

Stellenbosch University, Department of Process Engineering

Stellenbosch, South Africa http://processengineering.sun.ac.za/

Title:	Pyrolysis for production of high value phenolics from lignins isolated from waste streams
Abstract:	Lignins in residues such as those produced by lignocellulose biorefineries represent significant potential for chemicals production. Lignocellulose biorefineries typically target the carbohydrate components for valourisation, leaving a solid residue that is rich is lignin. This organic residue is usually utilised as an energy source for combustion, although it may be possible to derive higher value by conversion to chemical products. Phenols can be produced from these lignin rich residues by (catalytic) pyrolysis. Project entails simulation development for such a process, to determine conversion efficiencies and economic viability.
Lead institution:	Stellenbosch University
Partner institutions:	-
Student name:	Liberty Gura
Supervisor name:	Prof JF Görgens
Degree:	MEng
Funded by:	Industry
Start date:	Jan 2015
End date:	March 2017
Feedstock:	Black liquors and lignocelluloses
Value chain products:	Phenols
Geographic source of the feedstock:	KZN, MP, Gauteng