

Technical Specialist/Technical Tutor (Chemistry)

Job Ref: REQ251106

As part of the University's ongoing commitment to redeployment, please note that this vacancy may be withdrawn at any stage of the recruitment process if a suitable redeployee is identified.

Loughborough University's Technician Commitment

Loughborough University is a signatory of the national Technician Commitment Scheme which pledges to ensure the visibility, recognition, career development and sustainability of their technical staff. The successful candidate will therefore be joining a thriving and visible community of staff with opportunities for collaboration and networking, and a clearly defined career pathway against which they can map and plan their own professional development and career progression.

Job Description

Job Grade: Grade 6, Technical Teaching & Specialist (TTS)

Job Purpose

The postholder will work as part of a team to co-ordinate technical operations in an academic and research setting, ensuring compliance with safety standards and the effective management of facilities, equipment, resources and technical expertise to enhance the School's teaching, research, and learning aims.

Providing technical support for research/project activities in the Chemistry laboratories with a focus on materials, inorganic and physical chemistry, the role requires: the application of substantial experimental subject expertise: the provision of technical instruction; skilled experimental direction; provision of design-advice; and the delivery of Health and Safety guidance. The role supports: undergraduate, postgraduate-taught and postgraduate-research students as well as academic and research staff.

In addition, support of learning and supervision of taught practical sessions may occasionally be required.

The postholder will be required to independently plan and organise their own and the work of others, and to provide line management, mentoring and professional development support to colleagues. The level of responsibility will increase as the postholder's knowledge, training and professional development progresses.

Job Duties

- Co-ordinate technical operations in the Chemistry research laboratories to support the School's teaching, learning and research aims.
- Apply in depth knowledge of Chemistry techniques (particularly in the areas of materials, inorganic and physical chemistry) to provide technical or scientific solutions in support of research projects.
- Act as technical lead for the Chemistry dept X-ray diffraction instruments.
- Oversee maintenance of the Chemistry laboratories, ensuring high standards of housekeeping and safe handling and disposal of laboratory materials, to enable undergraduate, postgraduate taught, research students and staff to safely carry out practical work.
- Apply technical expertise to support collaborative research projects using reactive gases at high pressures and temperatures.
- In conjunction with academic staff, develop, test and construct/prepare new experiments and specialist research equipment. Work closely with academic colleagues to support and develop their research.

- Take technical responsibility for (operating, demonstrating and maintaining) apparatus and equipment (e.g. XRD, Glove Box, Thermal Analysis, GC, UV/IR).
- Take responsibility for line managing technical colleagues at lower grades, as determined by the Technical Manager, following HR policies and procedures. Actively support the professional development of colleagues that you line manage as well as other technical colleagues within the School when appropriate.
- Keep updated on Health and Safety regulations, implementing and enforcing them, and escalating any issues. Ensure compliance with relevant standards and regulations. Act as Health and Safety duty holder (eg Deputy Safety Officer, Radiation Protection Supervisor).
- Oversee and, when required, co-ordinate the maintenance and procurement of equipment and consumables within budget and policy guidelines.
- Establish, develop and oversee the maintenance of technical documentation, such as standard operating procedures and instructional materials.
- Identify and escalate issues (technical and staff-related) to the Technical Manager and suggest solutions drawing from your own knowledge and expertise.
- Support the delivery of open days, student visit days and outreach activities. Flexibility regarding working hours/days is required at times.
- Maintain good working relationships and communicate effectively with technical staff, academics, students, and visitors, including communicating complex information effectively to varied audiences. Attend and contribute to team meetings within the School and attend University technician networking events.
- Provide cover for any absence of other technical staff when necessary, including planning, preparation and delivery of timetabled laboratory sessions as part of a team with academic staff.
- Complete role-specific training and professional development, such as leadership and management or Health and Safety training.
- Undertake other general tasks and duties, commensurate with the level of the position, as directed by the Line Manager.

Points To Note

The purpose of this job description is to indicate the general level of duties and responsibility of the post. The detailed duties may vary from time to time without changing the general character or level of responsibility entailed.

Special Conditions

All staff have a statutory responsibility to take reasonable care of themselves, others and the environment and to prevent harm by their acts or omissions. All staff are therefore required to adhere to the University's Health, Safety and Environmental Policy & Procedures.

All staff should hold a duty and commitment to observing the University's Equality & Diversity policy and procedures at all times. Duties must be carried out in accordance with relevant Equality & Diversity legislation and University policies/procedures.

Successful completion of probation will be dependent on attendance at the University's mandatory courses which include Respecting Diversity, Information Security and, where appropriate, Recruitment and Selection.

There will be a requirement to undertake further training relevant to the role, both in laboratory techniques and specific Health and Safety related areas including fire marshal and manual handling training.

There will be some physical aspects of the role that require the use of manual handling techniques and equipment, including moving loads >25kg (such as cryogenic liquid vessels or compressed gas cylinders).

Organisational Responsibility

Reports to: School of Science Technical Facilities Manager

Responsible for: Technical Team Members within Chemistry

Person Specification

Your application will be reviewed against the essential and desirable criteria listed below. Applicants are strongly advised to explicitly state and evidence how they meet each of the essential (and desirable) criteria in their application. Stages of assessment are as follows:

- 1 – Application
- 2 – Test/Assessment Centre/Presentation
- 3 – Interview

Essential Criteria

Area	Criteria	Stage
Experience	Experience of advanced use and maintenance of X-ray diffractometers	1,2,3
	Experience of co-ordinating the operation, testing, repair and upgrade of specialist equipment, including XRD, TGA and elemental analysis	1,2,3
	Experience of providing and developing teaching and learning support to students, including practical demonstration & instruction on the use of complex instrumentation.	1,2,3
	Experience of ensuring that correct Health & Safety procedures and practices are being followed by all stakeholders working in technical settings and in compliance with relevant regulations, specifically COSHH, DSEAR and IRR17	1,2,3
	Experience of applying and co-ordinating relevant Chemistry processes and techniques, including the safe use of pressurised reactors, compressed and liquified gases.	1,2,3
	Experience of carrying out or designing experiments and studies, and the instrumentation and equipment to support this, for the use of compressed reactive gases (eg hydrogen, alkanes, toxic and corrosive) in high temperature work	1,2,3
	Experience of co-ordinating technical support in a relevant setting, supporting either teaching and learning or research activities	1,2,3
Skills and abilities	In depth knowledge of experimental techniques used within materials and physical chemistry.	1,2,3
	Accomplished at maintaining a wide range of chemistry laboratory equipment with a methodical approach to fault-finding and problem solving.	1,2,3
	Ability to communicate complex information in an effective and engaging way to a range of audiences.	1,2,3
	Ability to work efficiently and accurately, and with professionalism, in accordance with University values, planning and prioritising own workload to deliver tasks within agreed timescales while maintaining confidentiality.	1,2,3
	Ability to work independently, apply your own initiative, be self-motivated and lead own workload, projects and teams.	1,2,3
	Ability to establish, develop and maintain effective documentation, including safe working guidance and standard operating procedures.	1,2,3
	Ability to line manage others and support their professional development.	1,3

Training	Proven commitment to ongoing professional development, including mandatory and role-specific training.	1,3
	Willingness to take on wider University roles on behalf of the School/Service, such as Health & Safety or other roles.	1,3
EDI	Commitment to understanding Equity, Diversity and Inclusion (EDI) challenges and observing University EDI policies	1,3
Qualifications	Level 6, or equivalent qualification, in Chemistry or a closely related subject, including but not limited to: Degree or degree apprenticeship; Level 6 award; Level 6 certificate; Level 6 diploma; Level 6 NVQ. <i>While a Level 6, or equivalent, qualification is preferred, we recognise the value of practical and 'real-world' knowledge and expertise, therefore candidates with a strong industry track record will be considered based on their demonstrated skills, achievements, and contributions to the field.</i>	1
	Willingness to work towards a professional accreditation	1
Other	Willingness to provide support for events, such as University open and visit days (occasional Saturday working may be required)	1,3
	Willingness to travel for work purposes, such as visiting suppliers, training and professional development.	1,3

Desirable Criteria

Area	Criteria	Stage
Experience	Experience of co-ordinating or supervising the work of others.	1,2,3
	Experience of working with and/or co-ordinating the processing and testing of samples and/or materials, specifically for XRD, TGA or elemental analysis	1,2,3
	Experience of working with operando or in-situ spectroscopy.	1,2,3
Skills and abilities	Skilled in techniques such as advanced IR, solid state UV-Vis and surface area analysis.	1,2,3
	Ability to use and maintain other laboratory instrumentation such as Raman, NMR, GC-MS, LC-MS	1,2,3
Training	Ionising/non-ionising radiation safety	1,2,3
Qualifications	Higher degree or PhD in experimental Chemistry or a related subject	1
	NEBOSH or IOSH certificate	1
	Hold or be willing to work towards Associate Fellowship of the HEA	1
Other	Current driving license (to meet University requirements for driving University/hired vehicles).	1
	Understanding of lab infrastructure including local exhaust ventilation systems.	1,3

Conditions of Service

The position is **full time** (1.0FTE) and **open-ended**. Salary will be on the **Teaching and Technical Specialist** job family at **Grade 6**, £35,608 - £46,049per annum, at a starting salary to be confirmed on offer of appointment. The appointment will be subject to the University's Terms and Conditions of Employment for staff grades 6 and above, which can be found at: <https://www.lboro.ac.uk/services/hr/conditions-of-service/>.

The University is committed to enabling staff to maintain a healthy work-home balance and has a number of family-friendly policies which can be found at: <http://www.lboro.ac.uk/services/hr/support/>

The University offers a wide range of employee benefits, which can be found at: <http://www.lboro.ac.uk/services/hr/benefits/>

We also offer an on-campus nursery with subsidised places, subsidised places at local holiday clubs and a childcare voucher scheme, which can be found at: <https://www.lboro.ac.uk/services/hr/topics/childcare-support/>

In addition, the University is supportive, wherever possible, of flexible working arrangements. We also strive to create a culture that supports equality and celebrates diversity throughout the campus. The University holds a Bronze Athena SWAN award which recognises the importance of support for women at all stages of their academic career. Further information on Athena SWAN can be found at: <http://www.lboro.ac.uk/services/hr/athena-swan/>

Informal Enquiries

Informal enquiries should be made to Steve Elliott, Technical Facilities Manager by email on S.J.Elliott@lboro.ac.uk or by phone on +44 (0) 1509 222595