ID20: non-resonant inelastic X-ray scattering at extreme conditions

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X-ray Raman scattering (XRS) spectroscopy is an emerging technique to study low energy absorption edges using hard X-rays [1,2]. The use of hard X-rays makes this technique inherently suitable for the study of low-Z-element-containing samples inside e.g. high-pressure diamond anvil cells, especially for disordered and complex materials where diffraction experiments are challenging. ID20 hosts a dedicated state-of-the-art instrument for XRS [3].

Here, we will briefly introduce the XRS technique, present new technical developments [4-6], and show the most recent results obtained of samples under extreme conditions [6-7].

References