

Supporting information

In Figure 1 are reported the spectra collected at various times of an aerogel with a porosity $P = 98.5\%$ subjected to isothermal desorption at $T = 25^\circ\text{C}$ after equilibrium 1,2-dichloroethane (DCE) sorption in a 100 ppm aqueous solution.

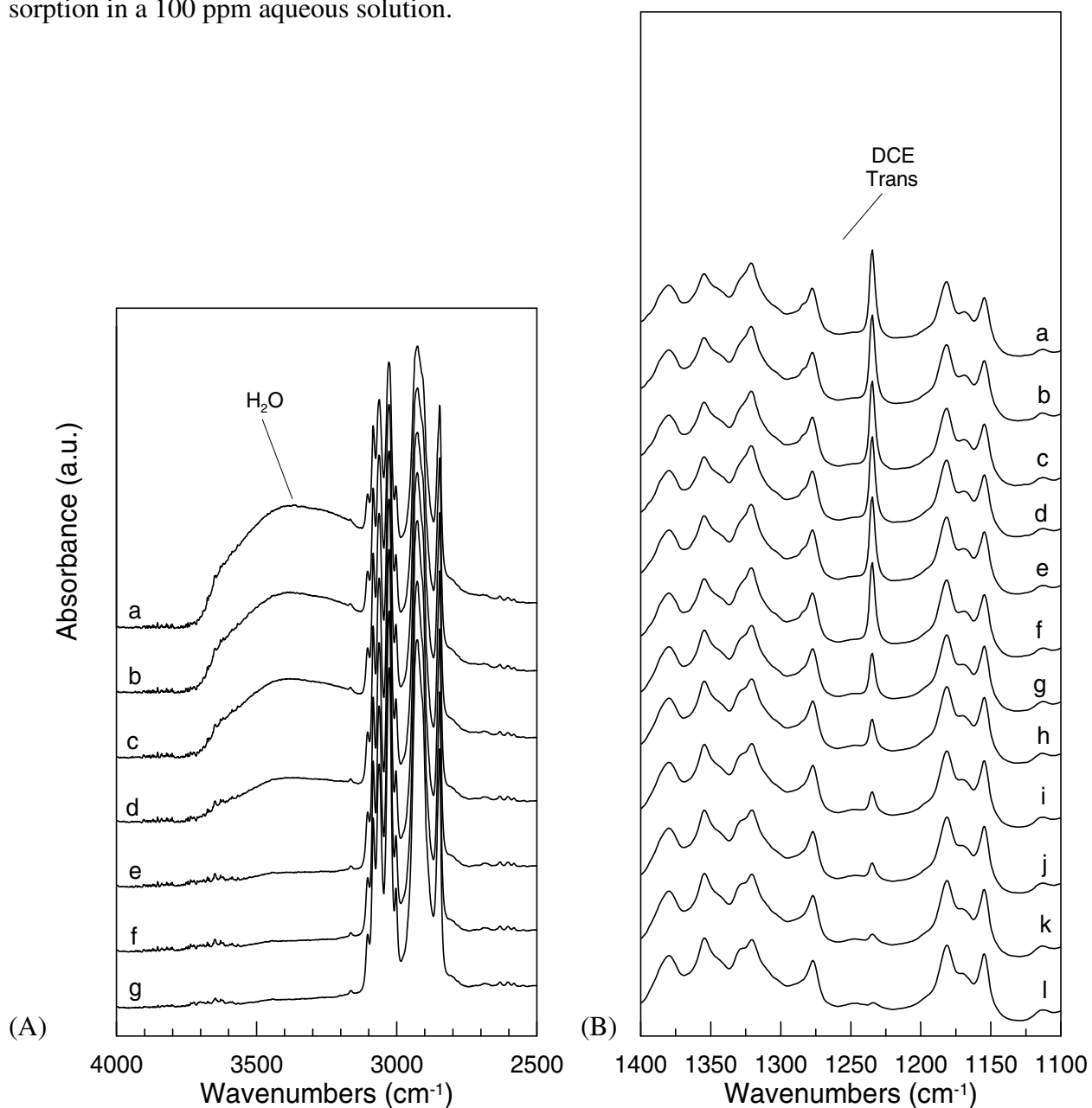


Figure 1: FTIR spectra in the 4000-2500 cm^{-1} (A) and 1400-1100 cm^{-1} (B) intervals collected at different times during the isothermal desorption of an aerogel with a porosity $P = 98.5\%$ after equilibrium 1,2-dichloroethane (DCE) sorption from an aqueous 100 ppm solution. The spectra were collected at the following desorption times: a: 1 min; b: 2 min; c: 3 min; d: 4 min; e: 5 min; f: 6 min; g: 30 min; h: 50 min; i: 70 min; j: 90 min; k: 140 min; l: 285 min.

The FTIR spectra clearly show that the desorption of water from the high porosity aerogel occurs with a fast kinetics and after c.a. 6 min (curve f of Figure 1A) all the water initially present in the aerogel has been desorbed. Conversely to water, the desorption of DCE (see in Figure 1B the absorbance peak characteristic of the trans DCE conformer at 1234 cm^{-1}) proceeds at a slower rate and the total desorption of DCE from the aerogel occurs after longer times (c.a. 285 min, curve l of Figure 1B).