

PHD PROPOSAL DEFENCE SEMINAR

Date and time:

Mon, 2014-11-10 11:45

Link to Gallery:

[PHD PROPOSAL DEFENCE SEMINAR](#)

Location / Venue:

Upper Kabete Premises

Eng. Joackim Mutua lecturer in the Department of Environmental & Biosystems Engineering presented his PHD proposal defence seminar on 3rd November, 2014 at Upper Kabete. The research title "**Characterization of the Quality of Long Grain Rice during Milling Using the Discrete Element Method.**"



Eng. J. Mutua presenting to the audience his PHD proposal defence

On his research study, about 10 – 15 % post-harvest losses in rice takes place during the milling process. The losses occur in form of breakages and cracking. Mutua proposes to study the force interactions during rice milling by modelling the milling process using the discrete element method. Discrete element modelling is a computer based simulation method which is used to model granular materials. Unlike other cereals, rice is preferably consumed as whole grains and an important quality criterion for the rice industry is the percentage of whole rice kernels. By understanding the contact forces between the kernels and the machine surfaces, designers will be able to improve the designs of the milling machines and consequently minimise milling losses

