Job Description

Job title:	Technology Translator for Joint Industry Projects (JIPs), Innovation Centre for Applied Sustainable Technologies (iCAST)
Department/School:	Chemistry
Grade:	7
Reporting to	iCAST Executive Director & iCAST Manager
Responsible for	No formal staff management responsibilities, although day to day supervision of other staff e.g. technical staff or supervision of doctoral or undergraduate students may be required and you will be expected to interact closely with other iCAST projects and colleagues at the Universities of Bath and Oxford.
Location:	University of Bath premises with occasional work at the iCAST Creative Hub facility in Swindon, the University of Oxford and potentially at industrial partner premises.

Job purpose

This is an exciting opportunity for highly motivated postdoctoral researchers with a keen interest in translational research, to work at the core of a new knowledge exchange facility hosted by the Centre for Sustainable and Circular Technologies (CSCT) at Bath: the **Innovation Centre for Applied and Sustainable Technologies (iCAST)**.

iCAST builds on the world-class research of the Universities of Bath and Oxford focussed on chemistry-using and chemical process-based innovation that will enable companies to easily invest in R&D and provide specialist business support for innovation to be deployed commercially. In collaboration with its partners, High Value Manufacturing Catapult's National Composites Centre (NCC) and Centre for Process Innovation (CPI), Swindon & Wiltshire LEP, the West of England Combined Authority, the Western Gateway Powerhouse and SETsquared, iCAST will enable UK companies to scale-up, deliver economic impact, and build supply chains, jobs and growth in the UK.

As a Technology Translator, you will be part of a large vibrant inter-disciplinary team responsible for delivering the technical elements of the iCAST innovation programme with partners, end users and customers. Specifically, you will be engaged in delivering at any given time various Joint Industry Projects (JIPs) – short proof of principle and feasibility studies - in your area of expertise. JIPs will be developed and delivered in collaboration with iCAST industrial partners and will mainly be in the following technical areas:

- Renewable and Bio-based Feedstocks (for commodity and high value chemicals)
- Circular Plastics and Sustainable Polymers (degradability, recycling, non-fossil feedstocks)
- Sustainable Engineering Materials (composites, built environment)
- Sustainable Manufacturing (green and sustainable chemistry, digitalisation, process intensification, distributed manufacturing).
- Cross-cutting systems-based approaches (LCA, TEA and cost engineering).

Within this dynamic iCAST project environment, from time to time you may also have the opportunity to contribute to iCAST Core Programmes of research in your specific area of expertise and knowledge.

By joining iCAST, you will also have the opportunity to use a wide range of new state-of-the-art equipment available to the project; spend time in iCAST academic and industrial partners' labs; and participate in industry engagement events at the iCAST Creative Hub facility in Swindon.

In addition to meeting the translational needs of iCAST programmes and projects, it is expected there will be the opportunity to publish research outputs in high impact journals.

Good technical, organisational and presentation skills are essential, as is the ability to work well in an interdisciplinary environment. Interaction with further academic and industrial partners of iCAST will be expected.

Main duties and responsibilities

	Responsible to iCAST Executive Director; Joint Industry Projects (JIPs) Leads and relevant Core Programmes Leads for:
1	Assisting in the development of JIPs in collaboration with iCAST Industry Director, academic and industrial partners by taking the lead in developing JIPs applications for iCAST Delivery Board review.
2	Conducting individual and/or collaborative R&D projects. Taking a lead in the experimental design and execution of the allocated JIP(s). Collecting and analysing existing data related to the projects using qualitative and quantitative techniques.
3	Writing up results of research and contributing to publishing of results in high-quality peer-reviewed academic literature.
4	Project management: e.g. timetabling and meeting projects' milestones; organising and participating in regular discussions with collaborative partners for allocated JIPs and specific Core Programme(s) as appropriate. Liaising with key stakeholders/industrial partners and conducting focus groups.
5	Disseminating results of project as appropriate to the discipline e.g. by presentations at conferences and industrial fora.
6	Participating regularly in group meetings and preparing and delivering presentations to iCAST team, internal and external stakeholders or funders.
7	Assisting with the supervision of graduate students and undergraduate project students who are engaged in iCAST related research.
8	Continually updating knowledge and understanding in field or specialism to inform research activity.
9	Identifying sources of funding and providing assistance with preparing bids to funding bodies to contribute to securing funds for further research and innovation.
10	Developing research objectives and proposals for own or joint research, with assistance of a mentor if required.
11	Contributing to IP exploitation efforts deriving from the research carried out.

Special conditions

Compliance with all relevant Codes of Practice and regulations for the University and relevant discipline.

Career and Professional Development Activities
From time to time you may be asked to assist in the facilitation of CPD activities and participate in iCAST training and mentoring programme for commercial skills (e.g. project and financial management, creative innovation and IP exploitation, etc.). This will form part of your substantive role and you will not receive additional payment for these activities.

Person Specification

Criteria	Essential	Desirable
Qualifications		
A PhD degree in chemistry or chemical engineering or relevant discipline or an equivalent professional qualification or industrial experience.	√	
Experience/Knowledge		
Postdoctoral experience in sustainable chemical technologies or relevant related discipline		√
Demonstrates significant depth and breadth of specialist knowledge of subject matter to contribute to iCAST research and innovation activities in one or more of these fields: • Renewable and Bio-based Feedstocks; • Circular Plastics and Sustainable Polymers; • Sustainable Engineering Materials; • Sustainable Manufacturing (process analytical technologies, reaction monitoring techniques, and process control and automation software) • Cross-cutting systems-based approaches (LCA, TEA and cost engineering)	√	
Demonstrates awareness of latest developments in the field of sustainable chemical technologies research and specific iCAST fields of research	√	
Experience in developing and/or contributing to funding applications		√
Demonstrates potential to disseminate results in high quality, peer reviewed journals, patents and confidential reports		√
Skills		
Experimental and/or computational modelling and/or coding and programming skills directly relevant to one or more of iCAST technical areas	√	

Ability to synthesise, produce, characterise or model molecules, materials and processes relevant to iCAST research	√	
Awareness and experience of Sustainable and/or Green Chemistry methods including integration of biotechnology; process analytical technologies; polymer science and sustainability assessment	√	
Ability to prepare research proposals and papers, to conduct individual research work and to disseminate results to multidisciplinary audiences, including industrial stakeholders	√	
Demonstrable ability to work across multiple projects at any one time.	√	
Ability to organise and prioritise own workload	√	
Ability to write research and other technical reports and to effectively disseminate outcomes	√	
Excellent oral, interpersonal and written communication skills	√	
Proficiency in experimental techniques (as appropriate to discipline)	√	
Proficiency in IT skills (as appropriate to discipline)	√	
Attributes		
Innovation and developing creative solutions	√	
Enthusiasm and self-motivation.	√	
Tenacity – working to achieve own objectives and overcoming obstacles	√	
Ability to be an effective team worker, especially in inter-disciplinary and multi-sector contexts	√	