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Job Description

Department	Particle Science and Engineering (Process R&D)
Positions (2)	Assist/Deputy Manager- Particle Science and Engineering
Reports to	Sr Manager/AGM of Particle Science and Engineering

Summary of Job

To be responsible for designing, planning and execution of solid form and version screening of drug substance across businesses including anhydrous crystalline, hydrate, solvate, salt, co-crystal, amorphous form, and polymer pre-mix screening. To be responsible for developing small scale and throughput screening set up within particle science team, adding orthogonal techniques of particle characterisations and work closely with analytical teams to ensure the timely completion and scientifically sound & quality output.

Key Responsibilities

1. Ability to design, plan and execute scientifically sound crystallization processes.
2. In-depth understanding of the scientific basis of controlled crystallization (solvent screening, evaluation of solubility and MSZW) and PAT tools in crystallization process development and particle engineering studies
3. Ability to design, plan and execute solid-form/polymorph screening and version (salt, co-crystal) screening experiments.
4. Have good understanding on achieving particle size reduction using crystal and particle engineering.
5. Have a reasonable understanding of physical property characterization and analytical data and ability to interpret the same.
6. Ability to collate and scientifically present the data & observations and provide scientific inputs in discussions with internal or external customer.
7. Ability to deliver & transfer crystallisation processes for starting materials, intermediates and APIs developed on sound scientific rationale to Kilo-Labs, pilot scale or manufacturing campaigns.
8. Proactively maintain the equipments, facility and supporting systems as per established Good lab handling processes, maintain requisite equipment and process SOPs and lean tools
9. Follow good documentation practices and has adequate exposure to record observations in Electronic Lab Notebook (ELN).
10. Proactive in aligning with new technologies and approaches to participate in continuous improvement needs of the business.
11. He/she should have sufficient knowledge chemical safety, comprehensive risk assessment of drug substance and safe handling.

No. of Reportees	None
Qualification	M.Sc. Organic Chemistry, Material Science, Chemical Engineering, Pharmaceutical Chemistry, Pharmaceutical Sciences with relevant specialisation
Experience	4-10 years

Key Competencies (Technical, Functional & Behavioural)

Technical & Functional

- Sound experience of basic crystallization concepts– especially in the design & execution of the crystallisation processes.
- Demonstrated capability in handling core crystallization techniques, equipments and exposure to APT tools.
- Sound experience of solid-forms screening and solid-state characterization-specially towards crystalline polymorph, solvate, hydrate, and salt screening. Co-crystal screening experience would be a plus.
- Ability to work in cross-functional team environment with PR&D, AR&D, PE, process design and Mfg teams.

Behavioural

- Aptitude to learn and excel.
- Proactive in technical & operational space
- Ability to work in cross-functional team environment.
- Ability to contextualise the observations and attention to detailing.
- Effective communication skills and absorbing attitude