

Times Higher Education University of the Year 2012 & 2019 Times Higher Education Widening Participation Initiative of the Year 2019 The University of Strathclyde is rated a OS 5-star institution





Decarbonisation Distillery Engineer (KTP Associate)

Department	Chemical and Process Engineering (www.strath.ac.uk/engineering/chemicalprocessengineering/)		
Faculty	Faculty of Engineering (www.strath.ac.uk/engineering/)		
Staff Category	КТР	Reference No	421190
Reports To	Dr Jun Li (Academic Supervisor) Norman Gillies (Company Supervisor)	Grade:	RS79
Salary Range:	£31,000-£33,000 p.a. plus £4,000 training and development budget	Contract Type:	Fixed Term (24 months)
FTE	I (37.5 hours/week)	Closing Date	20/02/2022

Job Advert

The Department of Chemical and Process Engineering in partnership with Isle of Raasay Distillery (https://raasaydistillery.com) are seeking to appoint a KTP Associate in the area of hydrogen energy, with a focus on the development of a direct electrolysis process turning whisky wastes into hydrogen and the use of hydrogen to power the whisky distillation process, while addressing the challenge of decarbonisation of distillery processes.

R&B Distillers Ltd are artisanal distillers of whisky and gin, who, in 2017, formed a distillery on the Hebridean Isle of Raasay. R&B Distillers Ltd has strategic vision on implementing sustainable practices to develop environmentally aligned products, for the future of their business, the Raasay community, and to affect positive change in the Scotch whisky industry. Taking the project, R&B Distillers Ltd's ambition is to reduce over 83% of its current carbon emissions, supporting its long-term expansion plans, enabling production of whisky products aligned to the net zero agenda, and thus growing as a thought leader on sustainable energy strategies to distilleries in Scotland.

The KTP Associate will be employed by the University of Strathclyde but will spend most of their time working time at the company's premises in Isle of Raasay. A key feature of the KTP position is a personal training and development allowance of £4,000 that you can use to develop skills related to the project that will help you to advance your career.

The position offers the KTP Associate the following benefits:

- The fulfilling employment opportunity where you can contribute to turn a key strategic innovation idea into reality.
- The chance to manage a challenging and rewarding job with real responsibility.
- An opportunity to tailor-make your role, as each KTP Associate position is unique.
- The chance to implement strategic decarbonisation within an innovative company.
- Mentoring from experienced industrial and academic supervisors.
- Dedicated coaching, mentoring and personal development with personal training budget.
- The opportunity to gain a management qualification/training and the chance to work towards a higher degree.
- An opportunity to write publications about project work alongside the academic and company team.
- An opportunity to make important and tangible improvements in decarbonizing distilleries.

The project is part of the Knowledge Transfer Partnership (KTP) programme that aims to help businesses to improve their competitiveness and productivity through the better use of knowledge, technology and skills that reside within the UK knowledge base. Successful Knowledge Transfer Partnership projects are funded by UK Research and Innovation through Innovate UK and are part of the government's Industrial Strategy. To find out how KTP works and the vital role you will play if you successfully secure a KTP Associate position please visit: www.ktpws.org.uk

To be considered for the post you should hold a PhD in Chemical Engineering / Applied Chemistry / Mechanical Engineering or a closely related subject, or a Masters-level qualification in chemical (or electrochemical) engineering together with specific relevant industry experience is essential. The successful candidate will have sufficient knowledge in chemical engineering, preferably with experience in bioenergy, hydrogen fuel or electrolysis, as well as experience or capability in process modelling of energy and chemical systems, particularly in the use of Software (e.g., Aspen) or computer programming for process optimisation. For further requirements for the role please see the person specification section below.

Job Description

Brief Outline of Job:

Supported by a team at the University of Strathclyde, the KTP Associate will play a lead role in developing and delivering key objectives of the project. You will integrate fully at R&B Distillers Isle of Raasay Distillery and work closely with the project team. You will plan and conduct project activities, including determining appropriate methods and recourses and plan your own workload and manage the project progress and deliverables. You will liaise with the project team to embed principles and techniques for technoeconomic performance evaluation and to inform the business case, disseminating findings and delivering training to R&B Distillers staff, using a variety of methods, including day-to-day informal training, workshops, bench sessions and seminars.

The successful candidate will deliver workshops and seminars with R&B Distillers staff to external stakeholders, including relevant trade associations (e.g. SWA) and the Scotch Whisky Research Institute (SWRI), supporting staff to effectively embed knowledge within the wider distillery sector. A key aspect of this will be document and archive all data, protocols, characterisation, testing and validation processes and procedures, training media (including manuals and videos), operating instructions/processes/how to guides, and sales/marketing literature in line with R&B Distillers document management system, in a defined project database. You will present progress updates at Board Meetings, and routinely contribute at team and all-staff meetings. You will work develop knowledge sharing processes to ensure the successful embedding and dissemination of KTP outputs to facilitate the incorporation of clean technology solutions within the designs of future planned distillery sites.

Main Activities/Responsibilities:

١.	Plan and conduct project activities as detailed in the work plan, including determining appropriate methods and recourses, with guidance from the project team.
2.	Plan own workload and manage the project progress and deliverables, with guidance from the project team.
3.	Embed principles and techniques for technoeconomic performance evaluation and to inform the business case.
4.	Disseminate findings and deliver training to R&B Distillers staff, using a variety of methods, including day-to-day informal training, workshops, bench sessions and seminars.
5.	Jointly deliver workshops and seminars with R&B Distillers staff to external stakeholders, including relevant trade associations (e.g. SWA) and the Scotch Whisky Research Institute (SWRI), supporting staff to effectively embed knowledge within the wider distillery sector.
6.	Document and archive all data, protocols, characterisation, testing and validation processes and procedures, training media (including manuals and videos), operating instructions/processes/how to guides, and sales/marketing literature in line with R&B Distillers document management system, in a defined project database.
7.	Present progress updates at Board Meetings, and routinely contribute at team and all-staff meetings.
8.	Develop knowledge sharing processes to ensure the successful embedding and dissemination of KTP outputs to facilitate the incorporation of clean technology solutions within the designs of future planned distillery sites.
9.	Join external networks to disseminate project outcomes, including attending conferences and journal publications.
10.	Engage in continuous professional development.

Person Specification

Educational and/or Professional Qualifications

(E=Essential, i.e. a candidate must meet all essential criteria to be considered for selection, D=Desirable)

E1 PhD in Chemical Engineering/Applied Chemistry/Mechanical Engineering or a closely related subject or a Masters-level qualification in chemical (or electrochemical) engineering together with specific relevant industry experience

D1 Membership of relevant Chartered/professional bodies

Experience

- E2 Sufficient breadth or depth of knowledge in chemical engineering, preferably with experience in bioenergy, hydrogen fuel or electrolysis
- E3 Experience or capability in process modelling of energy and chemical systems, particularly in the use of Software (e.g., Aspen) or computer programming for process optimisation
- D2 Experience in assessment of technoeconomic and environmental performances
- D3 Relevant industrial experience desirable.
- D4 Working knowledge of, or willingness to learn about clean technologies sector

Job Related Skills and Achievements

- E4 Developing ability to conduct individual research work and to disseminate results.
- E5 Ability to plan and organise own workload effectively.
- E6 Ability to work within a team environment.

Personal Attributes

- E7 Good written and verbal communication skills and ability to present and defend ideas to groups at all levels in the business and to all project stakeholders.
- E8 Highly motivated and proactive, with the confidence to drive the project, monitor progress, coordinate work streams, and manage the project timescales and budget effectively.
- E9 Strong organisational skills.
- E10 Ability to work collaboratively with a range of stakeholders in a multidisciplinary project team, or independently on own initiative as and when required.
- EII Credibility to ask questions and constructively challenge.
- D5 Awareness of commercial drivers.
- D6 Interest in the scotch whisky/distillery sector.

Application Procedure

Applicants are required to complete an application form including the name of three referees who will be contacted without further permission, unless you indicate that you would prefer otherwise. Applicants should also submit a Curriculum Vitae and a covering letter detailing the knowledge, skills and experience you think make you the right candidate for the job. Applicants should also complete the Equal Opportunities Monitoring Form.

Other Information

Further information on the application process and working at Strathclyde can be found on our website (<u>http://www.strath.ac.uk/hr/workforus</u>).

Informal enquiries about the post can be directed to Dr Jun Li (jun.li@strath.ac.uk).

Conditions of Employment

Conditions of employment relating to the KTP Associate staff category can be found at: Conditions of Employment.

Rewards and Benefits

Our staff have access to a wide range of outstanding benefits that include financial rewards, family friendly and wellbeing benefits and career development opportunities, details of which can be found <u>here</u>.

Probation

Where applicable, the successful applicant will be required to serve a 6 month probationary period.

Pension

The successful applicant will be eligible to join the Universities' Superannuation Scheme. Further information regarding this scheme is available from Payroll and Pensions.

Relocation

Where applicable, the University offers a relocation package to support new employees who meet the eligibility criteria. The relocation package is offered as a contribution towards costs incurred, and is designed to be flexible, allowing staff to use the financial support available in the way that will be most helpful to them. Further details are outlined in the Relocation Policy.

Interviews

Interviews will be held w/c 7 March 2022

Equality and Diversity

We value diversity and welcome applications from all sections of the community.

The University currently holds a Bronze Athena SWAN award, recognising our commitment to advancing gender equality in academia across all academic disciplines and professional and support functions.

University Values

The University's Values capture what we're all about: who we are, what we believe in and what we stand for. <u>Our Values</u> have been derived from how we act and how we expect to be treated as part of Strathclyde.





