

#### THE UNIVERSITY OF MANCHESTER

# PARTICULARS OF APPOINTMENT

#### **FACULTY OF SCIENCE & ENGINEERING**

### SCHOOL OF MECHANICAL, AEROSPACE & CIVIL ENGINEERING

VACANCY REF: S&E-13683

Salary: £32,236 to £39,609 per annum pro rata (according to relevant

experience)

Hours: Full Time

Duration: 1 May 2019 for 18 Months
Location: Sackville Street, Manchester

### **Enquiries about the vacancy, shortlisting and interviews:**

Contact: Dr Maria Sharmina

Email: maria.sharmina@manchester.ac.uk

\_\_\_\_\_

### The University of Manchester

The University of Manchester was created in 2004 by bringing together The Victoria University of Manchester and UMIST, two of Britain's most distinguished universities, to create a powerful new force in British Higher Education. The University of Manchester provides an exciting environment for teaching and learning with a city centre campus alive with student activity day and night.

The vision for the University of Manchester is to be one of the finest universities in the world. The University is one of the largest in the UK and has teaching and research in more subjects than any other single-site British University. Students benefit from unrivalled facilities while staff benefit from an environment which is fast emerging as a centre for research excellence.

## **Faculty of Science and Engineering**

The Faculty of Science and Engineering is large and comprehensive with nine Schools: Chemical Engineering & Analytical Sciences; Chemistry; Computer Science; Earth, Atmospheric & Environment Sciences; Electrical & Electronic Engineering; Materials; Mathematics; Mechanical, Aerospace & Civil Engineering; and Physics & Astronomy. Together with research institutes including: Manchester Institute for Biotechnology, Dalton Nuclear Institute and Photon Science Institute, Thomas Ashton Institute and the University of Manchester Aerospace Research Institute (UMARI), the Faculty represents a diverse portfolio of research and teaching of the highest quality.

Many of the major advances of the 20th century began in this Faculty, including the work by Rutherford leading to the splitting of the atom and the development of the world's first modern computer. Today, research activities remain at the cutting-edge and the Faculty now generates more than a third of the total research income for the University.



#### The School of MACE

The School of MACE is the largest engineering School within the Faculty of Science and Engineering at the University of Manchester. Manchester was the birthplace of the engineering discipline, and MACE has historical routes in the Institute of Mechanics in founded in 1824. Today the School hosts 1300 undergraduate and 450 postgraduate students, delivers undergraduate programmes across Mechanical, Aerospace and Civil Engineering, and MSc programmes in both technical engineering subjects and management. With 120 academic staff, 90 technical and support staff, and 300 postgraduate research students and post-docs, the School is at the forefront of engineering education in the UK.

The School hosts world-leading academic researchers in areas including structures in extreme environments, innovative manufacturing, engineering resilient systems, modelling and simulation, aerospace engineering, nuclear engineering and climate change. Research activities are connected into a range of research institutes and centres including Dalton Institute, the Modelling & Simulation Centre and MACE has a leading node of the interdisciplinary Tyndall Centre for Climate Change Research. Research active academics are strongly encouraged to engage in multi-disciplinary research through collaborating with colleagues across Manchester's Schools, Faculties and Institutes, and coordinate activities supporting the University's specialist beacon areas, for example Addressing Global Inequalities, Advanced Materials and Energy.

## **Tyndall Centre for Climate Change Research**

Tyndall Manchester conducts interdisciplinary research in the fields of energy, decarbonisation, circular economy, and climate change mitigation. Based in the School of Mechanical, Aerospace and Civil Engineering, Tyndall Manchester also enjoys excellent links departments across the University including the Alliance Manchester Business School, the Centre for Atmospheric Science and the Dalton Nuclear Institute.

The post holder will be part of the Tyndall Manchester team, which brings together engineers, scientists, social scientists and economists, working together to develop sustainable responses to climate change through trans-disciplinary research and dialogue at a local and national level. The post will provide the researcher with a direct link to the Tyndall community, the various Tyndall projects and allow the researcher to be part of a supportive team within the University of Manchester.

### **Key Responsibilities, Accountabilities or Duties:**

- To carry out a survey of business models existing in the food system and in the seafood sector in particular.
- To organise and run stakeholder workshops to document innovative business models emerging in the food system and to design further innovations in the business models, complying with the circular economy principles.
- To work with the project partners at the Newcastle University, the Scottish Association for Marine Science, and the University of Greenwich to integrate the findings from the business models work in the other work packages.
- To travel to workshops in the UK and to relevant international conferences.



 To prepare papers suitable for high quality journal publication, as well as policy- or industry-relevant reports and give presentations on the research work.

### **PERSON SPECIFICATION**

### Essential Knowledge, Skills and Experience:

- PhD degree or close to completing a PhD (or equivalent) in a relevant field
- Evidenced understanding of the broad concepts of sustainability and circular economy
- Evidenced understanding of business models
- Experience of stakeholder engagement including among industry and policy makers
- Experience in running workshops and analysing the resulting data
- Experience of synthesising data from different sources to provide insightful outputs
- Very strong written and oral communication skills
- Experience of working with other academic disciplines

## Desirable Knowledge, Skills, Experience and Qualifications:

- Experience of doing research on the food/energy/water/land nexus
- Experience of conducting statistical analyses such as clustering
- A track record of academic publications