



UNIVERSITY OF  
LINCOLN

## UNIVERSITY OF LINCOLN JOB DESCRIPTION

<b>JOB TITLE</b>	Senior Technician in Chemistry				
<b>DEPARTMENT</b>	School of Chemistry				
<b>LOCATION</b>	Janet Lane-Claypon Building and Joseph Banks Laboratories				
<b>JOB NUMBER</b>	ST8014	<b>GRADE</b>	6	<b>DATE</b>	November 2020
<b>REPORTS TO</b>	Technical Manager				

### CONTEXT

The Schools of Chemistry, Life Sciences, Pharmacy and Geography within the College of Science offer an exciting and supportive integrated work environment for excellence in teaching and research. A cross-school technical team (known as the JBL Schools Technical Team) combine discipline expertise with operational flexibility creating a dynamic and multi-disciplinary environment to enable delivery of the Schools' ambitious development plans. The post-holder is required to work across the Schools and their buildings, providing technical support to teaching research, and commercial service delivery.

### JOB PURPOSE

The role provides technical support in chemistry, analytical chemistry and pharmaceutical sciences to teaching staff and research teams. You will be responsible for the supervision and co-ordination of a team of 4 other technicians who support the day to day running of the chemistry laboratories in the Janet Lane-Claypon Building of the University of Lincoln. This will include ensuring teaching practicals are delivered in a timely and efficient manner; the regular and effective maintenance of equipment in the laboratory, laboratory supervision and technical assistance to undergraduate and postgraduate students and academic staff. Your line manager will be the Technical Manager and you will work with the other technical staff to share the workload.

Your main work environment will be the chemistry laboratories in the Janet Lane-Claypon Building which comprises a large synthetic chemistry lab and two adjacent instrument labs with several items of analytical equipment including: GC and GC/MS, HPLC, FTIR, AAS and various UV and fluorescence spectrophotometers. There will also be a requirement to provide technical support in the JBL research laboratories where needed. The role requires a good understanding and experience of safe working practices in a chemistry laboratory as well as confidence in using and troubleshooting advanced analytical laboratory equipment.

You will be part of a wider team of 20 technical staff who support teaching and research across the various buildings that the Schools use. You will liaise regularly with the other 2 senior technicians and the 2 technical managers to facilitate the delivery of technical support in teaching, research and the commercial services of the JBL schools.

## KEY RESPONSIBILITIES

### General

- Provide specialist advice and support to staff and students.
- Provide regular demonstration and guidance to others in the team which may include supervision and development of other technical team members.
- Be supportive and encouraging of others in a team; help to build co-operation by setting an example and showing a flexible approach to delivering team results.
- Contribute to building team morale as an active participant in the team.
- Organise and delegate work fairly according to individual abilities; help the team focus their efforts on the task in hand and motivate individual team members.
- Responsible for the forward planning and management of an area / unit.
- Discuss and interpret complex customer requirements to produce solutions and/or advice to produce a high level of learning support.
- Thorough understanding of the techniques and procedures of complex processes or specialised systems.
- Writing of complex and detailed instruction sheets and guidance material involving original thought and design.
- Point of reference for other team members for guidance and advice as an experience and specialist team member.
- Internal and external liaison to maintain and build relationships and contacts essential to the effectiveness of the role.
- Involvement in determining the delivery of service within the area due to their specialist expertise.
- Decision making on routine matters and influencing of longer term, high impact decisions.
- Carry out tasks requiring a high level of physical or sensory techniques.
- Train or instruct students on standard tasks or activities that require them to assess competency and provide feedback.

### Preparation of Experiments, Machinery and Equipment

- Manufacture and prepare materials/specimens and equipment requiring specialised skills and knowledge from verbal instruction and rough sketches to technical specifications.
- Provide highly specialist and technical advice to research students and researchers in the design of experiments or equipment.
- Conduct experiments on behalf of researchers and academics, interpret results using the information to make changes to processes and improvements.

### **Demonstration of Procedures**

- Demonstrate to undergraduate and postgraduate students as part of a module or course for both teaching and research.
- Assess students' competencies in tasks and be responsible for providing feedback during the session
- Assist with the development, updating or modifying the material or delivery method, in order to make it appropriate for the learning outcomes required, as agreed with academic staff, and to fit the learning style appropriate to the participants.
- Create written documents to communicate effective use of equipment or how to carry out regular procedures. Support academics by writing protocols for undergraduate practical schedules when requested.

### **Provision of Technical Advice**

- Be responsible for making recommendations to influence decisions which are far reaching, complex and long lasting for the Department/School. E.g. for major equipment purchase where the complexity of the changing technology means that the specialist advice from the role holder is critical and which, once implemented, will not be easily undone.
- Provide advice to academic staff and students to enable a resolution to unusual or complex problems where the available guidance or knowledge base is not specific and problems may be complicated due to the range of information available or there may be only partial or conflicting data available.
- Train members of staff in technical skills with the aim of transferring knowledge and experience.

### **Liaison and Networking**

- Where appropriate be responsible for leading departmental project groups.
- Contribute as an active and knowledgeable participant in internal or external working groups, committees or networks such as professional bodies, user groups.

### **Maintenance and Repair of Equipment/Apparatus**

- Conduct regular maintenance checks and repair equipment in the analytical lab. When unable to repair equipment liaise with relevant companies and oversee repair or replacement.

### **Collation of Results**

- Be responsible for analysing and interpreting results of experiments in order to feedback to students and academics and to make changes to future processes and techniques.
- Analysis of technical information in order to modify existing processes or techniques.

<b>Development of Methods of Testing and Practices</b>
<ul style="list-style-type: none"> <li>• Develop new or improved methods of testing and demonstrating practices under the supervision of academic, research or senior technical staff.</li> </ul>
<b>Health and safety</b>
<ul style="list-style-type: none"> <li>• Meet with undergraduate and postgraduate students to discuss their practical requirements, ensure they have access to the necessary equipment and check that they are complying with safe working practices while they work in the lab.</li> <li>• Contribute towards ensuring safety regulations are followed. Instruct students in safe working practices including overseeing activities in the labs and be aware of Risk and COSHH assessments that are in place.</li> </ul>
<b>Stock Control and Ordering</b>
<ul style="list-style-type: none"> <li>• Monitoring of laboratory resources, placing orders when required and monitoring of expenditure within a set budget.</li> <li>• Source new suppliers in line with requirements to purchase new equipment.</li> <li>• Advise on recommended purchases for new capital purchases. Management of a small budget, including processing invoices and delivery notes.</li> </ul>

**In addition to the above, undertake such duties as may reasonably be requested and that are commensurate with the nature and grade of the post.**

## ADDITIONAL INFORMATION

### Scope and dimensions of the role

You will be required to work 37 hours per week. Your hours of work will be agreed with the Technical Manager, the usual working hours are 8am to 4.30pm, 8am to 4pm on Fridays, flexibility with your hours will be required during busy periods.

### Key working relationships/networks

Internal	External
<ul style="list-style-type: none"><li>• Technical Manager</li><li>• Other technical staff in JLC</li><li>• Other senior technical staff in JBL and associated buildings</li><li>• School academic, administrative and learning support staff</li><li>• Head of College</li><li>• Head of School</li><li>• College Senior Academics</li><li>• College Programme Leaders</li><li>• Health and Safety Officers</li><li>• College Registrar</li><li>• Students</li></ul>	<ul style="list-style-type: none"><li>• Relevant academic and professional groups</li><li>• Relevant national, regional and international networks</li><li>• Materials suppliers and contractors</li></ul>



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## UNIVERSITY OF LINCOLN PERSON SPECIFICATION

<b>JOB TITLE</b>	Senior Technician in Chemistry	<b>JOB NUMBER</b>	ST8014
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<b>Selection Criteria</b>	<b>Essential (E) or Desirable (D)</b>	<b>Where Evidenced Application (A) Interview (I)</b>
<b>Qualifications:</b>		
Degree level qualification in a Chemistry / Chemistry related subject or equivalent experience	<b>E</b>	<b>A</b>
<b>Experience:</b>		
Previous experience of working in a laboratory / workshop environment	<b>E</b>	<b>A</b>
Evidence of having worked with specialist equipment and / or software	<b>E</b>	<b>A/I</b>
Experience of using analytical instruments for example GC, GCMS, HPLC, ICP-OES, AAS, EDX, FTIR, Raman, fluorescence and UV spectrophotometry	<b>D</b>	<b>A/I</b>
Experience of teaching support / demonstrating of procedures and equipment	<b>E</b>	<b>A/I</b>
Experience of laboratory management including preparation of risk assessments for chemical laboratory environments, e.g. COSHH	<b>E</b>	<b>A/I</b>
<b>Skills and Knowledge:</b>		
Technical working knowledge of all specialist equipment relating to specific workshop/laboratory	<b>E</b>	<b>A/I</b>
Maintenance and troubleshooting skills with routine and specialist laboratory equipment	<b>E</b>	<b>A/I</b>
Appropriate IT skills	<b>E</b>	<b>A</b>
Good written & verbal communication skills to enable explanation of technical issues and processes	<b>E</b>	<b>A/I</b>
Budgeting skills	<b>D</b>	<b>A/I</b>
<b>Competencies and Personal Attributes:</b>		
Enthusiastic and flexible approach to work	<b>E</b>	<b>I</b>
Effective team worker	<b>E</b>	<b>A/I</b>
Comfortable leading / supervising other team workers	<b>E</b>	<b>A/I</b>
Customer orientated approach to work	<b>E</b>	<b>A/I</b>
Professional and courteous manner	<b>E</b>	<b>I</b>
Good organisational skills	<b>E</b>	<b>I</b>
Able to work confidentially	<b>E</b>	<b>I</b>
Ability to meet tight deadlines	<b>E</b>	<b>A/I</b>
Proactive and able to demonstrate initiative	<b>E</b>	<b>I</b>
Keen to learn new skills and comfortable dealing with specialist lab equipment	<b>E</b>	<b>I</b>

A healthy regard for working in a potentially hazardous environment and obeying the rules and regulations imposed to provide a safe working environment	<b>E</b>	<b>I</b>
<b>Business Requirements:</b>		
Willingness to work flexible hours on occasions to accommodate the needs of business	<b>E</b>	<b>I</b>

**Essential Requirements** are those, without which, a candidate would not be able to do the job. **Desirable Requirements** are those which would be useful for the post holder to possess and will be considered when more than one applicant meets the essential requirements.

<b>Author</b>	JB	<b>HRBA</b>	HDR
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