

Postdoctoral Research Fellowship in Chemometrics available at Stellenbosch University, South Africa

A postdoctoral fellowship is available at the Department of Food Science, Stellenbosch University, South Africa, for a motivated candidate who is interested in the application and development of chemometrics techniques in the fields of near infrared (NIR) spectroscopy, NIR hyperspectral imaging as well as other analytical techniques; mostly applied to cereals.

The successful candidate will be involved in research programmes concerning the application and evaluation of near infrared (NIR) spectroscopy, NIR hyperspectral imaging and rapid method development for quality control of cereals in breeding programmes.

Research:

The research group within which the candidate will work is currently undertaking research in the following areas:

- NIR calibration development on barley and maize to be used in breeding programmes
- Evaluation of NIR hyperspectral imaging to determine fungal infection in maize, endosperm texture of cereals and adulteration of spices.
- Non-NIR research projects include the development of rapid methods for quality evaluation of malting barley; biochemical evaluation of malting barley and evaluation of zein composition of maize of different hardness using various analytical techniques.

The postdoctoral researcher will be expected to contribute significantly to:

- Perform and assist in chemometrics analysis as appropriate for the respective research projects
- Development of new chemometrics techniques as needed
- Supporting postgraduate student in terms of chemometrics analysis
- The publication of research outputs, also in collaboration with postgraduate students

Requirements:

A PhD in Food, Agricultural or Natural Sciences or a related scientific discipline obtained within the passed five years with relevant research experience in the use and application of chemometrics in NIR spectroscopy, NIR hyperspectral imaging (optional) ideally in the food and agricultural environment.

The fellowship is available from February 2010, or as soon after that as possible, for two years. The programme leader will be Dr Marena Manley.

How to apply:

Applications should include a covering letter and *curriculum vitae* including all research outputs as well as three contact e-mail addresses of potential references and it must be submitted to the address below no later than 20th November 2009.

Applications submitted to:

Dr Marena Manley
Department of Food Science
Stellenbosch University
Private Bag X1
Matieland 7602
South Africa

Tel: +27 21 808 3511

Fax: +27 21 808 3510

E-mail: mman@sun.ac.za

See <http://www.sun.ac.za/foodsci> for more details on the Department of Food Science and Stellenbosch University