

Job Description

Job title	Research Associate
Department/School	Chemistry
Job family	Education and Research
Grade	7
Reporting to	Professor Andrew Burrows (Chemistry)
Responsible for	There may be a requirement for: day to day supervision of other staff e.g. technical staff or, co-supervision of doctoral or undergraduate students
Location	University of Bath premises

Background and context

The research associate will undertake a programme of research to investigate the uptake of biomolecules into metal-organic framework materials and their controlled release from these porous materials. The research associate will undertake this project by carrying out a combination of experimental work and modelling studies.

Job purpose

To provide subject-specific research expertise and undertake specific research work reporting to Professor Andrew Burrows.

Main duties and responsibilities	
	Responsible to the PI for:
1	Conducting individual research project. Contributing to the design and execution of the project e.g. timetabling and meeting project milestones; participating in regular discussions with collaborative partners. Generating, collecting and analysing data related to the project using qualitative and/or quantitative techniques.
2	Writing up results of research and contributing to the publication of results in high-quality peer-reviewed academic literature.
3	Disseminating results of research project as appropriate to the discipline through activities such as <ul style="list-style-type: none"> • overseas research visits • conference presentations • public engagement activities
4	Participating in departmental/group meetings and preparing and delivering presentations/seminars to project team, internal and external stakeholders or funders.
5	Assisting with the supervision of postgraduate students and undergraduate project students and the assessment of student knowledge.
6	Continually updating knowledge and understanding in field or specialism to inform research activity.
7	Identifying sources of funding and providing assistance with preparing bids to funding bodies. Developing ability to secure own funding e.g. travel grants.
8	Contributing to the development of research objectives and proposals for own or joint research projects, with assistance of a mentor, if required.
9	Disseminating knowledge of research advances to inform departmental teaching.
	You will from time to time be required to undertake other duties of a similar nature as reasonably required by your line manager. You are required to follow all University policies and procedures at all times and take account of University guidance.

Person Specification

Criteria	Essential	Desirable
Qualifications		
A PhD degree in subject area of direct relevance for the project, or equivalent significant relevant experience and professional qualification	√	
Experience/Knowledge		
Post-doctoral experience		√
Demonstrated significant depth and breadth of specialist knowledge of subject matter to contribute to research programmes and to the development of departmental research activities	√	
Demonstrated awareness of latest developments in the field of research and in research design	√	
Demonstrated potential to publish in high quality, peer reviewed journals	√	
Demonstrated ability to secure beam time from national/international facilities and to successfully carry out experiments at these locations.		√
Skills		
Expertise in organic or inorganic chemical synthesis.	√	
Expertise in the synthesis and characterization of porous materials	√	
Expertise in using classical molecular simulation methods such as molecular dynamics and Monte Carlo preferentially with experience in materials modelling		√
Expertise in using ab initio methods preferentially with experience in materials modelling		√
Ability to prepare research proposals, to conduct individual research work and to disseminate results	√	
Ability to organise and prioritise own workload to meet required deadlines	√	
Ability to write research reports and to effectively disseminate outcomes	√	

Excellent oral, interpersonal and written communication skills	√	
Proficiency in appropriate techniques (as appropriate to discipline)	√	
Proficiency in IT skills (as appropriate to discipline)	√	
Attributes		
Commitment to working within professional and ethical codes of conduct	√	
Innovation and developing creative solutions	√	
Commitment to excellence in research	√	
Enthusiasm and self-motivation	√	
Tenacity – working to achieve own and team objectives and to overcome obstacles	√	
Ability to be an effective team worker	√	
Commitment to safe working practices	√	