

Supporting Information

Kinetic aspects of the adsorption of xyloglucan onto cellulose nanocrystals

*Ana Villares, * Céline Moreau, Abir Dammak, Isabelle Capron, Bernard Cathala*

UR1268 Biopolymères Interactions Assemblages, INRA, F-44316 Nantes, France

***To whom correspondences should be addressed:** Ana.Villares-Garicochea@nantes.inra.fr
(Ana Villares)

Fax: +33 240675043

Other authors' email addresses: celine.moreau@nantes.inra.fr (Moreau),
Abir.Dammak@nantes.inra.fr (A. Dammak), Isabelle.Capron@nantes.inra.fr (Capron), and
bernard.cathala@nantes.inra.fr (Cathala)

Provided Supporting Information

I. Adsorption of XG onto CNC surfaces

Figure S1. Normalized frequency ($\Delta f/n$) and dissipation ($\Delta D/n$) changes for the overtone number $n = 3$ of the CNC surface exposed to XG aqueous solutions at different concentrations (0.3-20 $\mu\text{g mL}^{-1}$) as a function of time. The arrows indicate where XG is injected and the rinse step with water.

II. Kinetic study of XG adsorption onto CNC surfaces

Figure S2. Values of the kinetic constant for adsorption onto uncovered CNC surfaces, k_1 , as a function of XG concentration.

Figure S3. Values of the kinetic constant for XG adsorption after rearrangement, k_2 , as a function of XG concentration.

I. Adsorption of XG onto CNC surfaces

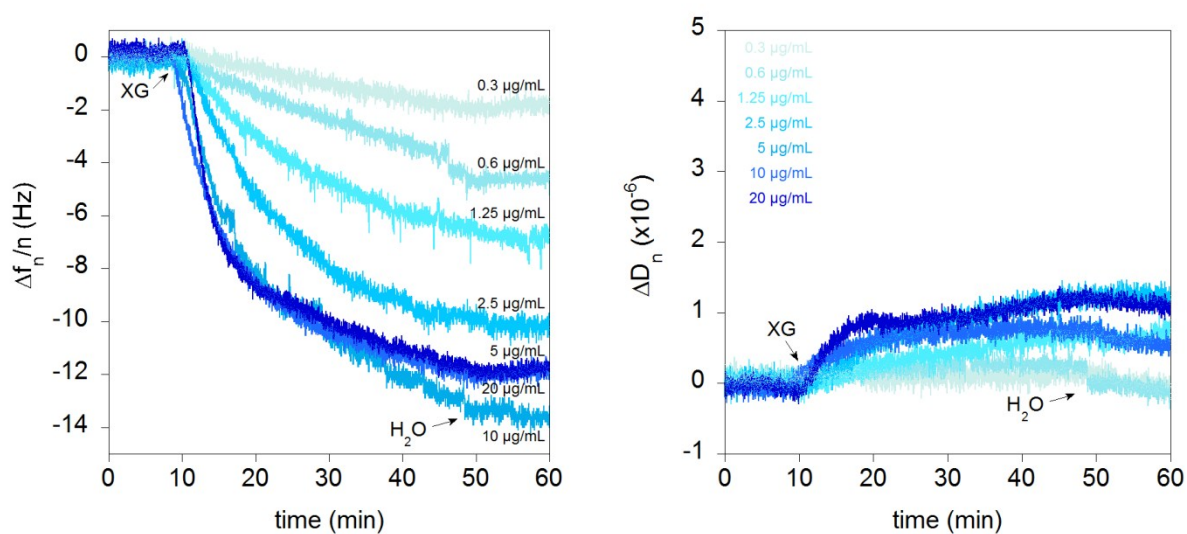


Figure S1. Normalized frequency ($\Delta f_n/n$) and dissipation (ΔD_n) changes for the overtone number $n = 3$ of the CNC surface exposed to XG aqueous solutions at different concentrations ($0.3\text{-}20 \mu\text{g mL}^{-1}$) as a function of time. The arrows indicate where XG is injected and the rinse step with water.

II. Kinetic study of XG adsorption onto CNC surfaces

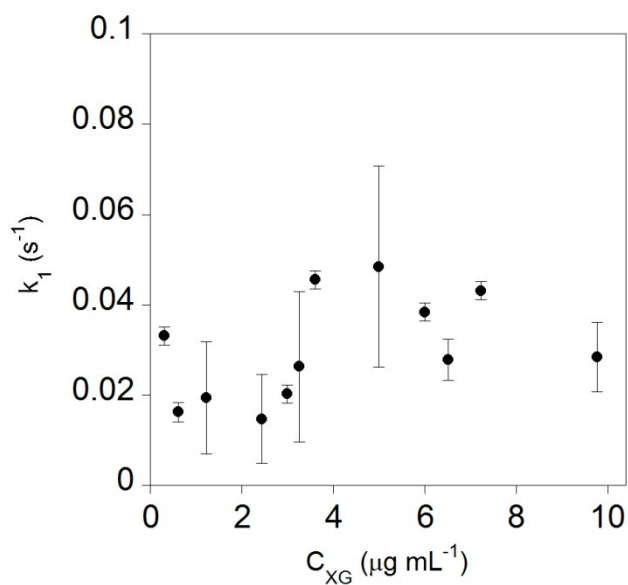


Figure S2. Values of the kinetic constant for adsorption onto uncovered CNC surfaces, k_1 , as a function of XG concentration.

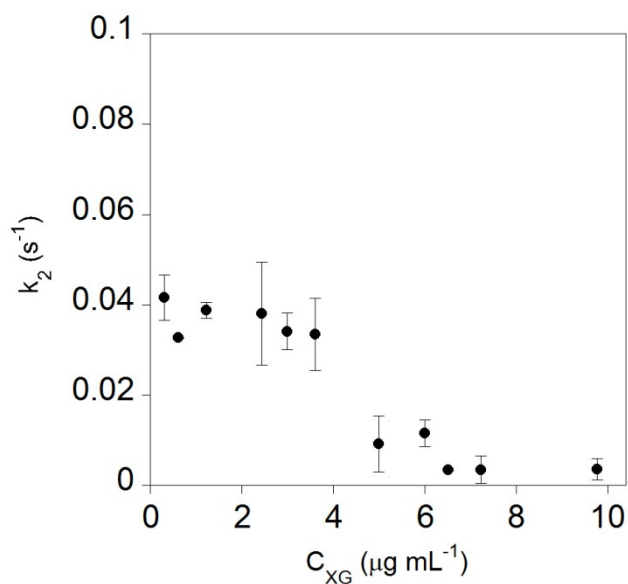


Figure S3. Values of the kinetic constant for XG adsorption after rearrangement, k_2 , as a function of XG concentration.