JOB DESCRIPTION – RESEARCH ASSOCIATE

Vacancy Ref: A2681

Job Title:	Research Associate	**Present Grade:** 6
Department/College:	Engineering Department	
Directly responsible to:	Dr Hungyen Lin	
Supervisory responsibility for:	Research Students, UG Project Students	

Other contacts

Internal:
Dr Hungyen Lin and other research colleagues within the Engineering Departments including PhD students and summer students.

External:
EPSRC, Members of the project consortium including University of Cambridge, University of Liverpool, Bosch Packaging Technologies, BASF, Colorcon.

Major Duties:

1. Design mixing baffles using CAD mimicking production scale scales.
2. Perform systematic studies of a lab-scale tablet mixing using terahertz in-line measurement in the Terahertz Application Group at University of Cambridge.
3. Review the state of the art modelling, data mining and machine learning tools (e.g. neural network, support vector machine, genetic algorithms and dimension reduction learning models) for analysing time dependent in-line measurements.
4. Develop data analytic tools and procedures (e.g. using machine learning and data mining techniques) for process modelling and optimisation.
5. Contribute to the planning, development & writing of research publications and research / progress reports or disseminate research findings using other appropriate media.
6. Presentation of results at progress meetings and at relevant international/national conferences.