

# SCIENTIST COCRYSTAL SCREENING AND DEVELOPMENT



Barcelona - Spain

A **Postdoctoral Researcher** position is offered by CIRCE Scientific. This position is located at the Research and Development Laboratory in **Barcelona**, Spain.

The candidate will **identify and characterize new cocrystals**, assess their physicochemical properties, and will **optimize and up-scale their production** process.

**Industry:** Nutraceutical industry

**Employment Type:** Full Day

**Experience:** Min. 2 years Post Doctoral experience

## Responsibilities:

- Proactively lead the **discovery of new solid forms of selected active ingredients** (and suggest new potential candidates according to the company strategies)
- **Design and conduct solid forms screens** (particularly cocrystal screens) using state-of-the-art techniques to ensure the success of the studies
- Propose, design and perform additional **alternative screening methodologies** to discover new solid forms when traditional techniques are not successful
- Use a variety of instrumentation to characterize the identified solid forms, including NMR, TGA, DSC, DVS, single-crystal and powder X-ray diffraction
- Design and perform **stability studies of new cocrystals**
- Apply HPLC methodologies to monitor degradation of solid forms during stability studies
- Develop production processes of new cocrystals at the gram and multi gram scale
- 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 (e.g. ternary phase diagrams)
- Produce at the laboratory small cocrystal batches for additional experiments
- Perform data analysis and prepare project reports
- Prepare documentation for patent filing, and scientific manuscripts for peer-reviewed journals in a timely manner
- Ensure compliance with environmental, safety, health and quality program requirements
- Participate in project planning and execution, report timely, deliver projects on time

## Requirements:

- A **PhD in chemistry, chemical engineering** or related discipline
- A **post-doctoral experience of at least two years** in **solid-state disciplines** including characterization (NMR, TGA, DSC, PXRD...) of organic compounds
- Experience with **process design** and optimization
- Excellent track record of productive and creative research as demonstrated by **publications in peer-reviewed journals** and/or filed patents would be a plus

## CONTACT

+34 871 94 60 47

[info@circescientific.com](mailto:info@circescientific.com)



## OFFICE BARCELONA

C / Baldri i Reixac, 4-8  
Torres I + D + I, PCB  
08028 Barcelona  
Spain