

Supplementary information for:

Lignin depolymerization by Fenton process assisted by hydrodynamic cavitation

Lucas Ramos¹, Giovani Maltempi-Mendes¹, Julio C. Santos², Anuj Kumar Chandel^{1*}

1 Renewable Carbon and Biology Systems Laboratory, Department of Biotechnology, Engineering School of Lorena, University of São Paulo (EEL-USP), Lorena 12602-810, SP, Brazil

2 Department of Biotechnology, Engineering School of Lorena, University of São Paulo (EEL-USP), Lorena 12602-810, SP, Brazil

* Correspondence: anuj10@usp.br.

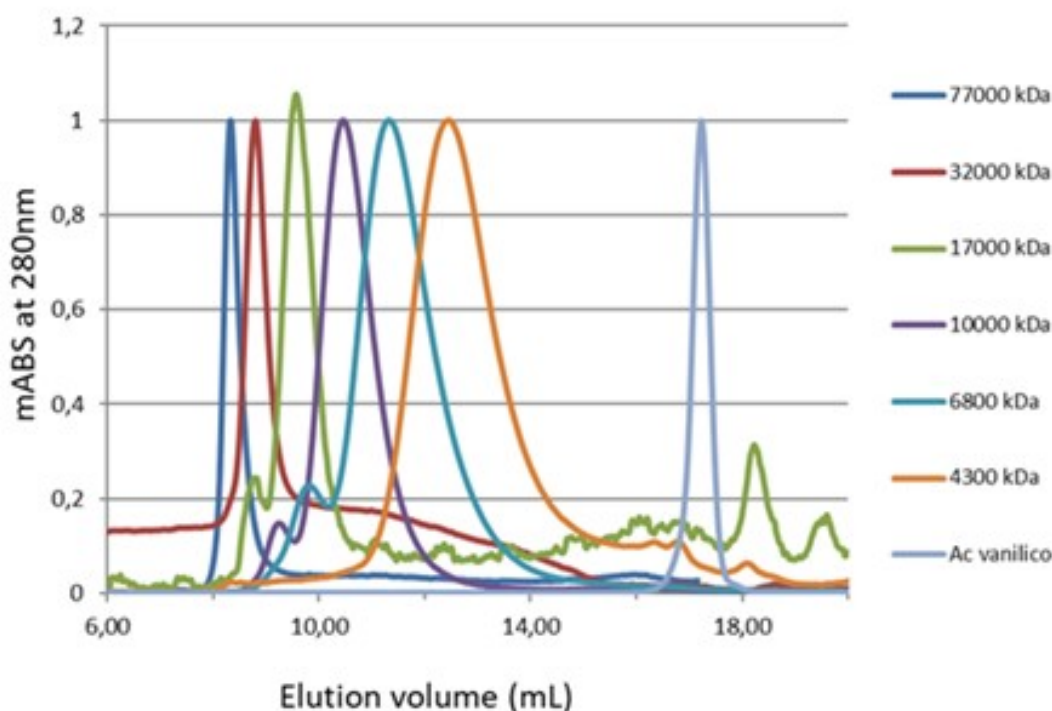


Figure S1. Polystyrene sulfonate standard markers used in the calibration column systems for molecular weight range analysis.

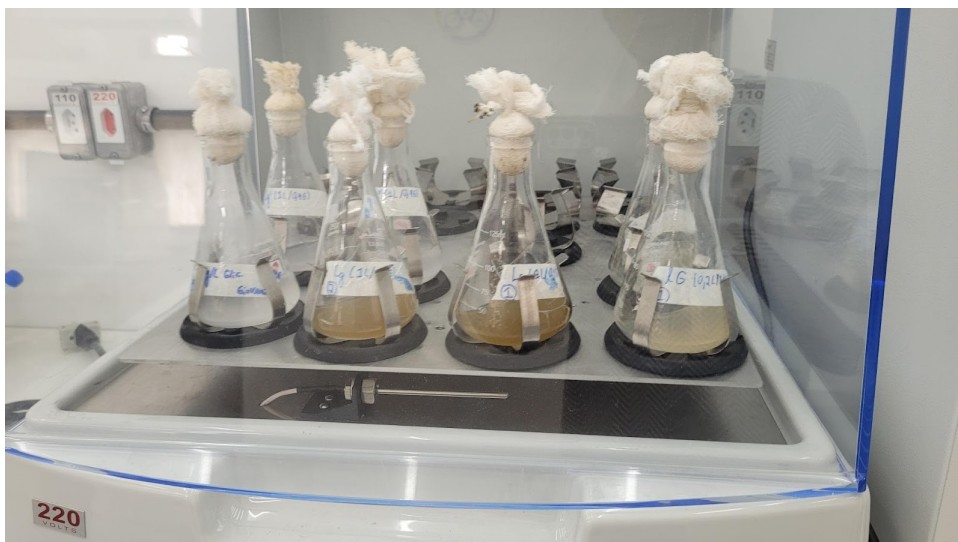


Figure S2. (a) Picture of all experiments of DL-assisted *P.putida* growth (48 hours of cultivation).



Figure S2. (b) Picture of the autoaggregation occurrence in fed-batch conditions of DL-assisted *P.putida* growth. (48 hours of cultivation).



Figure S2. (c) Picture of DL-assisted *P.putida* growth that has been introduced to DL initially (48 hours of cultivation).

Table S1. The limit of quantification employed for determining the concentrations of the various lignin-derived monomers

Compounds	Limit of Quantification ($\mu\text{g mL}^{-1}$)
Latic Acid	2.5
Glycolic acid	4.0
Phenol	5.0
2-Hydroxy-2-methylbutanoic acid	4.0
1,2-Pentanediol	4.0
p-Cresol	5.0
Benzyl Alcohol	5.0
Levulinic acid	7.5
Sorbic acid	7.5
4-Ethylphenol	5.0
Guaiacol	5.0

Benzoic Acid	5.0
Catechol	5.0
4-Methoxyphenol	7.5
2-Methoxy-4-methylphenol	7.5
4-Methylcatechol	5.0
Hydroquinone	5.0
4-Ethylguaicol	5.0
4-Hydroxybenzaldehyde	7.5
2,6-Dimethoxyphenol	5.0
2,5-Dimethylresorcinol	5.0
3-Methoxy-Catechol	5.0
Pyrogallol	5.0
Eugenol	7.5
4-hydroxyacetophenone	7.5
4-Methyl-2,6 Dimethoxyphenol	7.5
Trans-cinnamic acid	7.5
4-Hydroxybenzoic acid	5.0
Vanillin	7.5
Vanillyl Alcohol	7.5
Homovanillyl Alcohol	5.0
Vanillic Acid	7.5
Syringaldehyde	7.5
Acetosyringone	7.5
p-coumaric acid	7.5
Ferulic acid	7.5