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>15492</th>
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<tbody>
<tr>
<td>Job title:</td>
<td>Research Technician (SEM)</td>
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<tr>
<td>Reports to:</td>
<td>Laboratory Manager (EM Suite)</td>
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<tr>
<td>Salary:</td>
<td>£27,025 - £32,236</td>
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<tr>
<td>Terms and conditions:</td>
<td>Support</td>
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<tr>
<td>Grade</td>
<td>GR6</td>
</tr>
<tr>
<td>Duration of post:</td>
<td>Permanent, starting 1st June 2019</td>
</tr>
<tr>
<td>Working hours:</td>
<td>37</td>
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</table>
| Location:         | Walton Hall  
|                   | Milton Keynes |
| Closing date:     | Noon, Wednesday 16th January 2019 |
| Type of application form accepted: | Long |
| Number of referees required: | 3 |
| Unit recruitment contact: | STEM Recruitment |
| Your application should contain: | Long Application Form  
|                   | Covering Letter |
2. Summary of duties

The post holder will provide technical assistance in operating and sample preparation for the SRM laboratory.

- Ensuring smooth running of the Zeiss Supra 55VP and FEI Quanta FIB-SEM laboratories. Maintaining accurate laboratory records in accordance with Faculty policy. Ensuring that equipment is maintained, correctly aligned and calibrated.
- Preparing samples for SEM and TEM in support of Staff, visitors and external work
- Providing experienced technical assistance or training to research staff and students in:
  - samples preparation and coating
  - electron, x-ray and cathodoluminescence imaging and quantitative analysis
  - TEM wafer production
  - Data recording and processing
- Performing analyses and other measurements with the instruments as directed at times in support of staff, visitors and external work. Demonstrating equipment and techniques to work experience students, parties of school students and member of the public.
- Ensuring that the labs are well provisioned, with parts and consumables and disposal of waste chemicals and materials. Ensuring that equipment and chemical inventories are kept up to date.
- Supporting the work of associated analytical and support laboratories in STEM
- To work cooperatively with others in support of team, Faculty and University objectives.
- To undertake personal and professional development in accordance with post requirements
- Ensuring the Good Laboratory Practice procedures are compliant with current Health and Safety legislation.

3. Person specification

Requirements  (E = Essential/ D = Desirable)

<table>
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<tr>
<th>Education, qualifications and training</th>
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<tr>
<td><strong>Essential:</strong></td>
<td>A degree or equivalent in a scientific subject (preferably engineering) with significant experience in the technical aspects of Scanning Electron Microscope.</td>
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</table>
| **Desirable:** | PhD in engineering using analytical SEM  
Applicants should have or be working towards professional registration RSciTech, RSci or CSci |

<table>
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<tr>
<th>Knowledge, work and other relevant experience</th>
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| **Essential:** | Experience of scanning electron microscopy including:  
Sample preparation of samples  
Carbon and Gold coating  
SEM imaging and analysis |
• Data recording and processing
• In depth knowledge of the Health and Safety aspects of SEM processing.

Desirable:
• Experience of samples preparation of different nature (biological, rock samples etc)
• Experience in energy-dispersive X-ray spectroscopy (EDS/EDX) and EBSD analysis on SEM.
• TEM wafer production using Focused Ion Beam
• Experience of studying precious samples, including meteorites, lunar samples, etc.

Personal abilities and qualities

Essential:
• Highly motivated
• The ability to work unsupervised on a day to day basis
• The ability to learn new techniques and adapt existing ones, as directed
• Excellent attention to detail
• Good oral and written communication skills
• Demonstrating ability to work in a team

Desirable:

4. Role specific requirements e.g. Shift working

To work flexible hours in order to optimise efficient use of the facility.

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 Igor Kraev on +44 (0) 1908 858192 or email: Igor.Kraev@open.ac.uk.

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

7. The application process and where to send completed applications

Please ensure that your application reaches the University by: Noon, Wednesday 16th January 2019.
### 7. Selection process and date of interview

<table>
<thead>
<tr>
<th>The interview panel will be chaired by:</th>
<th>Igor Kraev</th>
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<tr>
<td>The other members of the interview panel will be:</td>
<td>TBC</td>
</tr>
<tr>
<td>The interviews will take place on:</td>
<td>TBC</td>
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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.