite of major element, trace element, and volatile analyses of experimental glasses, in addition to mixing and melting models of various isotopic systems.

Cici received a B.A. in Earth Science from Dartmouth College (2006), an M.S. in Geology from Northern Arizona University (2008), and a Ph.D. in Geoscience from The Pennsylvania State University (2014). Following graduate school, she was a post-doc in Geology and Geophysics at the Woods Hole Oceanographic Institution in Massachusetts.

## **COMPRES Annual Meeting SAVE THE DATE! August 5-8, 2018**



We are pleased to announce that the 2018 COMPRES Annual Meeting will be held on August 5-8, 2018 at the Hyatt Regency Tamaya Resort, New Mexico, USA.

http://compres.us/events/annual-meeting/2018/2018-compres-annual-meeting-general-information.

Meeting Questions? Contact Beth Ha: <u>beth3ha@unm.edu</u>. See you in New Mexico, August 2018!



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