

#### JOB DESCRIPTION

Job Title:	Consultant Engineer	Grade:	AC2/3
Department:	Engineering & Science	Date of Job	February 2021
-		Evaluation:	, and the second
Role reports to:	Director, The Wolfson Centre for Bulk Solids Handling Technology		
Direct Reports	N/A		
Indirect Reports:	Chief Consulting Engineer		
	Consulting Engineers		
Other Key contacts:	Head of the School of Engineering, Wolfson Centre staff and		
	students		
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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:

To work within a small team of professional engineers, providing commercial enterprise services to industry utilising the expertise base of The Wolfson Centre.

Customers of the Wolfson Centre include most of the major companies in the chemical, food, power and construction product sectors. Services are provided through projects which run from desk studies or one-day visits through to several man-months of test and design work.

To lead research activities and contribute to the delivery of undergraduate and postgraduate programmes in the School of Engineering.

#### **KEY ACCOUNTABILITIES:**

## **Team Specific:**

Laboratory test work involving measurement of bulk solid properties for system design purposes.

The following duties will be assessed according to experience and expertise and a job grade issued accordingly. Where experience is lacking, the opportunity to develop into these areas will be provided and enable career progression.

- 1. To engage in enterprise activity:
  - Analysis of bulk handling systems and components to support troubleshooting activity
  - Conceptual design of bulk handling systems and equipment including hoppers and silos, pneumatic conveyors, control systems and other items, both for new installations and modifications to existing plant
  - Writing of proposals for possible new projects, and reports on existing projects, will form a significant part of the work



- Representing the Wolfson Centre at trade shows, conferences, exhibitions etc and networking with potential clients
- Liaison with clients will include visits to their premises to view plant and participate in meetings, telephone contact to report progress and discuss technical issues, and any other forms of contact as may be required from day to day. It may be necessary at times to travel in the UK or abroad for periods of up to one week.
- Additional duties will be added as they are required in the course of the Wolfson Centre providing a developing range of enterprise activities to industry.
- 2. To liaise with clients and research consortia as required
- 3. To engage in research activity:
  - The engineer will be expected to work with specialists in many technical fields at the Wolfson Centre, to utilise and develop their expertise. Literature research must be regularly undertaken, to assess the current state of technology in less commonly used technical areas.
  - Supervise student projects at both undergraduate and postgraduate level
  - Participation in the production of research publications

#### Generic:

- provide effective communication of complex ideas in a range of academic and commercial situations
- support team members in research, teaching and learning situations
- develop bids for research and consultancy activities

# **Managing Self:**

Training (both formal and on the job) in relevant technical areas will be given where appropriate. The engineer will be expected to take responsibility for self-education and keeping up to date in appropriate technical areas.

After an initial period, the engineer will be expected to take responsibility for running projects.

It is possible that following several years of experience in this general role, there may be an opportunity to pursue a personal research theme within the context of bulk solids handling technology.

## **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
- Commitment to self and colleague development

## **Additional Requirements:**

Undertake any other duties as requested by the [e.g. PVC, FOO etc.] or their line manager, commensurate with the grade.



#### **KEY PERFORMANCE INDICATORS:**

Delivery of departmental KPIs against the University's strategic plan Delivery of teaching and learning against university strategic plan KPIs Delivery of research output in line with University strategic plan KPIs

## **KEY RELATIONSHIPS (Internal & External):**

Work in an integrated way on research and enterprise projects, with other Wolfson staff members, external (industry and academic) project members, customers and research collaborators.

Collaborate with technician staff and subcontractors in getting equipment procured, delivered, commissioned and developed.

Work with our key stakeholders to develop relationships with international industry, our feeder schools and the wider community.

## PERSON SPECIFICATION

## **Essential**

## Experience

- Specialist knowledge and experience of working in bulk solids handling and powder technology;
- Sound working knowledge of other nonspecialist powder and particulate technologies;
- Competent in the use of digital instrumentation on solids handling systems;
- Experience of initiating and/or writing bids to obtain funding from industry, research councils etc.;
- Established record of project work for both Research and Enterprise;
- Experience of working within a strong culture of health & safety

#### Skills

- Specialist skills in relevant laboratory work including design of experiments, interpretation and presentation of data;
- Familiarity with instrumentation and data logging equipment including data logging

## **Desirable**

## Experience

- Experience of supervising postgraduate research students;
- Teaching and supervision of student projects in a higher education environment
- Designing and leading significant teaching and assessment activity
- Experience of module/course development
- · High quality publications
- Previous professional experience in a related area

#### Skills

- Ability to produce high quality drawings in Solidworks or AutoCAD – for use within and outside of The Wolfson Centre
- Hands on skills in support of development of test apparatus or the execution of tests/trials



- and analysis software such as Labview, Matlab or similar;
- Ability to communicate technical work at high level;
- Creating professional/community partnerships;
- Excellent presentational and communication skills:
- Excellent technical writing skills;

## **Qualifications**

PhD in relevant engineering subject or equivalent experience

#### **Personal attributes**

- Ability to work in a multi-disciplinary team environment
- Ability to work with minimum supervision
- Ability to manage own workload
- Willingness to travel, including out of normal working hours where necessary
- We are looking for people who can help us deliver the <u>values</u> of the University of Greenwich: Excellence, Determination, Inclusivity, Ambition and Creativity

#### Qualifications

 Membership of an appropriate professional body

## Personal attributes

N/A