Senior Engineer – Biochemical – Job Description



Role Purpose:

To provide technical expertise and input in order to contribute to the delivery and realisation of projects, acting as technical lead in small and medium scale projects, and projects of some complexity. Draws upon a range of technical know-how to provide carefully thought-through advice and expertise to a range of stakeholders across the organisation. The Senior (1) is viewed as a specialist in their area of discipline, offering innovative solutions at business-unit level, contributing to development and improvement activities.

Key Responsibilities:

- To maintain consistent and documented compliance with all relevant Safety, Health and Environmental (SHE), quality and best practice requirements.
- To identify new technical developments and trends, translate these into building blocks for opportunities within the business unit, initiating the creation of (new) technological innovations/applications.
- To utilise own expert knowledge to assist in translating business unit strategy into practice through the delivery of plans to achieve business unit objectives.
- To build, maintain and exploit a network of relevant external stakeholders, customers, partners, research organisations and authorities, to represent the business unit as a credible specialist in networks, identifying opportunity for future projects and developments.
- To actively contribute to a culture of continuous capability development through coaching, mentoring and/or developing colleagues within the team and business unit, providing insights into areas of specialism. This may include coaching and developing junior colleagues (both technically and behaviourally) to help them reach their potential.
- To keep self up to date with external developments in areas of specialism, and/or legislative and SHE related changes, ensuring application of new best practice and/or knowledge.
- To work collaboratively with Business Development, Bid Proposal and technical colleagues to contribute to proposal / project development and direct customer engagement. Engage in business development opportunities where appropriate.
- To formulate and present possible solution directions and issue advice upon request or at own initiative, beginning to build an internal reputation as a reliable and credible source.
- 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, translating obtained findings and knowledge.
- 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.

Responsibilities specific to role:

- Design and test bioprocesses including the use of calculations, models, and simulations for optimisation
- Collect and analyse data to make improvements to bioprocesses
- Investigate and resolve problems relating to bioprocess, equipment or biologics products
- Conduct risk assessments to ensure safety and regulatory requirements
- Manage and optimise costs associated with bioprocesses and biologics products





 Support Change & Modifications, including the design, installation, testing and validation of equipment and bioprocess

Direct reports: Up to 5 direct reports

Education / Qualifications:

Essential:	Desirable:
Educated to HNC or Foundation Degree level (or equivalent) in Biochemical/Bioprocess Engineering discipline plus relevant industrial experience at a senior level Or Educated to Degree level (or equivalent) in Biochemical/Bioprocess Engineering discipline plus significant industrial experience Or Educated to Master Degree level (or equivalent)	Chartered status with a relevant professional institution i.e. IChemE or working toward chartership
Educated to Master Degree level (or equivalent) in Biochemical/Bioprocess Engineering discipline plus relevant industrial experience Or Educated to PhD level (or equivalent) in Biochemical/Bioprocess Engineering discipline plus some industrial experience	

Competencies and behaviours Leadership (Enabling) **Decision Making (Influencing)** Confidently draws reliable conclusions from Builds and leads groups, communicates a compelling and inspired vision or sense of core diverse and sometimes incomplete data. purpose to arrive at an agreed schedule of Proactively sources and refers to how others work for a project, including agreed success have tackled similar problems previously. criteria. Considers risks, and consequences, and takes Demonstrates commitment to common goals, accountability for, the impact the decision has integrity and trust in all dealings with on the business including costs/ benefits. colleagues and customers. Communication (Enabling) **Developing self and others (Enabling)** Presents complex issues/ data with a high • Supports others in their development. level of clarity and impact, using the Is personally committed to, and actively seeks, appropriate format and driving action. opportunities to improve continuously. Is able to write clearly and succinctly Provides honest helpful feedback to others on recommendations and messages that have the their performance. desired effect. Insightful about self, strengths and limitations, • Is aware of the impact of their communications and how to maximise contribution. and pro-actively seeks feedback for improvement. • 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.



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Collaboration	(Influencing)

- Blends people into teams, leveraging the use of talents available from any part of the organisation that result in the most innovative solution.
- Fosters a sense of energy, ownership, and personal commitment to collaborative work.
- Understands priorities and deeper needs of different stakeholders groups.
 Supports and enables people to work together to meet objectives.

Delivery (Influencing)

- Prepares and maintain schedules for activities and events for projects.
- Delegates responsibilities for tasks and decisions to the appropriate staff; sets SMART objectives and monitors progress.
- Researches capabilities and constraints, in advance of a project, which could affect its approach and outcomes.
- Holds people accountable for achieving results.

Knowledge and Experience:

Essential:

Will possess significant, technical expertise in Biochemical/ Bioprocess Engineering as well as a compelling evidence of complex technical problem solving.

Will exhibit professional mastery of principles and practices in Biochemical/ Bioprocess Engineering gained through career to date in area of specialism.

Can demonstrate evidence of building knowledge sharing and network building practice across teams.

Actively demonstrates in-depth technical and theoretical knowledge in Biochemical/Bioprocess Engineering and is viewed as a specialist in this area by peers.

Can provide examples of actively building crossteam and business unit collaboration to achieve desired results.

Actively participates in diverse or complex technical activities where it is necessary to use own initiative and judgement.

Desirable:

Is an active member of a professional body, engaging with peers beyond CPI.

Experience of biologics manufacture, GMP regulatory considerations including validation, and safety requirements including pressure systems, HAZOP and contained processing aspects.