

**Role Purpose:**

To contribute to the delivery and realisation of project work through preparation, development, research, design, testing and analysis work in line with the Device Technology team and HealthTech business unit requirements. This will involve applying scientific knowledge, using functional printing, and coating techniques, and analytical equipment to characterise device performance. The Scientist 2 will work using their own initiative and with some technical supervision from their manager and senior colleagues, assisting with development and improvement activities. Responsible for supporting the smooth running of laboratories and actively supporting the Safety, Health, Environment and Quality (SHEQ) objectives.

**Key Responsibilities:**

- To maintain consistent and documented compliance with all relevant Safety, Health and Environmental (SHE), quality and best practice requirements.
- To build and maintain a network of relevant internal stakeholders, to represent self and the wider team as a credible professional in networks and groups.
- To keep self up to date with developments in areas relevant to role, and/or legislative and SHE related changes, ensuring understanding of these and any associated new best practice, methods or techniques.
- To support in Business Development and Bid Proposal activities, to contribute to proposal / project development and direct customer engagement.
- To present and formally report experimental conclusions and supporting data for internal peer review and submission to clients, to agreed timescales and standards.
- To actively engage in hazard studies / SRA studies and discussions, as appropriate to role level.
- To set up, plan and execute experimental / pilot scale runs and analyse, interpret and report the results of these within agreed timescales and standards and in accordance with project requirements.
- To be responsible for providing clearly documented records of technical data, decisions, methodologies, calculations and software use in an agreed format.
- To take ownership in agreeing weekly workplans with line manager, project manager(s) and other relevant stakeholders, and delivering plan to agreed schedule.
- To be responsible for the maintenance and calibration of equipment to ensure it operates in a safe and efficient manner and is available to meet customer needs.

**Responsibilities specific to role:**

- To conduct state of the art research, develop new processes, fabricate a range of sensor devices using functional coating techniques, and perform functional ink formations and materials characterisation for 'Health Technology' applications including wearables, in-vitro diagnostics, and medical devices.

**Direct reports:** No direct reports

## Person Specification

### Education / Qualifications:

| Essential:   | Desirable:  |
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| <p>Educated to HNC or Foundation Degree level (or equivalent) in a Scientific/Engineering discipline plus significant industrial experience.</p> <p>Or</p> <p>Educated to Degree level (or equivalent) in a Scientific/Engineering discipline plus relevant industrial experience.</p> | <p>Chartered status with a relevant professional institution.</p> <p>Educated to Master Degree level or PhD level (or equivalent) in a Chemistry or Materials Science discipline.</p> |

| Competencies and behaviours   |  |
|---|--|
| Leadership (Core)   | Decision Making (Enabling)   |
| <ul style="list-style-type: none"> <li>• Respects and values the diversity of talents, skills and backgrounds that others bring to joint projects / work.</li> <li>• Has a positive influence on those in contact with.</li> <li>• Gains the respect and confidence of colleagues and supports them in achieving their goals and targets.</li> <li>• Aligns own behaviours and actions to CPI's values, vision and goals.</li> </ul>  | <ul style="list-style-type: none"> <li>• Pro-actively identifies and prioritises the key issues involved to facilitate the decision making process.</li> <li>• Seeks input from the relevant stakeholders when appropriate, considers risks, and takes accountability for the impact a decision may have on others.</li> <li>• Makes decisions in a timely manner. Identifies the key factors in a complex problem.</li> </ul> |
| Communication (Enabling)  | Developing self and others (Enabling)  |
| <ul style="list-style-type: none"> <li>• Presents complex issues/ data with a high level of clarity and impact, using the appropriate format and driving action.</li> <li>• Is able to write clearly and succinctly recommendations and messages that have the desired effect.</li> <li>• Is aware of the impact of their communications and pro-actively seeks feedback for improvement.</li> <li>• Is able to influence others by preparing a reasoned argument to adopt a specific tactics or plan, in line with strategy, and persuade other of the merit.</li> </ul> | <ul style="list-style-type: none"> <li>• Supports others in their development.</li> <li>• Is personally committed to, and actively seeks, opportunities to improve continuously.</li> <li>• Provides honest helpful feedback to others on their performance.</li> <li>• Insightful about self, strengths and limitations, and how to maximise contribution.</li> </ul>   |

## Scientist 2 – Device Technology - Job Description

| Collaboration (Enabling)  | Delivery (Enabling)  |
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| <ul style="list-style-type: none"> <li>Understands the value of establishing effective and supportive relationships, and collaborative working.</li> <li>Actively listens, questions and observes body language so as to understand communication from others.</li> <li>Cultivates and maintains partnerships across departments to deliver value for the business</li> </ul> | <ul style="list-style-type: none"> <li>Prioritises activities based on their impact and strategic importance.</li> <li>Takes responsibility and monitors own performance.</li> <li>Can articulate how their work feeds into projects.</li> <li>Creates and exploits useful metrics.</li> </ul> <p>Displays commitment and engagement to own work. Pursues everything with energy, drive and a need to finish, even when faced with setbacks or resistance.</p> |

### Knowledge and Experience:

| Essential:   | Desirable:   |
|--|--|
| <p>Has a good knowledge, experience and understanding of:</p> <ul style="list-style-type: none"> <li>the principles and practice of printing sensors for wearables such as strain sensors, pressure sensors, and electrochemical sensors</li> <li>the principles and practice of optical biosensors for HealthTech applications</li> <li>sensor system design, materials selection, sensor functional design, sensor fabrication and sensor test and validation.</li> <li>field effect transistors device architecture development &amp; characterisation for sensor application</li> <li>screen printing, slot-die coating, spin-coating, and digital printing</li> <li>material deposition</li> <li>chemical health and safety</li> </ul> <p>Will possess technical expertise through theory and a good underpinning knowledge, as well as evidence of technical problem solving.</p> <p>Will exhibit professional mastery of principles and practices in device technology,</p> | <p>Is a member of a relevant professional body.</p> <p>Electronics device operation and fabrication.</p> <p>Medical device ISO standards including ISO9001, ISO13485, ISO 14971 and IEC 60601-1.</p> <p>The development of sensors relevant to HealthTech applications e.g., glucose, blood oxygen, ECG, EEG, strain, pressure or similar.</p> |

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| <p>gained in academic or industrial environments.</p> <p>Can demonstrate evidence of knowledge sharing and network building practice across teams or groups.</p> <p>Has ability to apply theoretical and practical scientific/engineering methods to contribute to business activities.</p> <p>Can provide examples of actively utilising cross-team collaboration to achieve desired results.</p> <p>Has confidence to use own judgement and initiative within standard engineering / scientific practices, as well as an understanding of when to seek advice from colleagues.</p> |  |
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