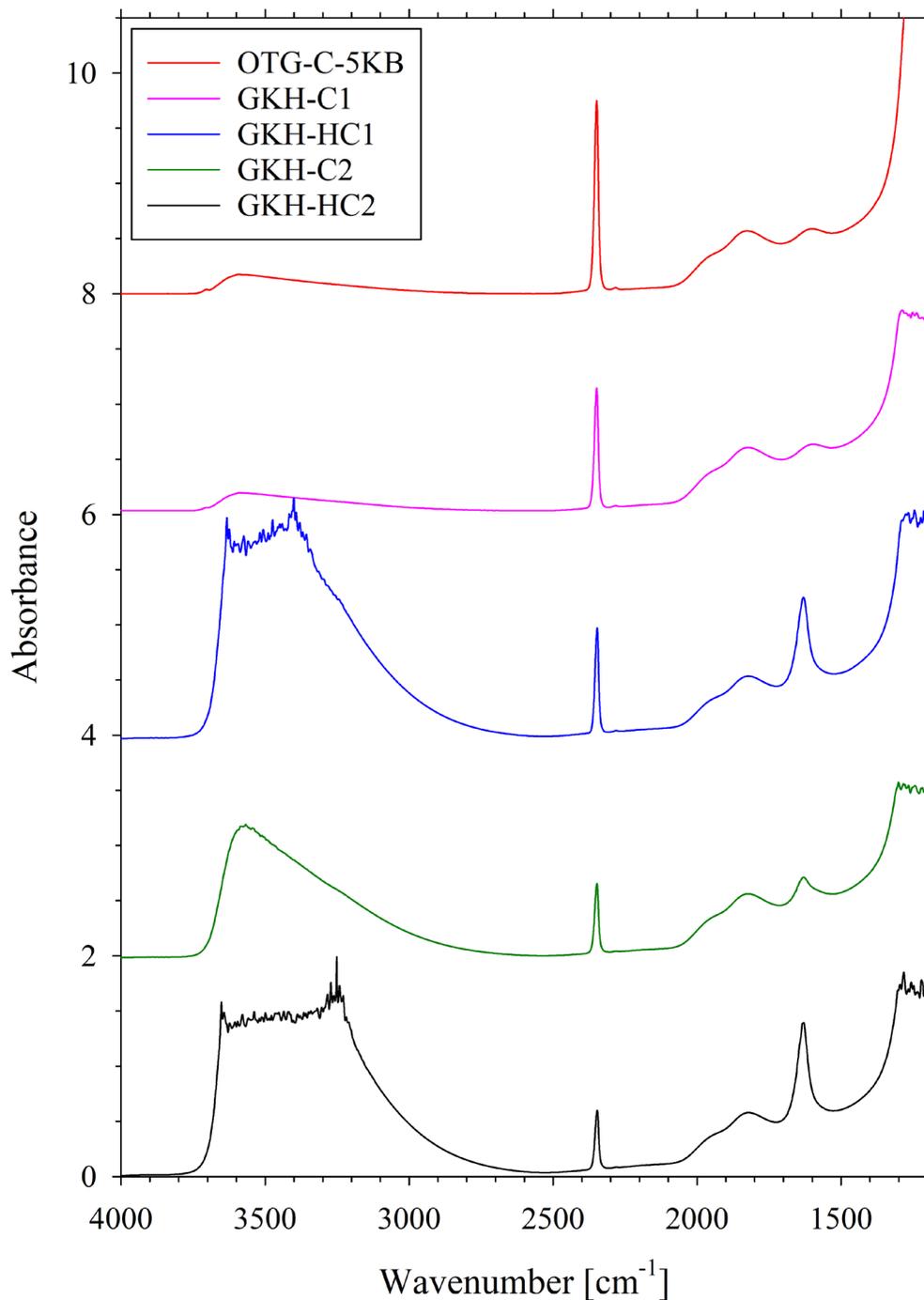


Fig. A5



**FIGURE A5:** MIR transmission spectra of granitic samples with decreasing CO<sub>2</sub> content from top to bottom (0.27 wt% – 0.08 wt%). Spectra were normalized to a thickness of 100  $\mu$ m and are shifted in y-direction to improve visibility. For the water-rich samples with more than 2.3 wt% water (GKH-HC2, GKH-HC1), the fundamental OH stretching vibration at about 3550 cm<sup>-1</sup> shows total absorption and for GKH-C2 (1.17 wt% water) this band exceeds the linearity limit of 2 absorbance units of the detector (note that the original sample thickness was 212  $\mu$ m). All three hydrous glass transmission spectra display a band at about 1635 cm<sup>-1</sup>, which is due to the bending vibration of H<sub>2</sub>O molecules. The sharp peak at 2350 cm<sup>-1</sup> is the  $\nu_3$  asymmetric stretching vibration of CO<sub>2</sub> molecules. No carbonate signal is visible in these spectra, which is expected to give rise to a doublet in the range of 1350 to 1650 cm<sup>-1</sup> (Brooker et al. 1999).