

Supplementary Materials :

C-O bond hydrogenolysis of aqueous mixtures of sugar polyols and sugars over $\text{ReO}_x\text{-Rh/ZrO}_2$ catalyst. Application to an hemicelluloses extracted liquor.

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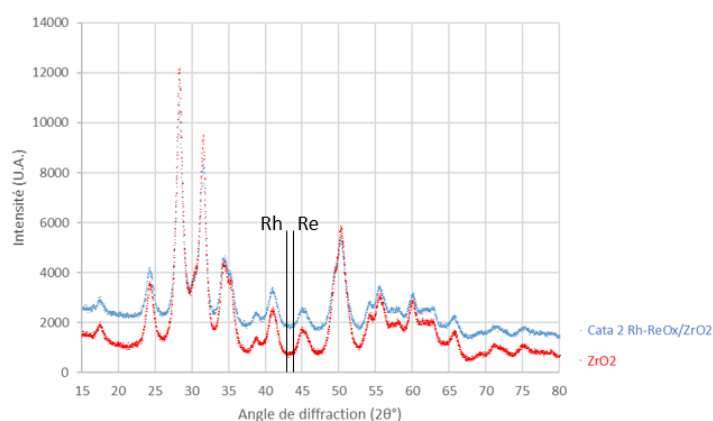
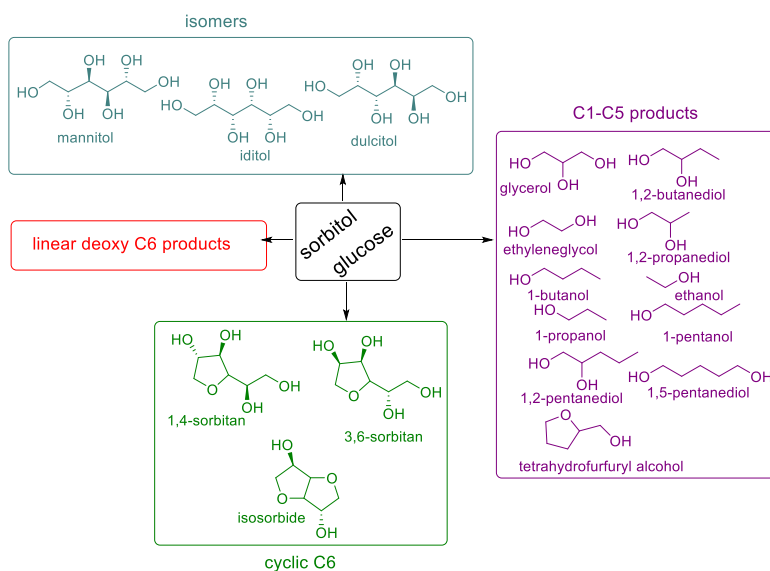
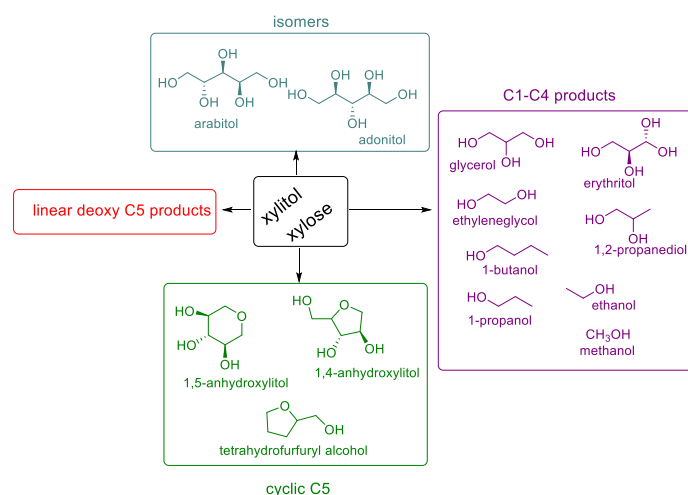


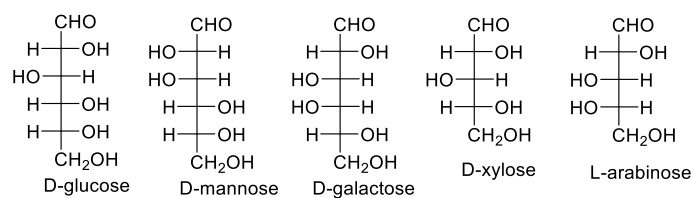
Figure S1. XRD pattern of support ZrO_2 and of catalyst 9.4%Re-3.2%Rh/ ZrO_2 .



Scheme S1. Reaction pathway during hydrogenolysis of sorbitol and glucose. Adapted from [69].



Scheme S2. Reaction pathway during hydrogenolysis of xylitol and xylose. Adated from [69].



Scheme S3. C6 and C5 sugars in the hemicelluloses liquor.

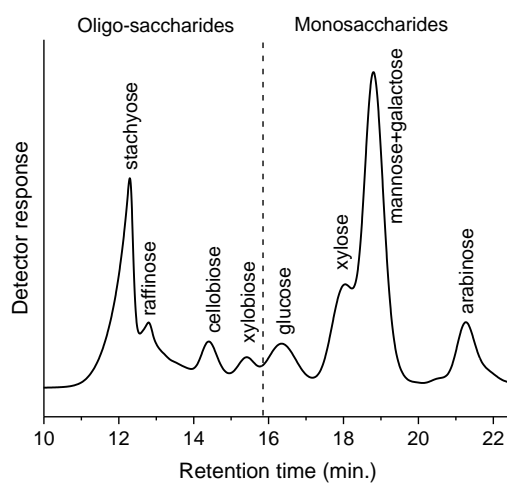


Figure S2. HPLC chromatogram of pine maritime hemicellulose after chlorite treatment, hot water extraction, and acid hydrolysis with HCl at 90°C during 24 h using Rezex RCM-Monosaccharide Ca²⁺ HPLC column.

[69] Sadier, A., Perret, N.; Da Silva Perez, D.; Besson, M. ; Pinel, C. Effect of carbon chain length on catalytic C-O bond cleavage of polyols over Rh-ReO_x/ZrO₂ in aqueous phase. *Appl. Catal. A: Gen.* **2019**, in press. <https://doi.org/10.1016/j.apcata.2019.117213>