

Candidate Information

Position:	Mechanical Engineer/Materials Scientist – KTP Associate – Metcollect Ltd
School/Department:	KTP and Business Networks
Reference:	18/106987
Closing Date:	Monday 3 December 2018
Salary:	£28,000 - £35,000 per annum. One of the key KTP benefits for graduates is access to a £12,750 training and travel budget over the 36 month project.
Anticipated Interview Date:	Thursday 13 December 2018
Duration:	36 Months

Job Purpose

Development of a novel process to add value to non-ferrous waste material.

Main Activities and Responsibilities

We wish to recruit a dynamic, highly skilled and motivated graduate to work in Metcollect Ltd in a collaborative project with Queen's University Belfast over 36 months. Through this Knowledge Transfer Partnership, the project aims to develop a novel process to add value to non-ferrous waste material. The postholder will be based in Metcollect Ltd.

Under the guidance of the company and academic supervisors the KTP Associate will provide the expertise necessary to deliver the following key integrated project phases:

1. Review of copper market and alloying methods.
2. Testing of copper refining and alloying.
3. Technical review of all biomass conversion technologies.
4. Techno-economic modelling.
5. Design of waste heat recovery system.
6. Specification, design, installation and commissioning of renewable power plant.
7. Optimisation of combined power and processing facility.

Planning and Organising

- Manage and coordinate the items of work as laid out in the project plan (individual work plan will be provided by Supervisors).
- Plan day-to-day activity within the framework of the agreed work plan.
- Contribute to the planning and management of the project, approximately 3-6 months in advance.
- Ensure that all training and development activity is scheduled to ensure that progress on the work plan objectives is not interrupted or delayed.

Resource Management and Responsibilities

- Plan and manage day-to-day resources to ensure the project runs to time and on budget.
- Coordinate and obtain approval for planned expenditure/allocation of resources with the Management Committee and Steering Group.
- Carry out supervision of placement students or other staff members as required.
- Monitor travel and development budgets and produce a Personal Development Plan which will ensure best use of financial resources.
- Attend training modules (mandatory and additional job-specific training). This may be local, national and international.
- Perform any other additional duties as agreed by the Local Management Committee and Steering Groups to contribute to the development of the company, the university and the Associate.

Internal and External Relationships

- Present regular progress reports to members of the Steering and Management Groups and to external audiences.
- Liaise with company staff on a daily basis. Contribute to training of staff in the company and university as required.

- Build relationships with both company and university staff to ensure effective working practices are established.
- Attend and contribute to any appropriate meetings, both in the company and the university as required.
- Establish contacts with additional groups and organisations (other KTP Associates, other university departments, other industrial contacts, and Innovate UK) as required to develop knowledge and understanding and form relationships for future collaboration.
- Act as an Ambassador for the Knowledge Transfer Partnership Scheme.

ESSENTIAL CRITERIA

- Hold at least a 2.1 (or equivalent) Masters degree (MEng/MSc) in Mechanical, Aerospace, Chemical Engineering, Materials Science or a closely related subject.
- Experience in Computational modelling and system design.*
- Experience in thermodynamics and heat transfer modelling.*
- Basic understanding of metallurgy and materials science.*
- Excellent 3D CAD skills.
- Good oral written and presentation skills.
- High level of IT skills.
- Ability to think logically, create solutions and make informed decisions.
- A high level of numeracy and the ability to interpret data.
- Ability to work effectively as a member of a group.
- Well organised, attention to detail and ability to meet tight deadlines.
- An interest in staying with the Company. (Associates are normally invited to apply for permanent positions).
- Ability to take part in Associate management courses (requiring two one-week periods in England).
- Willing/able to travel throughout the UK and Ireland and abroad, as necessary.

* may be demonstrated through completion of a module, student project or placement.

DESIRABLE CRITERIA

- A PhD in a relevant area.
- 1 years relevant work or research experience.
- Knowledge of advanced metals based materials and alloys.
- Ability to deliver training and follow-up support to operatives.
- Ability to influence people effectively.
- Tenacious and committed to achieving goals.

Additional Information

- Knowledge Transfer Partnerships is a UK programme that enables businesses to work with universities to gain access to specialist knowledge and expertise and apply it within their organisation. Each Partnership recruits a Graduate to work in the company, implementing and embedding the latest research techniques. Guidance is provided by the academic and company supervisors to ensure that the objectives of the project are met. Although the scheme is aimed at recent graduates, any suitably qualified individual may apply.
- Each KTP is a fully salaried job that lasts between twelve and thirty six months, providing the graduate with an opportunity to fast track a career in industry. Each KTP Associate has a training and development budget and a travel budget. This funding provides opportunities for job-specific training, attending and presenting at conferences, visiting trade shows, customers and suppliers etc. Two, one week residential management training modules are also provided as part of the package
- As members of University staff, KTP Associates can join the University pension scheme, gain access to University resources such as the Library and sports facilities.

More details are available at www.ktpjobsni.com