**Post-doctoral fellowship**

**Scope of research:**

I am seeking to appoint a post-doctoral fellow to contribute toward my research objectives targeted at the malting and beer brewing industry. The research aims to investigate the use of Hyperspectral Imaging and conventional RGB imaging as a vehicle to qualitatively predict for the presence of pre-harvest germination in barley and varietal differences, using chemometric modelling. The research question also highlights a feasibility study through multiple stakeholders to implement prior methodology into a tailor-made multispectral instrument. Key responsibilities for the fellowship include collecting data, calibrating and validating models and evaluating the feasibility of the proposed methodology for industry. The fellow will also be required to co-supervise students within my research group with respect to a further project addressing agricultural issues related to the brewing industry. The project is aimed to run for the 12 months with the option for renewal.

**Requirements:**

I am seeking an individual with a Ph.D in Food Science obtained within the last 2 years, coupled with a robust background in food science, agriculture, beer brewing and malting, chemometrics, spectroscopy, hyperspectral imaging, data-fusion and a sound knowledge and understanding of the specific problem relating to barley-preharvest germination. The candidate will also have to show, through publication record, that these requirements are indeed met.

**Commencement date:**

May 2024 or as soon as possible

Closing date :

10/04/2024

**Enquiries**:

Send a 200 word letter of motivation accompanied by a curriculum vitae, including a list of publications and scientific output and the names and contact details of two referees to [stefanh@sun.ac.za](mailto:stefanh@sun.ac.za)

**Contact details of the host:**

Dr Stefan Hayward (host)

Department of Food Science

Stellenbosch University

[stefanh@sun.ac.za](mailto:stefanh@sun.ac.za)

**Postdoctoral fellows are not appointed as employees and as their fellowships are awarded tax-free, they are not eligible for employee benefits**

**The University of Stellenbosch reserves the right to not make an appointment if a suitable candidate meeting the requirements of the host are not met.**