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Analytical modelling of thermal properties of possible fuel materials for aluminum smelting

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Many different fueling materials are used in the smelting of aluminum as used by rural foundry men in rural communities in South Africa. One lists namely coal, firewood, cow dung, and macadamia nutshells. While emission and heat radiation generated due to a poor heat containment leading to a possible biodiversity degradation environment pollution and contribution to climate change, a systematic study on environmental monitoring nor technical attributes of used or usable fuel materials is not reported. This paper uses algebraic linear combination of paired possible fuel materials to demonstrate their contribution to the generated heat. Possible emission would be studied and their contributions justified in terms weighted average of each component.

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

No

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

N/A

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