

Adsorption of PCL in CL on cellulose model surface before and after PCL grafting in the QCM.

A solution of PCL in ϵ -caprolactone (corresponding to the polymer solution formed after 30 min reaction in the QCM) was introduced under a continuous flow of $0.215 \text{ ml min}^{-1}$ for 30 minutes over a cellulose model surface and the surface was thereafter rinsed with pure monomer, in order to investigate the physisorption of polymer onto the surface. Likewise as previous performed experiments, a stable baseline was first obtained with only ϵ -caprolactone. The same experiment was performed on a PCL-grafted cellulose model surface. The results can be seen in Figure 1.

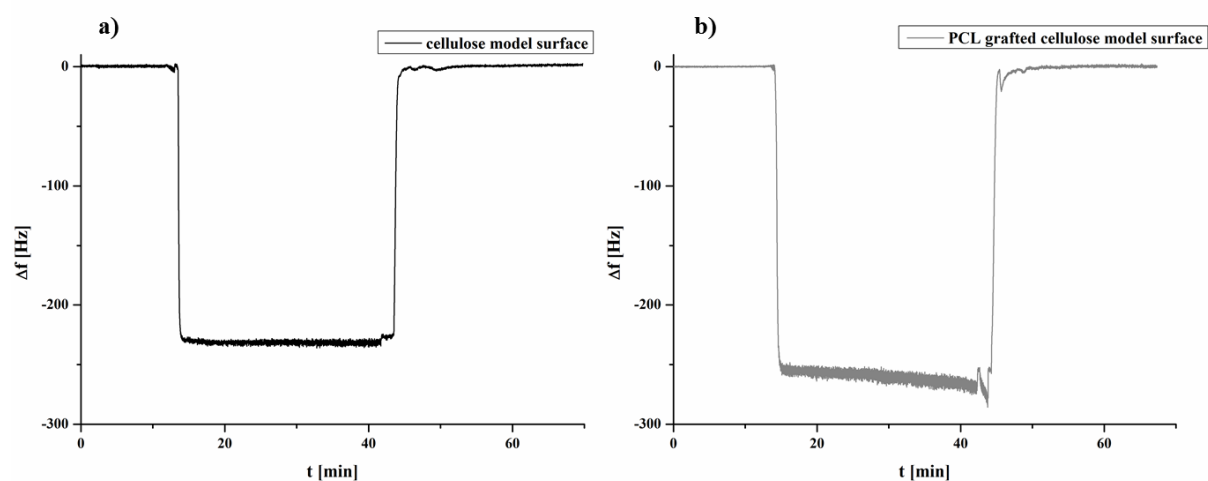


Figure 1. a) adsorption of PCL on a cellulose model surface (black line) b) adsorption of PCL on a PCL-grafted cellulose model surface (grey line).