

JOB DESCRIPTION

Vacancy reference:	JT14227
Post Title:	Postdoctoral Research Assistant
Grade:	Grade 6
School/Department:	Food and Nutritional Sciences
Reports to:	Dr Julia Rodriguez Garcia
Responsible for:	Not applicable

Purpose

The role of this post is as a Food Scientist researcher within the Food and Bioprocessing Sciences Research group (FaBS) which is part of the Food and Nutritional Sciences department and research division. The post is funded specifically as a fixed term contract as the PDRA on an Innovate UK funded project addressing sugar and fat reduction in biscuits.

Main duties and responsibilities

- To be able to use and interpret data resulting from microscopy (Light microscopy (LM), confocal laser scanning microscopy (CLSM), scanning electron microscopy (SEM) and transmission electron microscopy (TEM))
- To be able to carry out and interpret data from rheological measurements of dough and textural analysis of biscuits (e.g. fracture strength and penetration resistance tests)
- To be able to design and run sensory profiling panels and consumer acceptance panels, and statistically analyse resulting data
- To be able to carry out and interpret data resulting from volatile flavour analysis (e.g. headspace analysis using SPME and compound separation, identification and quantitation using GCMS)
- To be able to write progress reports and present work to industrial partners
- To be able to write manuscripts for research papers
- To be able to meet deadlines within a project plan.

Supervision received

The post will report directly to Dr Julia Rodriguez Garcia. The post holder should be able to work as an independent researcher, but will receive supervision from Dr Garcia and specific guidance on microscopy and texture measurement. Additionally they will be supported by Dr Lisa Methven in Sensory Science and Dr Jane Parker in Flavour Chemistry.

Supervision given

This post does not have a supervisory role.

Contact

This post will be within the Food and Nutritional Sciences department, additionally utilising equipment and expertise within the Chemical Analytical facility (CAF). There will be frequent contact with the external collaborators at both Cargill and United Biscuits.

Terms and conditions

This is an 80% FTE post and we envisage that this will be carried out within 4 full days per week (i.e. nominally 28 hours of a nominal 35 hour week). Exact hours worked each day and week can be at the discretion of the role holder and their line manager.

This document outlines the duties required for the time being of the post to indicate the level of responsibility. It is not a comprehensive or exhaustive list and the line manager may vary duties from time to time which do not change the general character of the job or the level of responsibility entailed.

Date assessed: August 2016

PERSON SPECIFICATION

Job Title	School/Department
Postdoctoral Research Assistant	Food and Nutritional Sciences

Criteria	Essential	Desirable
Skills Required	<p>To have at least 2 out of the 4 following skills:</p> <ul style="list-style-type: none"> • Microscopy (Light microscopy, confocal laser scanning microscopy, scanning electron microscopy and transmission electron microscopy) • Rheology and Texture Measurement • Flavour Analysis by GCMS • Ability to run Sensory Profiling and Consumer studies 	<p>To have the other 2 out of the 4 skills listed under essential</p>
Attainment	<ul style="list-style-type: none"> • PhD in relevant area (Food Science) 	
Knowledge	<ul style="list-style-type: none"> • Knowledge of at least 2 of the 4 areas: Microscopy, Rheology, Flavour Analysis and Sensory Science. 	<ul style="list-style-type: none"> • Knowledge of the other 2 out of 4 areas listed under essential. • Knowledge of biscuit ingredients, processing and structure

Relevant Experience	<ul style="list-style-type: none"> • To be have sufficient experience to operate two of the following independently: • Microscopy, Rheology, Flavour Analysis or Sensory Profiling panels. 	<ul style="list-style-type: none"> • Experience in baking, especially of biscuits.
Disposition	<ul style="list-style-type: none"> • Good communication skills in English (essential to run sensory and consumer panels) • Good project management and time management skills. 	<ul style="list-style-type: none"> • Good writing skills, for example previous experience in writing reports for industry and research papers.

Completed by: Lisa Methven	Date: 18/7/2016
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