

Elastic and plastic transformations of vitreous silica under pressure

Marie Foret^{a*}

a. L2C, University of Montpellier, CNRS, Montpellier, France

* Marie.Foret@umontpellier.fr

The talk focuses on the thermodynamic properties of vitreous silica submitted to high pressures in a diamond anvil cell as obtained directly from Brillouin Light Scattering experiments or indirectly from standard relations. The analysis reveals non-negligible differences between static and dynamic compressibilities which are mostly related to the existence of thermally activated relaxational processes. Estimate of the residual densifications after complete cycles of compression/decompression is discussed.