

### Information on Postgraduate Research Scholarship - Ref: VCS-ES-07-17

**Faculty:** Engineering and Science

**Department:** Food & Markets Department

**Lead Supervisor:** Keith Tomlins

**Project Title:** Development of improved processing for village-based root and tuber processing in sub-Saharan Africa

**Project Description:**

Root and tuber are an important staple in sub-Saharan Africa, however their shelf-life are short, leading to high postharvest losses. For this reason, village-based agro-processing plays an important role in improving food security and enhancing the livelihoods of rural populations. The research will aim to develop improved processing technologies for root and tuber crop processing. Computer simulation, process modelling and laboratory-based trials will be used to develop the technologies. Prototypes will be constructed and tested with the participation of the equipment users and manufactures in developing countries. It is expected that the developed technologies will be innovative, based on sound scientific evidence and meets the needs of users. Technologies will also need to be able to be built and maintained locally, be highly energy efficient and deliver a product of high quality.

The successful candidate will become part of a growing team around innovations in design and engineering working on a wide range of postharvest technologies based at the award-winning Natural Resources Institute ([www.nri.org](http://www.nri.org)).

**Duration:** 3 years, Full-Time Study

**Bursary available (subject to satisfactory performance):**

Year 1: £14,553

Year 2: In line with RCUK rate

Year 3: In line with RCUK rate

In addition, the successful candidate will receive a contribution to tuition fees equivalent to the university's Home/EU rate, currently £4,195, for the duration of their scholarship. International applicants will need to pay the remainder tuition fee, currently £8,305, for the duration of their scholarship. This fee is subject to an annual increase.

<b>Person Specification of Essential (E) or Desirable (D) requirements:</b>	
<b>Criteria:</b>	<b>E or D</b>
<b>Education and Training:</b>	
<ul style="list-style-type: none"> <li>1<sup>st</sup> Class or 2<sup>nd</sup> class, First Division (Upper Second Class) Honours Degree or a taught Master's degree with a minimum average of 60% in all areas of assessment (UK or UK equivalent) in a relevant area to the proposed research project</li> </ul>	<b>E</b>
<ul style="list-style-type: none"> <li>For those whose first language is not English and/or if from a country where English is not the majority spoken language (as recognised by the UKBA), a language proficiency score of at least IELTS 6.5 (in all elements of the test) or an equivalent UK VISA and Immigration secure English Language Test is required, unless the degree above was taught in English <b>and</b> obtained in a majority English speaking country, e.g. UK, USA, Australia, New Zealand, etc, as recognised by the UKBA.</li> </ul>	<b>E</b>
<b>Experience &amp; Skills:</b>	
<ul style="list-style-type: none"> <li>Previous experience of undertaking research (e.g. undergraduate or taught masters dissertation)</li> </ul>	<b>D</b>
<ul style="list-style-type: none"> <li>Experience in drying technologies, in particular flash dryers</li> </ul>	<b>D</b>
<ul style="list-style-type: none"> <li>Experience of work in developing countries</li> </ul>	<b>D</b>
<ul style="list-style-type: none"> <li>Willingness to travel and work in Developing Countries for short periods</li> </ul>	<b>E</b>
<b>Personal Attributes:</b>	
<ul style="list-style-type: none"> <li>Understands the fundamental differences between a taught degree and a research degree in terms of approach and personal discipline/motivation</li> </ul>	<b>D</b>
<ul style="list-style-type: none"> <li>Able to, under guidance, complete independent work successfully</li> </ul>	<b>E</b>
<b>Other Requirements:</b>	
<ul style="list-style-type: none"> <li>This scholarship may require Academic Technology Approval Scheme approval for the successful candidate if from outside of the EU/EEA</li> </ul>	<b>E</b>
<ul style="list-style-type: none"> <li>A PhD project research proposal that is related to the research area</li> </ul>	<b>D</b>
<ul style="list-style-type: none"> <li>The scholarship must commence before 30<sup>th</sup> September 2017</li> </ul>	<b>E</b>

**Closing date for applications: *midnight UTC on 3 July 2017***

**For further information contact: *Professor Keith Tomlins***

**Contact details: *E-mail: k.i.tomlins@gre.ac.uk***

#### **Making an application:**

Please read this information before making an application. Information on the application process is available at: [http://www2.gre.ac.uk/research/study/apply/application\\_process](http://www2.gre.ac.uk/research/study/apply/application_process) . Applications need to be made online via this link. **No other form of application will be considered.**

All applications **must include** the following information. **Applications not containing these documents will not be considered.**

- **Scholarship Reference Number (Ref)**– included in the personal statement section together with your personal statement as to why you are applying
- **a research proposal related to the subject topic \***
- **a CV including 2 referees \***
- **academic qualification certificates/transcripts and IELTS/English Language certificate if you are an international applicant or if English is not your first language or you are from a country where English is not the majority spoken language as defined by the UK Border Agency \***

*\*upload to the qualification section of the application form. Attachments must be a PDF format.*

Before submitting your application you are encouraged to liaise with the Lead Supervisor on the details above.