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High-Pressure Dynamic Light Scattering Implemented in a Diamond Anvil Cell[1] KEVIN LYON, WILLIAM OLIVER, University of Arkansas — In recent years full-spectrum analysis in light-scattering has been utilized to explore the liquid-glass transition at variable temperatures and ambient pressure. Our lab is currently working on developing dynamic light scattering in a diamond anvil cell to extend this characterization method to high pressures. There are many inherent complications in the implementation of dynamic light scattering in a diamond anvil cell such at distinguishing between self-beating and homodyne contributions to the signal. However, if successful, it would give rise to a several decade window for analysis of glass-forming dynamics not attainable through Brillouin or Raman alone. Progress toward an effective method for obtaining DLS in a diamond anvil cell for the purposes of such analyses will be presented.

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