

JOB DESCRIPTION

Job title:	SuperFab Technical Manager
Department / Unit:	Department of Physics, School of EPMS
Job type	Full-Time - Permanent - Professional Services
Grade:	RHUL 8
Accountable to:	HoD Physics, Prof Phil Meeson
Accountable for:	N/A
Purpose of the post	
<p>The SuperFab facility in the School of Engineering, Mathematical and Physical Sciences at Royal Holloway is a nanofabrication facility focussed on research in superconducting quantum electronic devices. Important nanofabrication processes include metallic thin film deposition, optical and electron beam lithography, and e-beam and ion microscopy. Facility users include internal and external academic staff, research students and users based in industry.</p> <p>The post-holder will manage technical and operational aspects of the SuperFab facility and will provide technical, managerial and user support, ensuring the continuing successful operation of SuperFab.</p> <p>The role includes providing training of users in tool operation, ensuring compliance with facility codes of practice and safety procedures, providing specialist technical support to users, tool and facility maintenance. The postholder will also act as an interface between SuperFab management, the internal and external users of the facility and the Royal Holloway's Research and Innovation Business Development team, and will work closely with the SuperFab Cleanroom Manager.</p> <p>The post-holder will be expected to foster a relationship of knowledge, trust and understanding between users, professional and academic staff; working collaboratively with colleagues to continuously improve the experience for academic staff, research staff and research students both at Royal Holloway and externally.</p> <p>The postholder will support the Director of SuperFab providing technical support, technical advice and reports to enable the Director to fulfil their academic leadership responsibilities. They may be asked to deputise for the Director of SuperFab on operational matters.</p> <p>The postholder will be responsible for the tasks outlined below.</p>	
Key tasks	
<p>Managing the SuperFab facility to deliver a high quality and reliable service to internal and external staff, students and industry. Duties will include:</p> <ol style="list-style-type: none"> 1. Delivering a customer-focused service for all facility users, acting as one of the first points of contact and authority for matters relating to facility use, including complaint handling. 	

2. Ensuring that there is adherence to all relevant internal and external policies, processes and regulations, including Health and Safety requirements, and managing the administrative operation of the SuperFab facility.
3. Providing user training / induction in the use of the facility and nanofabrication tools.
4. Providing technical support including tool and facility maintenance, fault diagnosis and fault resolution. Identifying malfunctions and breakdowns and resolving them.
5. Supporting the Director of SuperFab and the Cleanroom Manager by contributing to decision-making processes, representing the operational viewpoint internally in the Department and the School. This will include reporting to the Director of SuperFab and the Head of Department and providing information and action in relation to facility use.
6. Contributing to the management of the facility through the analysis of technical facility data, process data and user data.
7. Working with the Director of SuperFab and the Cleanroom Manager to implement research objectives and University strategic plans, including contributing to major projects, successfully managing change as necessary.
8. Providing technical and administrative support for the acquisition, installation, maintenance and operation of tools and equipment.
9. Ensuring that there is a culture of constant improvement. Identifying improvement and enhancement opportunities.
10. Demonstrating leadership behaviours at the appropriate level in line with the University's Leadership Behaviours Framework.
11. Ability to undertake workload planning
12. Covering duties of other SuperFab team members during absences
13. Ensuring the delivery of excellent customer service to stakeholders.
14. Developing effective communication networks and working relationships with internal colleagues, external networks and professional bodies, sharing information and good practice, as required.
15. Supporting the Director of SuperFab with the workload management of the facility.
16. Providing technical, strategic and planning advice to the Director of SuperFab and to academic colleagues.
17. Ensuring compliance with established financial controls and taking responsibility for SuperFab budget expenditure.
18. Liaising with the Finance Department and Departmental Staff to ensure that financial transactions conform to the University's Financial Regulations.
19. Liaising with Research and Innovation Business Development team to ensure the growth of external user engagement, contributing to contractual negotiations and the implementation of Trusted Research requirements.
20. Ensuring the provision of administrative support for academic staff with research grants, such as supporting the recruitment of fixed term staff, procurement processes and high level budget reporting.

Other duties and expectations

The duties listed above may be varied from time to time as dictated by the changing needs of the University. The post holder will also be expected to undertake additional duties as appropriate and as requested by their manager.

Although the SuperFab Technical Manager will be based in the SuperFab facility, if the need arises they may be required to assist and provide cover around the Department and the School, as required, in order to ensure that an outstanding level of service is maintained across the University.

The post holder may be required to work at any of the locations at which the business of Royal Holloway is conducted. The post-holder may be required to travel for business reasons that might

include; inspection and maintenance of equipment, use of tools at other nanofabrication facilities, representation of the facility with suppliers and at research and trade meetings.

Internal and external relationships

The post holder will be required to work closely with all colleagues within SuperFab and the Department of Physics, and with external users of SuperFab.

The following list is not exhaustive, but the post holder will also be required to liaise with colleagues in other areas, such as:

- the School of EPMS and across the University
- External suppliers
- Technical Professionals
- Finance
- Research and Innovation Business Development team
- IT Services
- Senior Management Team
- Administrative, academic staff and research students in other schools and institutions.
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PERSON SPECIFICATION

Details on the qualifications, experience, skills, knowledge and abilities that are needed to fulfil this role are set out below.

Job Title: SuperFab Technical Manager

Department: Academic Services

	Essential	Desirable	Tested by
Knowledge, Education, Qualifications and Training			
Education to degree level or equivalent technical experience.	X		Application Form
Education to PhD level		X	Application Form
In depth knowledge and understanding of nanofabrication processes / working in a cleanroom	X		Application Form / Interview
Skills and/or Abilities			
Ability to diagnose and solve technical problems in nanofabrication	X		Application Form / Interview
Ability to teach/demonstrate nanofabrication methods and techniques	X		Application Form / Interview
Proven ability to work as part of team and support colleagues, as well as a readiness to work on own initiative and act pro-actively.	X		Application Form / Interview
Ability to think and plan strategically.	X		Application Form / Interview
Good interpersonal skills including a professional approach and manner and ability to use tact and diplomacy.	X		Interview
Good organisational skills, ability to prioritise conflicting demands and meet deadlines, whilst maintaining a high level of attention to detail and accuracy.	X		Application Form / Interview
Proven ability to use creative problem solving techniques, identify and implement technical improvements, innovate and develop processes and policies to improve technical processes.	X		Application Form / Interview
Flexibility and proven ability to respond effectively to changing requirements.	X		Application Form / Interview
Proven ability to learn new systems. Good IT skills.	X		Application Form
A high level of numeracy and literacy, experience writing documents such as procedures, reports and papers.	X		Application Form / Interview / Test
Experience			
Experience of nanofabrication / working in an electronic cleanroom environment	X		Application Form / Interview
Experience of training users in technical areas.		X	Application Form / Interview
Maintenance of electromechanical tools		X	Application Form / Interview

Experience of line management and managing or leading a large complex team.		X	Application Form / Interview
Experience of budget management.		X	Application Form / Interview
Experience of manipulating data and analysing large data sets to identify trends.		X	Application Form / Interview
Other requirements			
Self-awareness and a commitment to self-improvement and personal development	X		Interview
Ability to work occasional weekends or late evenings and travel to events and other external activities as required.	X		Application Form