

Senior Scientist 1 – Downstream Processing – 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 technology team level, contributing to development and improvement activities.

Key Responsibilities:

- Embrace and role model the desired behaviours to exemplify our Company values, promoting an ethical, positive company culture.
- To maintain consistent and documented compliance with all relevant Safety, Health and Environmental (SHE), Good Manufacturing Practice (GMP), Data Integrity (DI), quality and best practice requirements.
- To identify new technical developments and trends, translate these into building blocks for opportunities within the technology team, initiating the creation of (new) technological innovations/applications.
- To utilise own expert knowledge to assist in translating technology team strategy into practice through the delivery of plans to achieve technology team objectives.
- To build, maintain and exploit a network of relevant external stakeholders, customers, partners, research organisations and authorities, to represent the technology team 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 technology team, 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.

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Responsibilities specific to role

- To design, lead and perform experiments to develop, optimise and ultimately scale-up recovery and separation processes for the manufacture of a variety of bio-based products.
- Development, optimisation, scale-up and characterisation of primary recovery/separation-based processing methods such as centrifugation, cell disruption and filtration.
- Development, optimisation, scale-up and characterisation of isolation-based processing methods such as chromatography and tangential flow filtration techniques.
- Working across other technology teams / business areas to exploit their expertise and assets to deliver a complete process. Including processing methods leading up to final formulation such as concentration, drying/evaporation and product stabilisation.
- To stay abreast of the current state of the art in downstream processing and take ownership for introducing new technologies into CPI.
- To be the primary technical contact with clients & third parties, using customer management skills to build excellent working relationships.
- To be the technical manager of collaborative research and development and/or commercial projects, co-ordinating the activities of the assigned team.

Direct reports: No direct reports

Person Specification

Education / Qualifications:

Essential:	Desirable:
<p>Educated to HNC or Foundation Degree level (or equivalent) in a Scientific/Engineering discipline plus relevant industrial experience at a senior level.</p> <p>Or</p> <p>Educated to Degree level (or equivalent) in a Scientific/Engineering discipline plus significant industrial experience.</p> <p>Or</p> <p>Educated to master's degree level (or equivalent) in a Scientific/Engineering discipline plus relevant industrial experience.</p> <p>Or</p> <p>Educated to PhD level (or equivalent) in a Scientific/Engineering discipline plus some industrial experience.</p>	<p>Chartered status with a relevant professional institution.</p>

Competencies and behaviours	
Leadership (Enabling)	Decision Making (Influencing)
<ul style="list-style-type: none"> Builds and leads groups, communicates a compelling and inspired vision and sense of core purpose to deliver the incredible, by arriving at an agreed schedule of work for a project, including agreed success criteria. Demonstrates commitment to common goals, integrity, and trust in all dealings with colleagues and customers. 	<ul style="list-style-type: none"> Confidently draws reliable conclusions from diverse and sometimes incomplete data. Proactively sources and refers to how others have tackled similar problems previously. Considers risks, and consequences, and takes accountability for, the impact the decision has on the business including costs/ benefits. Thinks ahead, ensuring that the potential of teams and projects are unlocked and making future focused decisions.
Communication (Enabling)	Developing self and others (Enabling)
<ul style="list-style-type: none"> Presents complex issues/ data with a high level of clarity and impact, using the appropriate format and driving action. Is able to write clearly and succinctly recommendations and messages that have the desired effect. Is aware of the impact of their communications and pro-actively seeks feedback for improvement, learning from their experiences and taking ownership of their actions and how they present them. Is able to influence others by preparing a reasoned argument to adopt a specific tactics or plan, in line with strategy, and persuade others of the merit. 	<ul style="list-style-type: none"> Supports others in their development. Is personally committed to, and actively seeks, opportunities to improve continuously. Is comfortable learning from the experiences of others and recognises the differing strengths of team members. Provides honest helpful feedback to others on their performance. Insightful about self, strengths, and limitations, and how to maximise contribution.
Collaboration (Influencing)	Delivery (Influencing)
<ul style="list-style-type: none"> Blends people into teams, leveraging the use of talents available from any part of the organisation that result in the most innovative solution. 	<ul style="list-style-type: none"> Prepares and maintains schedules for activities and events for projects. Delegates responsibilities for tasks and decisions to the appropriate staff; sets SMART objectives and monitors

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| <ul style="list-style-type: none"> • Fosters a sense of energy, ownership, and personal commitment to collaborative work, ensuring that diverse people are able to collaborate openly and honestly as one team even with differing views and perspectives. • Understands the priorities and deeper needs of different stakeholders' groups, being sensitive to different experiences. • Supports and enables people to work together to meet objectives. | <p>progress, fostering an atmosphere of purposeful empowerment in order to allow teams to function efficiently.</p> <ul style="list-style-type: none"> • Researches capabilities and constraints, in advance of a project, which could affect its approach and outcomes. • Holds people accountable for achieving results. |
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Knowledge and Experience:

Essential:	Desirable:
<p>Will possess significant, technical expertise in Downstream Processing (DSP) as well as a compelling evidence of complex, technical problem solving.</p> <p>Will exhibit professional mastery of principles and practices in DSP gained through career to date in area of specialism.</p> <p>Can demonstrate evidence of building knowledge sharing and network building practice across teams.</p> <p>Actively demonstrates in-depth technical and theoretical knowledge in at least one area and is viewed as a specialist in this area by peers.</p> <p>Can provide examples of actively building cross-team and business area collaboration to achieve desired results.</p> <p>Actively participates in diverse or complex technical activities where it is necessary to use own initiative and judgement.</p> <p>Holds theoretical and practical knowledge in Biochemistry, Biological Separation /</p>	<p>Is an active member of a professional body, engaging with peers beyond CPI.</p> <p>Has experience in dealing with different bio-based products (for example proteins, lipids, polysaccharides, whole cell & small molecules).</p> <p>Experience in the Agritech and Food & Feed industries.</p> <p>Experience in process engineering calculations including whole process mass balances.</p> <p>Supervision/management of other team members.</p>

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Purification, Biochemical Engineering, and relevant analytical techniques.

Has understanding the biochemistry across a range of different biological products including proteins, lipids, carbohydrates & platform biochemicals.

Has experience of working in one or more of the following biotechnology sectors: food & feed, agritech, healthcare & biopharmaceuticals.

Has experience of application techniques for the analysis of these biological products.

Has experience of downstream processing unit operations at lab and pilot/demonstration scale.

Has wide experience of performing techniques for the recovery/separation of industrial bio-based products (for example centrifugation, filtration, evaporation, drying & chromatography) and protein analysis (for example HPLC methods, SDS PAGE & protein assays).

Has experience of process development and carrying out data analysis.

Has experience of leading technical development projects.

Has understanding and application of experimental design and statistical concepts to experimental work.

Experience of independent planning, execution, and interpretation of complex laboratory experiments.

Experience of document writing, data interpretation, presentation, statistical analysis, and trending.

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Experience of training and supervising others.