

POSITION: SCIENTIST. COCRYSTAL PROCESS DEVELOPMENT AND SCALE UP

A postdoctoral Researcher position is offered by CIRCE Crystal Engineering. This position is located at the Research and Development Laboratory of CIRCE (Barcelona Science Park, Spain), and may be funded through a TecnioSpring Industry fellowship.

CIRCE's project "Production process optimization and up-scale of nutraceutical cocrystals" requires an expert in crystallization process development and scale-up of cocrystals. The candidate will be in charge of the full process from the bench to the production plant.

Major duties/responsibilities:

- Lead the process optimization and development for the production of new cocrystals coming from CIRCE's R&D Department
- Apply crystallization process design and development fundamentals, modelling tools, and experimental skills using laboratory instrumentation to develop robust crystallization processes for active ingredient cocrystals.
- Support crystallization process development by conducting studies involving compound properties and experimental conditions
- Select, develop, and apply new and existing process technologies to facilitate process design to achieve project goals.
- Identify, select and supervise the installation of equipment, software or technologies that may be useful for internal process optimization and development.
- Identify, select and manage collaborations with research or technological centres, or companies to carry out process development and pilot productions
- Perform data analysis and presentation of report research results.
- Prepare Technology Transfer Reports to transfer a process to a GMP CMO, and in-situ support and supervise the Tech Transfer Process.
- Produce at the laboratory small cocrystal batches for additional experiments.
- Contribute to scientific and technical discussions with co-workers and clients to plan, execute, and resolve issues
- Prepare reports for patent filing, and publish scientific results in peer-reviewed journals in a timely manner
- Contribute to the preparation of the Chemistry and Manufacturing Controls (CMC) section of regulatory dossiers (NDA, IMPD, NDIN, GRAS...)
- Participate in project planning and execution
- Remain current with the process engineering and chemistry literature

Basic qualifications

- PhD in Chemical Engineering or Chemistry with >1 year of relevant experience required.
- Knowledge of chemistry and chemical engineering principles related to crystallization and isolation unit operations
- At least one year experience in polymorph/cocrystal screening, characterization and/or production

Preferred Qualifications

- Working knowledge of solubility and crystallization predictive tools
- Experience with computational modelling tools, data processing tools.
- Working knowledge of HPLC, PXRD, NMR, DSC and TGA.
- Working knowledge of application of in-situ analysis tools to process understanding including: FTIR, FBRM, UV/Vis, Raman
- A good foundational understanding of organic chemistry and crystallography

Please send your CV and cover letter to info@circecrystal.com