Imperial College London

Job Description

Job Title:	Research Facility Manager, Cryo-EPS
Department/Division/Faculty:	Department of Materials
Campus location:	South Kensington
Job Family/Level:	Professional Services, Level 4
Responsible to:	Director of Facilities
Key Working Relationships (internal):	Department Operations Manager Department Safety Officer Academic Champions Associate Head of Department (Research) Other Research Facility Managers Research Facility users Research Finance Manager Estates Facilities - Buildings and Maintenance Managers External service providers Academics, Research and Administrative staff within the Department, Administrative and Support staff in Faculty and College administrative departments Research students
Contract type:	Full time, Open-ended

Purpose of the Post

- To enable excellence in research by providing expertise in the use of the research facility.
- To manage the day-to-day operations of the research facility, facilitating access and maintenance of the facility.
- Be responsible for ensuring systems are in place for safety, and to ensure training is provided to be confident that users can use instruments capably.
- To train and support research associates and PhD students in use of the facility.
- To teach relevant courses to both undergraduate and postgraduate students.
- To conduct research on instrument development, design and capability, in collaboration with departmental colleagues, project investigators and/or manufacturers.
- To keep up-to-date with developments in the area (instrumentation and analytical protocols) to include attendance at appropriate workshops and conferences.
- To have primary responsibility for the atom probe instrument, and secondary responsibility for all other instruments within the CRYO-EPS facility and potentially others (to be determined).
- To liaise with external stakeholders (other Departments, instrument manufacturers, industrial sponsors etc.).
- To actively engage with the wider Electron Microscopy facility, and to provide input on the technical and scientific programme

Key Responsibilities

Technical Research Management (50-70%):

- Provide relevant specialist engineering skills and knowledge to the facility.
- Provide expert advice, both internally and externally to staff and students on the research capability of the facility.
- Maintain effective interactions with instrument manufacturers.
- Ensure access to the research facility is available to researchers as required.

- Ensure the operational environment is safe at all times.
- Ensure all users are trained as required to use the instruments competently.
- Perform ad hoc experiments when user training is not appropriate/possible.
- Ensure the most appropriate service contract for the facilities and the department is in place from a technical and financial view point.
- Ensure routine and preventative maintenance of the instruments is carried out – in addition and in support of the planned service agreement with the manufacturer.
- Ensure the smooth day-to-day operations of the research facility including provision of supplies and consumables.
- Provide technical support to the purchasing, installation and commissioning of any new equipment relating to the facility in consultation with other staff.
- Successfully integrate the instrument(s) into current facility and departmental operations.
- Work with the building and maintenance manager to ensure that the facility environment is fit for purpose (i.e. prompt and accurate reporting of faults/defects).
- Contribute to the development of long term strategies for running, development and renovation of the research facility to ensure the provision of experimental services and optimal use of resources across the Department.
- Provide support for local facility user meetings, and help ensure that they occur regularly and are well attended.
- Work well within a cross-disciplinary team and attend team meetings.
- Be highly motivated and be able to quickly develop skills necessary to achieve broad project goals.
- Lead the delivery of a range of different workshops on the relevant techniques to new and current users of the facility.
- To engage in outreach activities relevant to the facility.

Operations Management (20%):

- Monitor and ensure effective management of the facilities budgets including service contracts costs.
- Ensure appropriate booking systems are used, and be a point of contact for facility bookings.
- Ensure all usage and booking information is recorded and stored appropriately.
- Ensure the research finance manager receives regular and accurate usage and charging reports.
- Provide key information to the Department Operations Manager and Research Finance Manager to inform the annual TRAC for the facility.
- Ensure the appropriate charge-out rate is quoted to all intended users and highlight any contracts requirements where necessary.
- Attend key meetings related to running the facility

Research and Teaching Duties (0 – 10%):

- To conduct research in the area of instrument development/capability and data processing and management approaches.
- Where appropriate to assist in the preparation of grant proposals and to interact with collaborators to write proposals.
- To develop contacts and create links with research facility users within the College and the wider community.
- To contribute to teaching in the areas of the relevant techniques on both undergraduate and postgraduate courses as required.

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Secondary Instrument Responsibility (0 – 10%):

- To be a named "point-of-contact" for an instrument not considered to be your primary responsibility and to provide emergency cover.
- This would entail being able to safely shut down the instrument, and to then contact the primary instrument responsible person, and if deemed necessary, the DoF.

Person Specification

Requirements Candidates/post holders will be expected to demonstrate the following	**Essential (E)/ Desirable (D)**
Education	
A degree (or equivalent) or MSc (or equivalent) in materials, physics or chemistry, or a related subject (e.g. metallurgy, electrical engineering etc.)	E
PhD (or equivalent) in materials, physics, chemistry, or equivalent	E
Experience	
Expertise in handling and operating cryogenics.	E
Preferably a good understanding and experience of other standard materials characterisation methods.	E
Expertise in the use of appropriate (specific) software packages.	E
Extensive management experience of a facility/instrument in a research or industrial environment.	E
Experience of taking the lead with a team of colleagues in a changing environment	E
Experience in the installation and commissioning of new instruments, of setting up new-booking procedures and training others in the use of the new equipment.	E
Knowledge	
Detailed knowledge and experience of atom probe tomography in a wide variety of contexts and materials systems.	E
In addition, a high level of expertise of the theory, and practical experience of the following is desirable: o Focused-ion beam and scanning-electron microscopy o transmission-electron microscopy o ultra-high vacuum systems	E
Practical knowledge and experience in designing experiments, and in specifying and maintaining relevant the instrumentation stated above.	E
Knowledge of research funding models.	E
Skills & Abilities	
Well-organised and self-motivated with the ability to manage the day-today running of advanced instruments and to carry out appropriate research activities within a given time-scale.	E
Ability to support and perform high-quality research in a world leading department.	E
To manage collaborative projects effectively.	E
Effective overall management and supervisory skills.	E
The ability to manage a budget and knowledge of the Imperial College finance, as well as effectively communicating with research support structures.	E
Excellent written (to a level consistent with publication in highly regarded international journals) and oral communication skills.	E

Good interpersonal skills, and a demonstrated ability to interact with academics.	E
Ability to solve technical research and equipment problems.	E
A demonstrated ability for innovation.	E
Proven ability to meet deadlines.	E
Ability to work independently, and as a member of a team, across the research facilities.	E
A strong willingness to work with colleagues and train them in the use of the facilities in the laboratory.	E
Experience of implementing new procedures as a result of changes in policy.	E

Please note that job descriptions cannot be exhaustive and the post-holder may be required to undertake other duties, which are broadly in line with the above key responsibilities.

Imperial College is committed to equality of opportunity and to eliminating discrimination. All employees are expected to follow the 7 Imperial Expectations detailed below:

1) Champion a positive approach to change and opportunity
2) Encourage inclusive participation and eliminate discrimination
3) Communicate regularly and effectively within and across teams
4) Consider the thoughts and expectations of others
5) Deliver positive outcomes
6) Develop and grow skills and expertise
7) Work in a planned and managed way

Employees are also required to comply with all College policies and regulations paying special attention to:

- Confidentiality
- Conflict of Interest
- Data Protection
- Equal Opportunities
- Financial Regulations
- Health and Safety
- Information Technology
- Smoking
- Private Engagements and Register of Interests

They must also undertake specific training and assume responsibility for safety relevant to specific roles, as set out on the College Website Health and Safety Structure and Responsibilities page.

The College is a proud signatory to the San-Francisco Declaration on Research Assessment (DORA), which means that in hiring and promotion decisions, we evaluate applicants on the quality of their work, not the journal impact factor where it is published. For more information, see https://www.imperial.ac.uk/research-and-innovation/about-imperial-research/research-evaluation/

The College believes that the use of animals in research is vital to improve human and animal health and welfare. Animals may only be used in research programmes where their use is shown to be necessary for developing new treatments and making medical advances. Imperial is committed to ensuring that, in cases where this research is deemed essential, all animals in the College's care are treated with full respect, and that all staff involved with this work show due consideration at every level.
http://www.imperial.ac.uk/research-and-innovation/about-imperial-research/research-integrity/animal-research/

Committed to equality and valuing diversity, we are an Athena SWAN Silver Award winner, a Stonewall Diversity Champion, a Disability Confident Employer and work in partnership with GIRES to promote respect for trans people.

November 2020