[1] Chiavassa et al 2005 Astron. & Astroph. 432,547; Posch Th et al 2007 Astroph. J. 668, 993 [2] Ferrarotti and Gail 2005 Astron. & Astrophys. 430, 959 [3] Thompson et al. 2012 Journal of Non-Crystalline Solids 358 (5), 885 [4] Demyk, et al. A&A, 2000,364,170; B.T. Draine. 2003 Annu. Rev. Astron. Astroph., 41,1

**Keywords:** amorphous silicates, carbonates, powder diffraction, PDF

## MS18-P2 Single Crystal High Pressure Diffraction at the Advanced Light Source

Christine M. Beavers<sup>1,2</sup>, Earl F. O'Bannon<sup>2</sup>, Andrew Doran<sup>1</sup>, Martin Kunz<sup>1</sup>, Quentin Williams<sup>2</sup>

- 1. Advanced Light Source, Lawrence Berkeley National Laboratory, Berkeley, CA USA
- 2. Department of Earth & Planetary Sciences, University of California Santa Cruz, Santa Cruz, CA USA

## email: cmbeavers@lbl.gov

Beamline 12.2.2 at the Advanced Light Source, which was previously optimized for high pressure powder diffraction only, has undergone the substantial addition of a dedicated single crystal diffractometer. Positioned upstream of the existing endstation, the new endstation consists of a Stoe Stadi Vari diffractometer equipped with a RDI CMOS detector. The system was configured with high pressure diffraction in mind: a small sphere of confusion(10µm), a sample weight capacity compatible with DACs (1kg), and a detector phosphor optimized for 25keV. System details and commissioning experiment results will be shared.

Keywords: high pressure, single crystal