

Technical Tutor/Senior Technician (Physics)

Job Ref: REQ231180

As part of the University's ongoing commitment to redeployment, please note that this vacancy may be withdrawn at any stage of the recruitment process if a suitable redeployee is identified.

Job Description

Job Grade: Technical Services Grade 6

Job Purpose

To provide technical support for research/project activities, applying substantial experimental subject expertise, and provide technical instruction, skilled experimental direction, design advice and Health and Safety guidance to undergraduate, postgraduate taught and research students. To support learning and supervision of undergraduate and postgraduate-taught practical sessions/project work in the Physics Laboratories.

Job Duties

Technical Support for Laboratories

- To maintain the Physics laboratories, to enable undergraduate, postgraduate taught, research students and staff to safely carry out practical work.
- To provide technical and demonstrating support to students and staff within the Physics laboratories. To maintain the equipment, cleanliness and supplies within the laboratories to meet the needs of undergraduate and postgraduate students.
- To use expertise in complex instrumentation to train users and ensure operational continuity.
- To be responsible for the preparation of apparatus and equipment for practical sessions and provide advice & assistance to students (including the preparation and operation of equipment associated with experiments).
- To apply in depth knowledge of Physics techniques to provide technical or scientific solutions in support of research projects.
- In conjunction with relevant academic staff, develop, test and construct/prepare new experiments and specialist research equipment. To work closely with academic colleagues to support and develop their research.
- To be responsible for supporting (operating, demonstrating and maintaining) apparatus and equipment (e.g. XRD, VSM,, PVD thin film, lithography, electromagnets, radio telescope, observatory telescopes, cryostats, low temperature, ultra high/high vacuum).
- To ensure the laboratories are maintained, tidy and serviceable at all times and to ensure all housekeeping is undertaken to a high standard.
- To coordinate duties of technical support staff in the laboratory and for other members of the technical support team as required.
- To provide technical support in research or other teaching laboratories as required.

Health & Safety Practices

- To act as Deputy Safety Officer, taking a proactive approach to health and safety within the School and contribute to the continual development of good practice using a risk-based approach.
- To act as Health and Safety duty holder as required (eg Radiation Protection Supervisor).
- To ensure safe handling and disposal of laboratory materials and ensure that all work surfaces are free from contamination.

Teaching Support

- In conjunction with module leaders, proactively plan and prepare laboratory material for undergraduate and postgraduate classes including equipment and other materials for all scheduled laboratory sessions and projects.
- When required, to deliver timetabled laboratory sessions and to assess, as part of a team with academic staff, experimental practical skills.

Laboratory Administration

- To be responsible for monitoring consumables levels within the lab and to be responsible for the procurement of materials and serviceable parts for equipment.
- To act as a technical representative on School/University working groups as required.

Other

- To act as the line manager for members of the technical support team.
- To undertake any other duties, commensurate with the grade of the role, at the request of the School Technical Facilities Manager or School Operations 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 and Inclusion policy and procedures at all times. Duties must be carried out in accordance with relevant Equality, Diversity and Inclusion 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 first aider, 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 >5kg (such as lab equipment, chemical containers or gas cylinders). A degree of flexible working is required, to supported extended teaching activities, to provide support for Visit/open days and outreach activities and to support other labs when required.

The post holder may be required to work outside of normal office hours if necessitated by the exigencies of the service.

Organisational Responsibility

Reports to: School of Science Technical Facilities Manager

Responsible for: Technical Team Members within Physics

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	Previous practical experience of working in a Physics teaching/research environment.	1,3
	Experience of supervising /training staff and/or students.	1,3
	Previous experience of experimental techniques used within Physics.	1,3
	Experience of teaching/instructing students in practical skills and complex instrumentation to degree level or above.	1,3
Skills and abilities	Thorough understanding of the theories and principles of Physics.	1,3
	Knowledge of experimental techniques within Physics.	1,2,3
	Excellent hands on practical skills.	1,2,3
	In depth knowledge and understanding of COSHH, DSEAR and related safety policy.	1,2,3
	Excellent organisational skills and ability to work flexibly and independently.	1,3
	Excellent communication skills and ability to interact effectively with students and staff.	1,3
	High level of competency in the use of lab equipment and instrumentation.	2,3
	A willingness and ability to undertake further training, both in lab skills and H&S, as outlined in the above job duties and special conditions.	1,3
Training	Demonstrate evidence of continuing professional development relevant to the role.	1,3
Qualifications	Degree in Physics/ Engineering or a closely related discipline.	1,3
Other	Commitment to observing the University's Equality, Diversity & Inclusion policies at all times.	1,3
	Flexible approach to working hours to ensure scheduled laboratory sessions are supported, help with Outreach /Applicant Visit Day activities.	1,3

Desirable Criteria

Area	Criteria	Stage
Experience	Previous experience of working within an academic environment.	1,3
	Experience of Observational Astronomy.	1,3
Skills and abilities	Skilled in use of instruments such as XRD, PVD thin film, lithography, electromagnets, lasers, radio telescope, optical telescopes, cryostats, ultra high/high vacuum.	1,2
	Methodical approach to diagnostic problem solving	1,2
Training	Compressed gas safety	1,3

	Ionising/non-ionising radiation safety.	1,3
	Use of cryogenic liquids	1,3
Qualifications	Higher degree/PhD in experimental Physics or a related subject	1,3
	Hold or be willing to work towards Associate Fellowship of the HEA	1,3
	NEBOSH or IOSH certificate	1,3
Other	Knowledge of clean room protocols.	1,3

Conditions of Service

The position is full time and fixed term contract until 31st July 2024. Salary will be on a **Technical Services Grade 6, (£33,966 – £44,263 per annum)** at a starting salary to be confirmed on offer of appointment. The appointment will be subject to the University's normal Terms and Conditions of Employment for Technical Services staff, details of which can be found [here](#).

The University is committed to enabling staff to maintain a healthy work-home balance and has a number of family-friendly policies which are available at <http://www.lboro.ac.uk/services/hr/a-z/family-leave-policy-and-procedure---page.html>.

We also offer an on-campus nursery with subsidised places, subsidised places at local holiday clubs and a childcare voucher scheme (further details are available at: <http://www.lboro.ac.uk/services/hr/a-z/childcare-information---page.html>)

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. For further information on Athena SWAN see <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