



Council for Scientific and Industrial Research (CSIR)

Natural Resources and the Environment (NRE)

Durban, South Africa

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Title:	Lignosulphonate sludge
Abstract:	Production of lignosulphonates results in build-up of a black, highly viscous, heterogeneous mixture containing large conglomerated solid particles in storage tanks. The accumulation of such a sludge in the storage tanks poses many problems for the mill; including environmental concerns such as increased costs for disposal in landfills and greenhouse gas as the sludge emits strong unpleasant odours. Are there better ways to beneficiate the sludge? The composition of the sludge is unknown since it has not been previously characterised. The aims of this project include the analysis and characterisation of the sludge as well as to ascertain the valuable materials present and potential uses for the sludge.
Lead institution:	CSIR
Partner institutions:	Sappi
Principal Investigator:	Prof. Bruce Sithole
Student:	Siddhi Birjanund and Priya Brijmohan
Degree:	BSc
Funded by:	CSIR
Start date:	2014
End date:	2015
Feedstock:	Lignosulphonate sludge
Value chain products:	Lignin, activated carbon
Geographic source of the feedstock:	Sulphite and neutral semi-sulphite mills