



Contribution ID: 325

Type: Oral Presentation

Demand and supply site approaches for energy conversion from macadamia nut shells waste and castor cake.

Thursday, 6 July 2017 12:30 (20 minutes)

The increasing macadamia production in the Southern Africa and the need to leverage on existing indigenous plants like castor seeds for medicinal applications have led to the production on high amount of processing and agricultural wastes. A significant increase in demand for alternate energy sources (renewable electricity, biofuel and gas etc..) has stressed on the negative environmental impact caused by the conventional fossil fuel sources (coal, petroleum, and natural gas). Observed negative impacts on the environment of producing energy from waste should be minimised for an optimum environmental preservation. Demand site approach or/and supply site approach would be the employed strategy tools to ensure an optimum balance between producing the required energy and minimising the unwanted waste. Collected data from secondary sources and conducted experiment work will be discussed while the minimisation of the generated waste as the maximisation of energy produced will be ensured.

Apply to be considered for a student award (Yes / No)?

No

Level for award (Hons, MSc, PhD, N/A)?

N/A

Main supervisor (name and email) and his / her institution

Antoine F. Mulaba-Bafubiandi
 amulaba@uj.ac.za

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

Full

Primary author: Prof. MULABA-BAFUBIANDI, Antoine-Floribert (School of Mining, Metallurgy and Chemical Engineering, University of Johannesburg)

Co-authors: Ms NTOBENG, Mmatseleg Getrude (University of Johannesburg); Ms DANIA, Tiny-Henriette (Mineral Processing and Technology Research Centre)

Presenters: Ms NTOBENG, Mmatsele Getrude (University of Johannesburg); Ms DANIA, Tiny-Henriette (Mineral Processing and Technology Research Centre)

Session Classification: Applied Physics

Track Classification: Track F - Applied Physics