**JOB DESCRIPTION**

**Vacancy Ref:** A3434

<table>
<thead>
<tr>
<th>Job Title:</th>
<th>KTP Associate – Electronic Engineer</th>
<th>Present Grade: off scale</th>
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<tr>
<td>Department/College:</td>
<td>Department of Engineering</td>
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<tr>
<td>Directly responsible to:</td>
<td>Dr Hungyen Lin</td>
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<td>Supervisory responsibility for:</td>
<td>n/a</td>
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**Other contacts**

**Internal:**
*Lancaster University:* Staff and postgraduate students of the Engineering Department, Research & Enterprise Services staff concerning KTP and relations between the University and ACM Instruments Ltd.

*ACM Instruments Ltd:* all staff and senior management team

**External:**
*ACM Instruments Ltd:* Key stakeholders, Innovate UK KTP Adviser
*University College London:* Dr Lai Bun Lok, academic supervisor and technical adviser to KTP

**Major Duties:**
The Associate for the Knowledge Transfer Partnership will drive and lead a project which aims to realise a high speed, modular and relatively low cost electrochemical impedance spectroscopy instrument. A suite of four prototype EIS instruments will be developed during the project to meet the evaluation needs of ACM's primary customers.

You will work closely with and be supported by academics from Lancaster's Department of Engineering and UCL's Department of Electronic and Electrical Engineering, as well as staff at ACM Instruments Ltd.

**Key Responsibilities**
Under the supervision of academics from the Department of Engineering and the senior management team at ACM Instruments Ltd, the Associate will:

- Following familiarisation with the company and project scope, identify the aims, objectives and KPI's for the project.
- Characterise the typical loads-under-test which are of interest, namely the solid oxide fuel cells and electrolyzer cells, using the existing benchtop EIS instruments at LU and ACM.
- Design and implement the 10-channel multiplexer which will be used to increase the power capability of the new EIS instrument.
- Review ACM’s existing Potentiostat and Galvanostat designs and adapt them to use surface mount components to meet prescribed specification
- Carry out high frequency PCB design for the frequency response analyser in the EIS instrument.
- Assist in the mechanical design for the new EIS instrument
- Prepare the laboratory set up during PCB manufacture.
- Ensure that the design implementation is embedded within the company, via dissemination, reporting, users documentation and project meetings.
- Disseminate the key scientific and technical outcomes will be facilitated via attendance at a conference and the publication of papers in peer-reviewed journals.
- Manage the KTP project including maintenance of project plans, and organisation of project-related meetings.
- Actively manage a personal development plan and commit to any training required for the project.
- Liaise between ACM and the academic team.
• Complete other tasks as determined by the supervisors for the successful completion of the KTP.