

## **Post Description**

| Post  | Research Fellow Energy Systems   | Position no: | 11823-3 |  |  |  |  |
|---|--|--------------|---------|--|--|--|--|
| College /<br>Department /<br>Directorate /<br>Institute | College of Engineering, Design and Physical Sciences Department of Mechanical and Aerospace Engineering Centre for Sustainable Energy Use in Food Chains Institute of Energy Futures |              |         |  |  |  |  |
| Salary  | Grade R1   |              |         |  |  |  |  |
| Contract type   | 30 months Fixed Term   |              |         |  |  |  |  |
| Full time/Part time                                     | Full Time  |              |         |  |  |  |  |
| Accountable to  | Prof. Savvas Tassou  |              |         |  |  |  |  |
| Reports   | n/a  |              |         |  |  |  |  |
| Internal<br>stakeholders                                | Director of CSEF, CSEF Administrator, other Researchers in CSEF, admin staff in MAE  |              |         |  |  |  |  |
| External stakeholders                                   | Industry and other Centre groups   |              |         |  |  |  |  |
| Date reviewed   | June 2024  |              |         |  |  |  |  |

### Main accountabilities:

To carry out research and development and contribute to existing and new projects, business development activities and the promotion of the work of the Centre for Sustainable Energy Use in Food Chains (CSEF), and the Institute of Energy Futures (IEF), nationally and internationally.

#### Work of the Role:

The appointee will work within CSEF and the Institute of Energy Futures at Brunel University London and will be expected to undertake independent research on one or more of the following areas:

- i) Hydrogen technologies for heating and cooling.
- ii) Heat pums and refrigeration.
- iii) Advanced heat to power cycles particulally sCO2.

#### **Post Profile**

- Production of independent original research
- · Acquiring and interpreting research data and results
- Take initiative in the planning of research and other supporting activities
- Write reports
- Present the results to stakeholders and at national and international conference
- Produce high quality journal publications

### Management of Staff and Students (Responsibilities and Accountability)

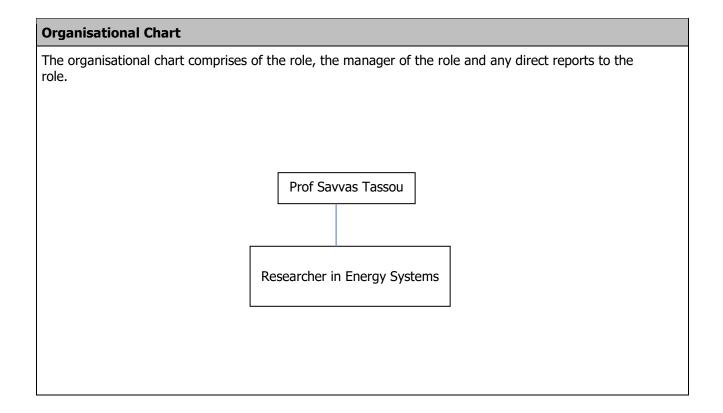
To provide appropriate advice to staff and students on their research area or research methodologies

#### **Effective Behaviours**

- Timeliness
- Meeting Deadlines
- Communication and Networking
- Networking group across colleges
- Ability to negotiate and influence
- Ability to plan and organise own workload
- Ability to adapt to a flexible approach to the demands of a busy college/department in order to accommodate changes in priorities when required

#### **University Employment Policy:**

- 1. Undertake any other reasonable duties as required and commensurate with the grade of post.
- 2. Adhere to and comply with the provisions of the Data Protection Act and the Health and Safety at Work Act in accordance with University policies.
- 3. Undertake all duties and responsibilities in compliance with the rules and regulations encompassing equal opportunities to help foster a diverse workforce.
- 4. Adhere, comply and work in accordance with University and Departmental policies, procedures and codes of conduct.
- 5. Promote the University's Environmental Policy and demonstrate commitment to it through actions and decision making.
- 6. Actively participate in on-going professional development activities as requested





# **Person Specification**

| Attributes  | Criteria   | Essential<br>/Desirable | How measured   |  |
|---|--|-------------------------|--|--|
| Education,<br>qualifications &<br>training            | PhD in appropriate discipline OR attained equivalent research, industrial or commercial experience                             | Е                       | Application form   |  |
|   | Evidence of research attainments including examples of written contributions in academic publications / journals               | E                       |  |  |
| Experience  | Details of previous employment/research and/or academic achievements applicable to the post over the past 2 years              | E                       | Application form,<br>Interview                           |  |
|   | Evidence of IT literacy including Excel and database   | Е                       | Application form,<br>Interview                           |  |
|   | Experience of planning research, preparing research proposals and negotiate contracts with little supervision                  | E                       | Application form,<br>Interview                           |  |
| Knowledge<br>Skills & Abilities                       | Evidence of current knowledge in the subject area  Demonstrate ability in acquiring and Interpreting research data and results | E                       | Application form,<br>Interview                           |  |
|   | Ability to compile reports and give/participate in academic presentations – particularly the results of                        | E                       | Application form, Interview  Application form, Interview |  |
|   | own research to both specialists and non specialists   | E                       |  |  |
|   | Ability to draft research papers for Publication in appropriate academic journals  | E                       | Application form,<br>Interview                           |  |
|   | Experience of giving oral presentations at academic / non-academic conferences and meetings                                    | E                       | Application form,<br>Interview                           |  |
| Additional<br>Requirements<br>(not included<br>above) |  |                         |  |  |

# **Job Hazard Assessment**

Any identified hazards have undergone appropriate Risk Assessments.

| Please tick all relevant workplace hazards identified with this post.  Currently the University, as a minimum runs Health Surveillance programmes for staff working with skin and respiratory sensitisers, Biological Agents Class 2 and above and GMOs. |        |   |                                       |                                       |  |                   |                                      |         |
|--|--------|---|---------------------------------------|---------------------------------------|--|-------------------|--------------------------------------|---------|
| Display screen 🗵 equipment   |        | Manual handling                             |                                       |                                       | Prolonged standing e.g.<br>1 hour plus □                     |                   | Prolonged sitting e.g. 1 hour plus ⊠ |         |
| Biological agents: Cla<br>2 and above and<br>GMO Class 1 □   |        | Human blood, tissue or fluids □             |                                       |                                       | Respiratory sensitisers or laboratory allergens e.g. animals |                   | Skin Irritants/Chemicals □           |         |
| Work in confined Places □  |        | Ionising radiation                          |                                       | Noise (more than 80 dba-8 hrs. taw) □ |  | Lone working      |                                      |         |
| Use of dangerous machinery   | ,      | Electrica                                   | al hazar                              | rds □                                 | Shift work/night work □                                      |                   | Work outdoors □                      |         |
| Neck & arm vibrating equipment   | _      | Fork lift truck driving □ Work at heights □ |                                       |                                       |  | Lasers            |                                      |         |
| Any other hazards (e.g. food handling) please specify and ensure that appropriate guidance has been received from the Health & Safety office:  |        |   |                                       |                                       |  |                   |                                      |         |
| Physical demands of the job  | Liftin | ting   Carrying                             |                                       |                                       | □ Bending □  |                   |                                      | Pushing |
| If lifting/carrying duties expected, please give details of heights/weight load(s) the individual is expected to lift/carry and frequency:   |        |   |                                       |                                       |  |                   |                                      |         |
| Travel/Off-site working: % of time Meetings / Conferences  |        |   | UK ⊠                                  |                                       | Ove  | rseas 🗆           |                                      |         |
| Driving for work:  | None   | e 🗆   | □ Occasiona                           |                                       | ally ⊠ Weekly □  |                   |                                      | Daily □ |
| Management responsibility: Superviso   |        |   | · · · · · · · · · · · · · · · · · · · |                                       | í –  | pervisory 🗆       |                                      |         |
| Hours of work: Full tir  |        |   | ime ⊠                                 |                                       | Part tim   | Part time   hours |                                      |         |
| Non-standard contractual hours? (evenings/weekends)  Frequency, number of hours, type of work outside standard hours:  |        |   |                                       |                                       |  |                   |                                      |         |
| Other – including occasional or possible work hazards (please specify nature and frequency):   |        |   |                                       |                                       |  |                   |                                      |         |