

Stellenbosch University, Department of Process Engineering

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

Title:	Reactor design for industrial furfural production from sugar cane agricultural residues
Abstract:	Detailed kinetics models are developed for hemicellulose hydrolysis and dehydration, leading to furfural and by-product formation, based on own experimental work. These models are combined with the work from other researchers to develop a comprehensive kinetic model of furfural production from hemicelluloses. The latter model is required for reactor design for furfural production from sugarcane residues and other types of lignocelluloses
Lead institution:	Stellenbosch University
Partner institutions:	-
Student name:	James Coker
Supervisor name:	Prof JF Görgens
Degree:	MEng
Funded by:	CSIR Waste Roadmap
Start date:	Jan 2016
End date:	Dec 2018
Feedstock:	Sugarcane lignocelluloses
Value chain products:	Furfural and derivatives
Geographic source of the feedstock:	KZN