

JOB DESCRIPTION

Job Title:	Flavour Technologist	Grade:	SG6
Department:	Food & Markets, Natural Resources Institute	Date of Job Evaluation:	
Role reports to:	Medway Food Innovation Enterprise Fellow		
Direct Reports	-		
Indirect Reports:	-		
Other Key contacts:	Director of NRI, HoD Food and Market, Centre Lead for Food systems research, staff at Medway Food innovation Centre		
	non contractual and provided for guidance. It will be undated		

This role profile is non-contractual and provided for guidance. It will be updated and amended from time to time in accordance with the changing needs of the University and the requirements of the job.

PURPOSE OF ROLE:

The background

The Natural Resources Institute of the University of Greenwich is part of a consortium called Growing Kent and Medway (GK&M), which is led by NIAB EMR and won a £17.8 million UKRI Strength in Places grant. The ambition of GK&M is to develop a world-class agri-food innovation cluster that supports growth in technology-driven horticultural production, food & drink processing, and manufacturing. Besides, NIAB EMR and the University of Greenwich, the other research partners of this world-class consortium include the University of Kent. The industry partners include a range of significant local agri-food companies (APS Produce, Berry Gardens Growers, Chapel Down, Gusbourne Estate, Richard Hochfeld Group, Thanet Earth, Worldwide Fruit); an innovative technology integration business that operates across supply chains (Geku Automation); and a world-leading packaging company (Smurfit Kappa). GK&M is backed by strong civic and business support with partners from the Kent & Medway Economic Partnership and Locate in Kent. GK&M will drive innovation and wealth creation by stimulating a vibrant and collaborative network that enables new and existing food enterprises to develop and thrive. It connects industry with technologists and researchers to co-creatively address the innovation challenges faced by the agri-food sector and its supply chains.

Flavour Technologist (FT) workplace: Medway Food Innovation Centre (MFIC) at Natural Resources Institute (NRI)

As part of the GK&M project, the University of Greenwich has set up the Medway Food Innovation Centre (MFIC) – a state of art facility to deliver step-changing food R&D solutions for food industries through disruptive research, enterprise support as well as excellent training and courses on food product and process development for student cohorts. One of the core units of the MFIC is the Food and Flavour analysis unit (**FFAU**) which is equipped with the advanced facilities like automated robotic sampling unit (Centri) attached to the two dimensional gas chromatography coupled with Time of Flight Mass spectrometry (GCxGC-ToF MS), hitherto not available in the campus. This high end equipment will be extensively used to assess the flavour profile of food products and related volatile analysis



to support new product technologies and expand flavour research at the NRI which will support the innovation challenges of the local food businesses.

With support from the GK&M project team within NRI, the successful candidate will contribute to the work of MFIC by ensuring that this facility is seamlessly operational and effectively managed. S(he) will work closely with the MFIC head within University of Greenwich, to deliver relevant food innovation projects/workstreams including those for the GK&M Research and Innovation Fund.

Purpose of the role

- Responsible for overall management of GCxGC-ToF MS and to undertake day-to-day operational responsibilities and upkeeping/maintenance.
- Act as the technical Lead for the research project linked to the flavour analysis, deliver enterprise/corporate project, and involve in (student) training.
- Maintain and implement NRI's QMS procedures and work instructions as well as responsible for ordering consumables for the GC-MS, overseeing installation where required.

KEY ACCOUNTABILITIES:

With support from the GK&M project team within NRI, the successful candidate will be the operational lead for flavour analysis to support relevant research projects within the Food and Market Department, University of Greenwich and the maintenance of GCxGC-ToF MS within MFIC.

The successful candidate should have proven experience of working with GC-MS/GCxGC-ToF MS facility (prior knowledge of the flavour analysis is essential) with at least MSc level in food/flavour science.

Role Specific:

- Provide technical support for flavour and volatile analysis projects including sensory panelling with particular emphasis on plant-based food
- Maintaining/handling/(basic) trouble shooting of GCxGC-ToF MS
- Lead flavour analysis and sensory workstream to support internal and external projects and facilitate industry collaboration
- Key MFIC contact with the supplier of the recently purchased GCxGC-ToF MS for maintenance (logbook owner) and schedule routine check-up (e.g., equipment performance) during warranty period
- Develop SOPs for GCxGC-ToF MS, train students and project fellow with instrument operation and help with designing flavour analysis experiments
- Together with the NRI teaching programme leads, develop flavour science module/teaching materials for the relevant BSc/MSc courses
- Support MFIC head and GK&M team towards regular updates of MFIC facilities and reporting of ongoing projects (linked to flavour analysis)
- Enterprise support via working with the participating businesses on flavour and sensory analysis and/or helping with the technical feasibility studies
- Support MFIC head on future CAPEX requisition related flavour and sensory analysis
- Help MFIC head to develop and deliver relevant CPD courses as part of KE strategy

Generic:



- Provide flavour technology support to research staff working on grants
- Ensure routine procedures are performed according to schedule, e.g. calibration and monitoring of GCxGC-ToF MS
- Conduct laboratory inductions and training for new staff and students
- Contribute to departmental plans, activities, and efficient working practices
- Assist in achieving the KPIs of the MFIC and Natural Resources Institute
- Demonstrate a commitment to equality, diversity and inclusion
- Contribute to the flavour analysis CPD development activities

Managing Self:

- Well-developed communication and presentation skills
- Successful technical skills with a high level of competency using equipment
- Maintain own continuous professional development (CPD)
- Able to prioritise individual and team workload and meet competing deadlines
- A methodical approach to tasks with attention to detail and ability to analyse problems
- Behave in a manner which reflects the University values and creates a positive environment for work and study

Core Requirements:

- Adhere to and promote the University's policies on Equality, Diversity and Inclusion and Information Security;
- Ensure compliance with Health & Safety and Data Protection Legislation;
- Support and promote the university's Sustainability policies, including the Carbon Management Plan, and carry out duties in a resource efficient way, recognising the shared responsibility of minimising the university's negative environmental impacts wherever possible
- Adhere to current legal requirements and best practice relating to digital content and accessibility, including Web Content Accessibility Guidelines when creating digital content.

Additional Requirements:

Undertake any other duties as requested by senior university officials or their line manager, commensurate with the grade.

The role holder will be expected to show flexibility in working arrangements, including working hours, to deliver the required level of service.

KEY PERFORMANCE INDICATORS:

- Produce and deliver work and set tasks to agreed timescales
- Demonstrate technical Knowledge in the field of flavour and sensory analysis
- Contribute to team effectiveness and wellbeing.
- Comply with corporate standards

KEY RELATIONSHIPS (Internal & External):

Internal

MFIC Head



- Head, Food and Markets Department
- NRI academic and support staff
- Faculty and University wide collaborations

External

- Project partners and collaborators particularly GK&M Innovation Growth Managers
- Private sector actors
- Relevant professional bodies in the field.

Person Specification

Essential

Experience

- Knowledge and experience in the field of flavour and sensory analysis
- Technical management and operational capability of GC-MS/2D GC-ToF-MS
- Demonstrated capability in the data analysis of GC-MS
- Experience in flavour and sensory analysis for plant/algae-based food
- Support internal research and contract analytical service
- Evidence of teamwork to deliver high quality analytical outputs against strict targets

Skills

- Proven ability to operate GC-MS/ GCxGC-ToF MS and strong background in flavour science
- Proven ability to work with sensory panel and use of statistical software
- Proven ability to manage own workload
- Excellent oral and written communication skills and computer literacy e.g. MS Office

Qualifications

 PhD/Master in food science or flavour science or closely related field(s) like analytical chemistry

Personal attributes

 We are looking for people who can help us deliver the <u>values</u> of the

Desirable

Experience

- Direct experience in handling and independently operating 2D GC-ToF-MS
- Demonstrated capability in the data analysis of 2D GC-ToF MS (preferably Markes/SepSolve)
- Experience in setting up sensory panelling and data analysis
- Experience working with industries
- Demonstrated contribution in publications and report writing
- Support postgraduate teaching programmes and experience in providing training on 2D GC-ToF-MS

Skills

- Experience of working with GCxGC-ToF MS (operational knowledge of SepSolve/Markes software)
- Experience of the maintenance of GCxGC-ToF MS
- Experience of maintaining research facilities to a required standard
- Experience of industry engagement in analytical chemistry/flavour technology

Qualifications

N/A

Personal attributes

N/A



University of Greenwich: Inclusive, Collaborative and Impactful