MSc Scholarship 2016 - Technologies for recovering value from vinasse and managing distillery residues.

Background
The STEP-Bio Programme is a public/private partnership between the Department of Science and Technology and the South African sugarcane milling industry, aimed at growing significantly the amount of sugarcane processing R&D being conducted in South Africa. Part of the objectives of this programme is to undertake research into sugarcane biorefineries with the aim of enhancing the competitiveness of the South African sugar industry.

One of the projects funded under the STEP-Bio Programme is Technologies for recovering value from vinasse and managing distillery residues.

The disposal of vinasse is a serious cost and design bottleneck for new bioethanol facilities and developing technologies or decision support tools to design effluent management systems is a critical need for sugar mills planning on taking advantage of the bioethanol opportunity. However, there are many technology options already available, but the efficacy of each one is dependent on the environmental, agricultural and socio-political context of the mill. The proposed MSc project will develop a decision support model for assessing the feasibility of any location-specific effluent management scenario, taking into account the uncertainty of the underlying data.

Requirements
In order to qualify for this bursary, the candidate must:

- Meet the admission requirements to the Degree of Masters in Science (Engineering) programme at the University of KwaZulu-Natal
- Have demonstrated skills in process and/or statistical modelling

Eligibility and conditions
The following eligibility criteria and conditions apply to this bursary:

- The bursary is offered to one South African citizen or South African permanent resident.
- To promote equity and redress, preference will be given to appropriately qualified applicants from designated groups, namely black, female and persons with disabilities.
- The applicant will be required to register for an MSc Eng at the University of KwaZulu-Natal.
Selection criteria
In considering an applicant for this bursary, their past, current and potential academic performance will be assessed based on their academic record, potential to undertake independent research, previous leadership roles and previous awards, prizes and honours.

Conditions of award for the Masters scholarship

• The successful applicant who is offered the scholarship is required to complete and sign the scholarship agreement that will be forwarded at the time of the award.
• The successful applicant will be supported for two years from year of initial registration.
• The value of the scholarship will be R80 000 per year.
• Payment of the scholarship will be made on submission of progress reports according to an agreed schedule.
• The scholarship may be discontinued at any time should the applicant not demonstrate sufficient progress or diligence in the pursuit of their studies.

Interested parties should submit their CV with a 1 page covering letter and a copy of their academic transcript to kfoxon@smri.org and Starka@ukzn.ac.za by 17h00 by 24 February 2016.