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Supporting information for article:

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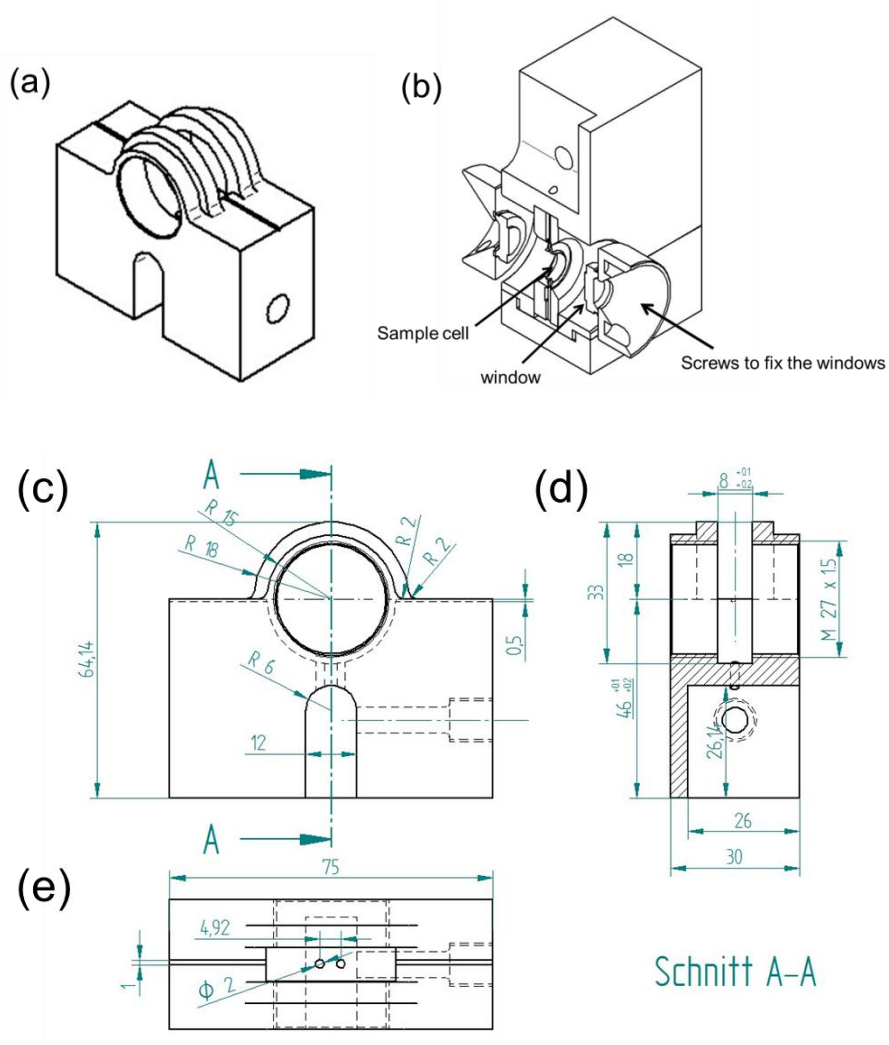
Supporting Information:

S1: Construction plans of the in situ high pressure cell



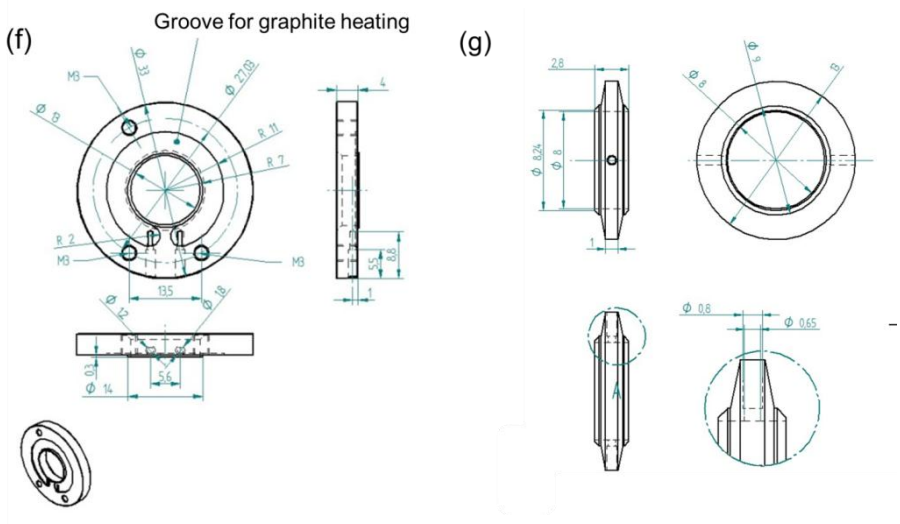


Figure S1: (a) Base part of the cell with the sample container, (b) vertical cut through the cell, (c) base part showing the dimensions in mm, (d) side view, (e) view on the base plate, (f) heating system, (g) sealing of the sample cell.

S2: Comparison of powder patterns measured on a transmission diffractometer with $CuK\alpha_1$ radiation and with $MoK\alpha_1$ radiation. Data collection was performed with a linear position sensitive detector (STOE).

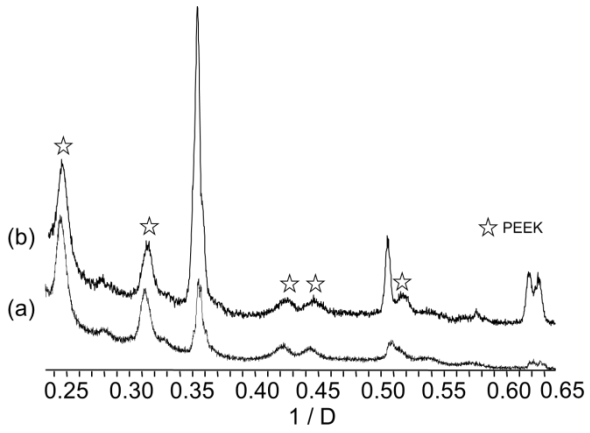


Figure S2: Diffraction patterns of $NaAlH_4$ measured in transmission geometry in the high pressure cell under ambient conditions with (a) $CuK\alpha_1$ radiation, (b) $MoK\alpha_1$ radiation.