

# Fractionation of Lignocellulosic Biomass using the OrganoCat Process

 Leonie Schoofs<sup>1</sup>, Dennis Weidener<sup>1</sup>, Ulrich Schurr<sup>1</sup>, Holger Klose<sup>1</sup>, Philipp M. Grande<sup>1</sup>
<sup>1</sup>Institut für Bio- und Geowissenschaften, Pflanzenwissenschaften (IBG-2), Forschungszentrum Jülich

## Corresponding Authors

Holger Klose

h.klose@fz-juelich.de

Philipp M. Grande

p.grande@fz-juelich.de

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## Materials

Name	Company	Catalog Number	Comments
1200 HPLC system	Agilent	n.a.	was used for size exclusion chromatography
2,5-furandicarboxylic acid	TCI Deutschland GmbH	F0710	Purity: >98.0%(T)(HPLC)
2-methyltetrahydrofuran	Carl Roth GmbH	6845.4	SOLVAGREEN ≥99 %, extra pure
Accellerase 1500	Provided by Genencor (60 FPU mL <sup>-1</sup> and 82 CBU mL <sup>-1</sup> ; 2300 AE Leiden, Netherlands)	n.a.	cellulase for pulp hydrolysis
beech wood (Fagus sp.)	local supplier	n.a.	
BioTek Power Wave HT UV-Vis Spectrometer	BioTek Germany, 74177 Bad Friedrichshall, Germany	BT-RPRWI	
Bruker AS400 (400 MHz) Spectrometer	Bruker, Billerica, MA 01821, USA	n.a.	HSQC-NMR analysis
CarboPac PA20 column	Dionex	302747	monosaccharide separator column for high-performance anion-exchange chromatography
centrifuge 5430 R	Eppendorf	5428000610	
Focus GC	Thermo Fischer	n.a.	gas chromatograph
Glucose (hexokinase) assay kit	Sigma-Aldrich	GAHK20-1KT	
GPC- precolumn PSS PolarSil in DMAc	PSS Polymer Standards Service GmbH	PSA080505	precolumn with polar silica (8 x 50 mm)
HP-INNOWax column 30 m	Agilent J & W	19091N-213IE	GC column with a polar polyethylene glycol stationary phase
PSS MCX	PSS Polymer Standards Service GmbH	MCA0830051E3	gel columns (8 x 300 mm, particle diameter: 5 µm, nominal pore width: 1000 Å)
ThermoMixer	Eppendorf	n.a.	mixing and heating block
tinyclave steel Typ 3 / 25 mL	Büchi	49,33,45,10,000	100 bar, 200 °C