Job Related Information

This document includes information about the role for which you are applying and the information you will need to provide with your application.

1. Role Details

<table>
<thead>
<tr>
<th>Vacancy reference</th>
<th>14115</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job title:</td>
<td>Research Technician (Waterbeach)</td>
</tr>
<tr>
<td>Reports to:</td>
<td>Project Officer (Biodegradability)</td>
</tr>
<tr>
<td>Salary:</td>
<td>£26,495 to £31,604</td>
</tr>
<tr>
<td>Terms and conditions:</td>
<td>Support</td>
</tr>
<tr>
<td>Grade</td>
<td>GR6</td>
</tr>
<tr>
<td>Duration of post:</td>
<td>Fixed term contract until 31 October 2018</td>
</tr>
<tr>
<td>Working hours:</td>
<td>37</td>
</tr>
<tr>
<td>Location:</td>
<td>Walton Hall</td>
</tr>
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<td></td>
<td>Milton Keynes</td>
</tr>
<tr>
<td>Closing date:</td>
<td>Noon on 9 November 2017</td>
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<tr>
<td>Type of application form accepted:</td>
<td>Long</td>
</tr>
<tr>
<td>Number of referees required:</td>
<td>Two</td>
</tr>
<tr>
<td>Unit recruitment contact:</td>
<td>Michelle Gallacher</td>
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</tbody>
</table>
2. Summary of duties

This post is based in the Ecosystems Research Group (ERG). The post holder’s main responsibility will be to support research being carried out at a waste treatment facility, where household waste is mechanically processed and biologically treated for landfill. The post holder will be based at Walton Hall, Milton Keynes, 50 miles from the waste treatment facility, near, Cambridge, so some travelling to and from the research location will be required. Work will include undertaking sampling activities and field and laboratory chemical analyses of samples derived from mixed biodegradable wastes, leachate and gaseous emissions. Other work may include contributing to research projects within the Ecosystems research group.

Main duties

1. Leading and participating in teams for fortnightly waste fractionation by hand-sorting household waste at an industrial waste treatment plant, ensuring adherence to agreed analytical protocols.
2. Leading and participating in fortnightly sampling of waste at various stages of processing at an industrial waste treatment plant.
3. Aids or leads monitoring of gaseous emissions at the household waste treatment facility using FTIR and other gas analysers.
4. Ensures compliance with safety regulations (site rules and OU risk assessments) while on site, and be responsible for Health & Safety for specific aspects of lab and field work e.g. regular checks on PPE (personal protective equipment) and assisting in assessing the risks of new procedures.
5. Receives deliveries of samples of waste and other materials and ensures completion of sample log records as required. Distributes delivered items to lab areas.
6. Prepares samples at the waste treatment facility and/or at The Open University by sorting, shredding, grinding and sieving, ensuring adherence to agreed protocols and quality control.
7. Performs preliminary testing on samples (e.g. moisture and loss on ignition) and routine chemical analyses e.g. total carbon and nitrogen, pH, electrical conductivity, nutrient content, acid digestions for total elemental composition.
8. Sets up biodegradability tests to standard protocols as directed by the Project Officer (Biodegradability) e.g. BMc anaerobic biodegradability tests; respirometry.
9. Records and analyses data, such as gas production volume in biodegradability tests, as directed by senior staff and PI. Provides data reports to the PI. Assists in writing routine reports.
10. Carries out inspection, servicing, maintenance and repair of laboratory and field equipment. This will include biodegradability testing rigs and other equipment specified by senior technical staff.
11. Is responsible for maintaining the stock of consumable supplies for specific areas of lab. Prepares replenishment requests for authorisation by the Laboratory Manager.
12. Reports failures in infrastructure to appropriate senior technical staff and works with Estates when requested to rectify problems.
13. Ensures that the Health and Safety at Work Act and The Open University’s Health and Safety Policies are observed in all aspects of the above work.

Other Responsibilities

14. To contribute a range of skills to research, contract research and consultancy projects within ERG. To provide additional support to research staff and students as required.
15. To undertake any other duties which may reasonably be required
16. To take reasonable care of the Health and Safety of themselves and that of any other person who may be affected by your acts or omissions at work.
17. To demonstrate a strong commitment to the principles and practice of equality and diversity.
3. Person specification

<table>
<thead>
<tr>
<th>REQUIREMENTS</th>
<th>(E = ESSENTIAL/ D = DESIRABLE)</th>
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<tbody>
<tr>
<td><strong>EDUCATION, QUALIFICATIONS AND TRAINING</strong></td>
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| Essential:    | • A degree or equivalent in a relevant scientific subject (e.g. Environmental Science, Soil Science, Applied Waste Management).  
• A detailed understanding of physical and chemical analysis of environmental materials such as compost, household waste, soil, anaerobic sludge.  
• Current driving licence. |
| Desirable:    | • First aid qualification. |
| **Knowledge, work and other relevant experience** |
| Essential:    | • Significant relevant laboratory and fieldwork experience with evidence of professional training in laboratory procedures (preferably in environmental research).  
• Familiarity with Health and Safety regulations and risk assessment, including CoSHH.  
• IT skills with a good knowledge of Excel (Microsoft Office).  
• An understanding of equal opportunities and diversity in the work place. |
| Desirable:    | • A good understanding of gas analysis techniques including gaseous emissions monitoring using on-line analysers.  
• Practical experience of anaerobic biodegradability testing (e.g. Residual Biogas Potential).  
• Practical experience of aerobic biodegradability testing (e.g. DR4 test).  
• Data processing skills and statistical knowledge e.g. using R, programming languages.  
• Experience of successful engagement with external stakeholders such as clients and funding bodies |
| **Personal abilities and qualities** |
| Essential:    | • Works as part of a team to support research projects.  
• Strong organisational skills, takes responsibility for getting things done by prioritising work or referring to senior staff.  
• Highly motivated and willing to work in difficult conditions at waste treatment sites including direct handling of waste materials, with proper regard to safety procedures.  
• Problem solving ability, working creatively to develop innovative and workable solutions.  
• Good oral and written communication skills.  
• Ability to work unsupervised when appropriate.  
• Responds quickly to changing priorities.  
• Shows respect for individuals from diverse backgrounds holding different values and attitudes.  
• Takes personal responsibility for self-development, willing to maintain and improve skill set. |
| Desirable:    | |
4. Role specific requirements e.g. Shift working

Occasional weekend work (Checking tubes)

5. About the unit/department

**Faculty of Science, Technology, Engineering & Mathematics**
The Faculty of Science, Technology, Engineering and Mathematics (STEM) is comprised:

- School of Computing & Communications
- School of Environment, Earth & Ecosystem Sciences
- School of Engineering & Innovation
- School of Life, Health & Chemical Sciences
- School of Mathematics & Statistics
- School of Physical Sciences
- Knowledge Media Institute
- Deanery including teams supporting Curriculum, Research and Enterprise, Laboratory Infrastructure and Faculty Administration

“We aspire to be world leaders in inclusive, innovative and high impact STEM teaching and research, equipping learners, employers and society with the capabilities to meet tomorrow’s challenges”

The Faculty of STEM consists of 700 staff and 1,800 Associate Lecturers. The Faculty delivers over 185 modules across undergraduate and postgraduate curriculum, supporting nearly 19,000 students (full time equivalents) which is 29% of the OU total.

The Faculty generates more research income (circa £17M) than any other Faculty in the University, supported by a comprehensive laboratory infrastructure.

We are proud of our distinctive values and capabilities underpinning our aspiration:

*We are inclusive:*

- We transform people’s lives, ensuring STEM education is openly accessible to many thousands of students from diverse backgrounds – our students express high satisfaction with their study experience
- We engage the public in exciting citizen science and engineering, including through free open educational resources, multi-platform broadcasting, outreach to inspire the next generation and with programmes to encourage more women into STEM

*We are highly innovative:*

- We are at the forefront of innovative developments in teaching practical science and engineering at a distance, through simulated and remote access laboratories and practical experimentation
- Our high quality teaching and curriculum are informed by world-leading research, strong links with professional bodies and communities of practitioners, as well as by scholarship focused on continuously improving our STEM pedagogy

*We deliver significant social and economic impact:*

- We provide STEM higher education at a scale and reach unsurpassed in the UK, with a sizeable international reach and further growth potential
- We inject transferable STEM skills and knowledge direct into the workplace for immediate employee and employer benefit, as students combine study while working
• The employability value of our courses is underpinned by accreditation from leading STEM Professional Bodies and Learned Societies, as well as partnerships and sponsorship with leading employers
• Our high quality, applied and academically relevant teaching and research addresses real-world issues, delivering impact for industry and society, including addressing pressing STEM skill-shortages across the UK

**Laboratory Support Team**

The Faculty’s Laboratory Support team supports a vibrant and interdisciplinary research community across biomedical and health sciences, earth and environmental sciences and physical and space sciences. The team provides technical support to the laboratory and research operations including developing and carrying out of experimental and analytical techniques, the training and supervision of users and the provision of technical support to ensure a safe and health working environment through professional laboratory practice.

6. **HOW TO OBTAIN MORE INFORMATION ABOUT THE ROLE OR APPLICATION PROCESS**

If you would like to discuss the particulars of this role before making an application please contact Graham Howell on +44 (0)1908 655487 or email: graham.howell@open.ac.uk

If you have any questions regarding the application process please contact Michelle Gallacher on +44 (0)1908 653485 or email: STEM-Staffing@open.ac.uk.

7. **THE APPLICATION PROCESS AND WHERE TO SEND COMPLETED APPLICATIONS**

<table>
<thead>
<tr>
<th>Your application should contain:</th>
<th>Long application form</th>
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<tbody>
<tr>
<td>Please ensure that your application reaches the University by:</td>
<td>Noon on 9 November 2017</td>
</tr>
<tr>
<td>E-mail your application to:</td>
<td><a href="mailto:STEM-Recruitment@open.ac.uk">STEM-Recruitment@open.ac.uk</a></td>
</tr>
<tr>
<td>Or post it to Name/Job title:</td>
<td>Michelle Gallacher, Staffing Adviser</td>
</tr>
<tr>
<td>Department/Unit:</td>
<td>Deanery, Faculty of Science, Technology, Engineering &amp; Mathematics</td>
</tr>
<tr>
<td>Address:</td>
<td>The Open University, Walton Hall, Milton Keynes, MK7 6AA</td>
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</tbody>
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8. **SELECTION PROCESS AND DATE OF INTERVIEW**

| The interview panel will be chaired by: | Graham Howell |
| **The other members of the interview panel will be:** | Emily Sear  
Brett Keith |
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<td><strong>The interviews will take place on:</strong></td>
<td>TBC</td>
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</table>
| **The selection process for this post will include** | Interview  
Tour/lab exercise |

We will let you know as soon as possible after the closing date whether you have been shortlisted for interview. Further details on the selection process will also be sent to shortlisted candidates. Applications received after the closing date will not be accepted.