



Contribution ID: 117

Type: **Poster Presentation**

## Gasification characteristics of sugarcane bagasse

*Thursday, 12 July 2012 17:30 (2 hours)*

### Abstract content <br> &nbsp; (Max 300 words)

Sugarcane bagasse is a residue that results from the crushing of sugarcane in the sugar industry. Among the various agricultural crop residues, sugarcane bagasse is the most abundant lignocellulosic material in tropical countries such as South Africa. Bagasse is a renewable feedstock that can be used for power generation and manufacturing cellulosic ethanol. In the sugarcane industries the bagasse is mainly burnt inefficiently in boilers that provide the heating for the industry. This project seeks to investigate the possibility of gasifying sugarcane bagasse as an efficient conversion technology. Proximate and ultimate analysis of sugarcane bagasse was conducted after which the results were used to conduct computer simulation of the mass and energy balance during gasification. The final paper will present the proximate and ultimate analysis as well as the computer simulation results.

### Apply to be<br> consider for a student <br> &nbsp; award (Yes / No)?

yes

### Level for award<br>&nbsp;(Hons, MSc, <br> &nbsp; PhD)?

MSc

### Main supervisor (name and email)<br>and his / her institution

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### Would you like to <br> submit a short paper <br> for the Conference <br> Proceedings (Yes / No)?

yes

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**Session Classification:** Poster Session

**Track Classification:** Track F - Applied Physics