

<b>Job Title:</b>	Principal Technologist	<b>Position Type:</b>	Full Time
<b>Location:</b>	Laughton, East Sussex	<b>Travel Required:</b>	10%
<b>HR Contact:</b>	personnel@quorumtech.com	<b>Date posted:</b>	September 27, 2021
<b>Job Description</b>			
<p><b>MAIN PURPOSE OF JOB</b></p> <p>To ensure the company maintains and grows its leadership in the area of sample preparation for electron microscopy by researching, developing, commercialising and supporting new thin coating technology and technologies for Quorum's entire range of sample preparation products for electron microscopes, including sputter coaters, vacuum evaporators, critical point dryers, freeze dryers, plasma etchers and cryo-SEM, as well as other technologies that would complement our current offering.</p> <p><b>RELATIONSHIPS</b></p> <p><b>REPORTS TO:</b> Engineering Manager</p> <p><b>RESPONSIBLE FOR:</b> Thin films technology leadership.</p> <p><b>INTERACTS WITH:</b> Engineers: technical specifications; Commercial: new product roadmap; External: Universities and research organisations, specialist equipment providers.</p> <p><b>ROLE AND RESPONSIBILITIES</b></p> <p>The Principal Technologist will be responsible for developing new instruments and equipment to create thin coatings and associated processes, primarily but not limited to the electron microscopy sample preparation market. This will involve screening new technologies, developing the equipment, techniques and fundamental processes and then working with internal and external resources to create a commercial product offering.</p> <p>The scope for such innovation is varied and includes various types of vacuum coaters such as sputtering, ion beam, e-beam, evaporation and PE-CVD. Knowledge of other sample preparation techniques would be a distinct advantage (i.e. critical point dryers, freeze dryers, plasma etchers and cryo-SEM).</p> <p>Key internal stakeholders for new product development are Sales and Marketing, Service, Operations and the Senior Management Team. Development work will include working with outside parties such as academic groups, technology suppliers, microscope manufacturers and vendors.</p> <p>The Principal Technologist will need to have a sound technology and engineering background, as well as scientific curiosity, be self-motivated, have a passion for quality and the drive to champion and implement new ideas.</p> <p><b>The above is not an exhaustive list of duties and you will be expected to perform different tasks as necessitated by your changing role within the organisation and the overall business objectives of the organisation.</b></p> <p><b>QUALIFICATIONS AND EDUCATION REQUIREMENTS</b></p> <p>Relevant Degree in Physics, Engineering or related technical discipline.</p> <p>Key Words: sputter   coater   vacuum   plasma   magnetron   cryo   electron microscopy   sample preparation   SEM   new product development   thin film coatings</p>			

**REQUIRED EXPERIENCE & SKILLS**

Practical experience is essential.

**The successful candidate will have experience in:**

- Development of vacuum coating equipment, particularly vacuum sputter coating
- Technology and engineering associated with plasma processes
- Materials characterisation techniques.
- Technology screening and product development
- Collaboration with third parties and in-house resources to complete assignments
- IPR identification and protection
- Applicable regulations and standards affecting scientific instrumentation
- Demonstrable innovative thinking in solving complex problems

**PREFERRED EXPERIENCE & SKILLS**

- Experience with other forms of PVD/CVD
- Knowledge of electron microscopes and familiarity with alternative methodologies for sample preparation (e.g. critical point drying, cryo)
- Formal qualifications in methodologies such as Agile Product Development and Six Sigma
- Working knowledge of Plasma Physics
- Applications and embedded software knowledge
- Electronics design
- Mechanical design
- Design for Manufacturing
- Ability to engage with customers

**ADDITIONAL NOTES**

Full valid driving licence a requirement.

Passport required, because this role involves travel to meet suppliers and customers, which may include occasional overseas trips.