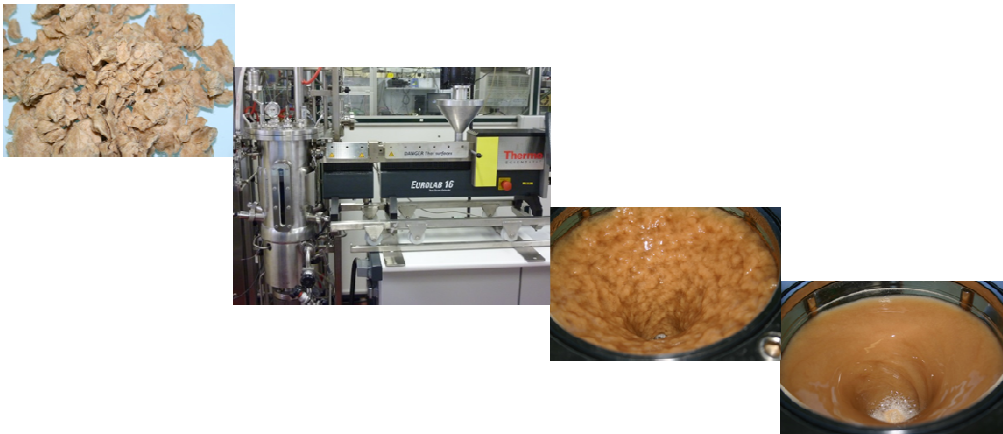


## Scientific Objective:

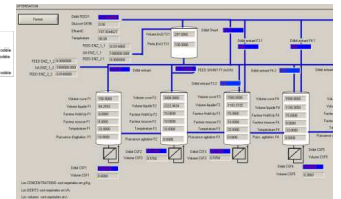
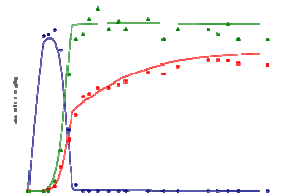
Investigating the interactions biocatalysts/substrates and identifying the phenomena limiting the implementation of the lignocellulosic substrates in fermentation under constraints of high dry matter content



## Highlights: lignocellulosic fermentation (4 papers, 3 patents)



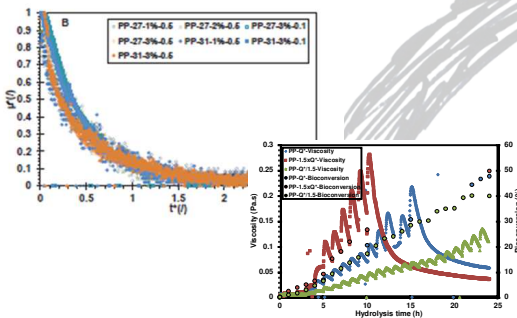
Innovative Bioprocess: HDMB Bioextrusion-fermentation bioreactor



Simultaneous Saccharification and Fermentation modelling and simulation



C5 Fermentation modelling allowed to reach the max. Yetoh with natural C5  $\mu$ org (Fromanger et al., 2012 ; Montheard et al. 2013 ; Bideaux et al., 2016 )



Rheological Models: dimensionless viscosity-time curves (Nguyen et al., 2013)

