Electronic Supplementary Material (ESI) for Green Chemistry.


Supporting information
For

# Simultaneous and Selective Recovery of Cellulose and Hemicellulose Fractions from Wheat Bran by Supercritical Water Hydrolysis

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## Tabla de contenido

## Figure S.1.

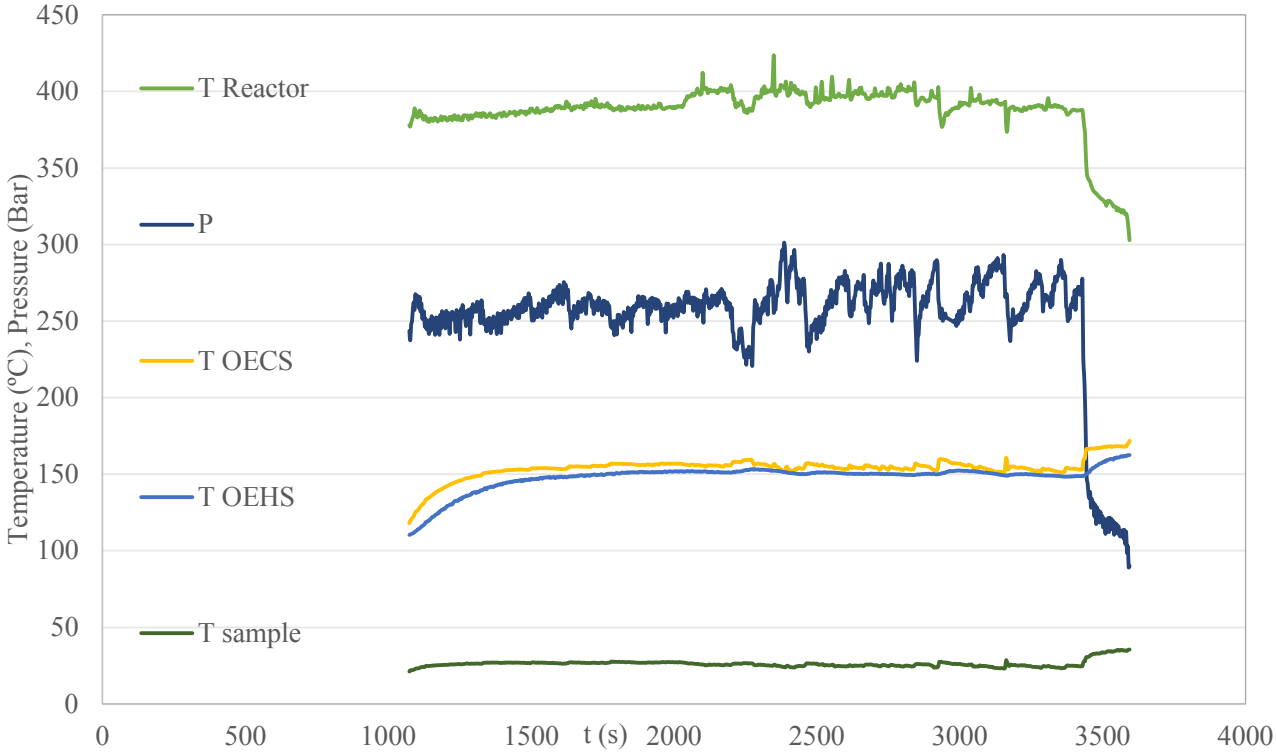


**Figure S.1.** Temperature and pressure profile during a typical experiment. '*T Reactor'* is the temperature in the middle of the reactor in ºC. *'P'* is the pressure in bar. *'T OECS'* is the temperature of the outlet cold stream of the HE. *'T OEHS'* is the temperature of the outlet hot stream of the HE. *'T Sample'* is the temperature of the sample.

## Figure S.2.

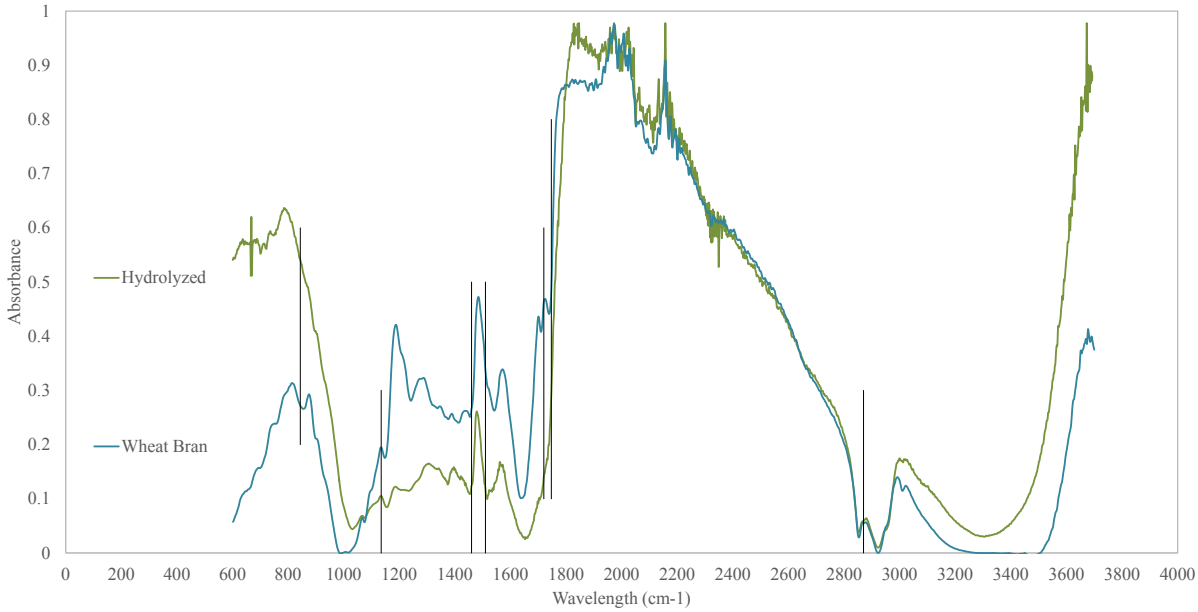


**Figure S.2.** FTIR spectrums of wheat bran and the solid after 0.69 s of hydrolysis at 400ºC and 25 MPa.

## Figure S.3.

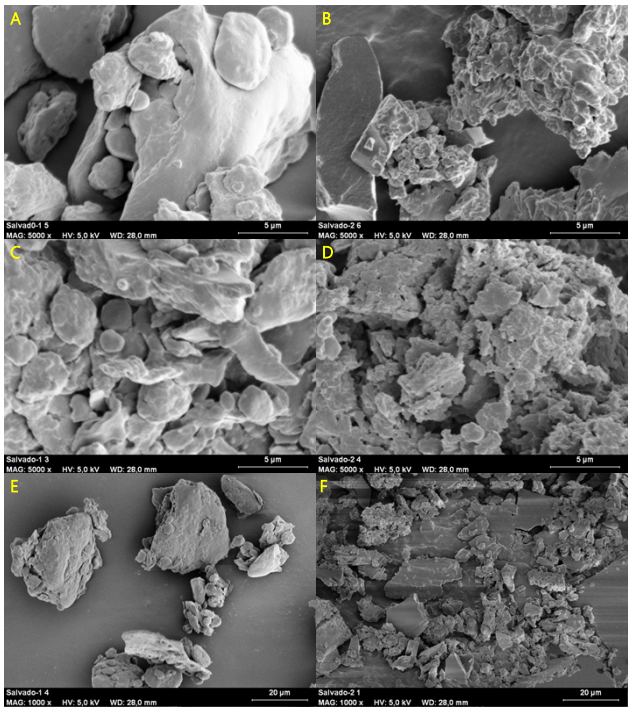


**Figure S.3.** SEM images of the solids before and after hydrolysis. **(A)** Wheat straw at 5000X; **(B)** hydrolysed product at 5000X; **(C)** Wheat straw at 5000X; **(D)** hydrolysed product at 5000X; **(E)** Wheat straw at 1000X; **(F)** hydrolysed product at 1000X.

## Figure S.4.

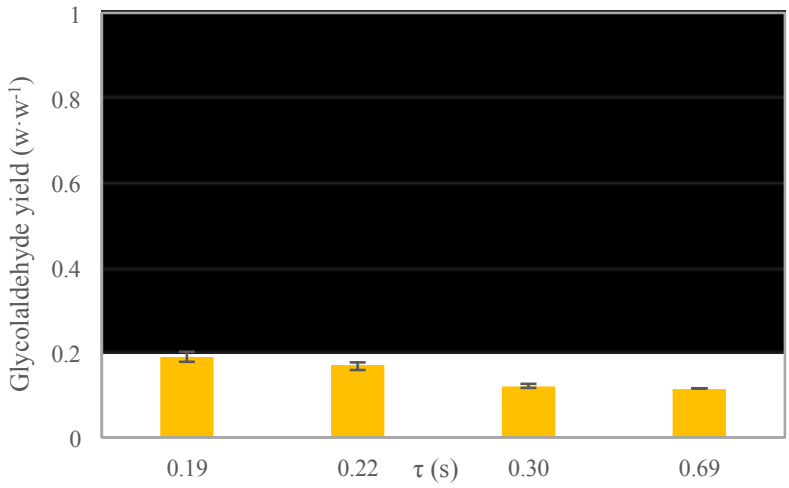


**Figure S.4.** Yield of glycolaldehyde along residence time after supercritical water hydrolysis at 400ºC and 25 MPa.

## Figure S.5.

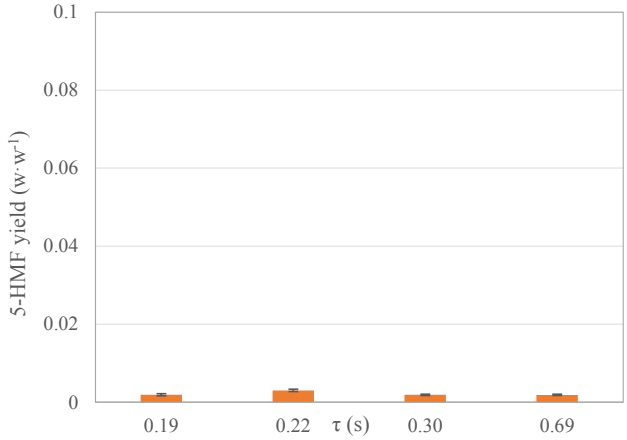


**Figure S.5.** Yield of 5-HMF along residence time after supercritical water hydrolysis at 400ºC and 25 MPa.

## Figure S.6.

**Figure S.6.** Photo of the Fast Sugars pilot plant in the University of Valladolid.