

Job Description

Senior Crystallographer/Diffraction Specialist

Triclinic Labs

Position Summary:

This position is the scientific lead in operation of X-ray powder diffraction instruments and in the interpretation of the data derived from these instruments. In addition, the person in this position is expected to contribute to the research strategies of the organization by developing novel analytical approaches for organic and inorganic materials characterization.

Primary responsibilities include:

- Working knowledge of X-ray powder diffractometer construction and operation, and the ability to
 - operate a diffractometer
 - reconfigure a diffractometer (reflection, transmission, grazing angle, variable temperature, etc.)
 - align a diffractometer
 - change the X-ray tube in a diffractometer
 - troubleshoot and carry out minor repairs of a diffractometer
- Expert understanding of powder diffraction data derived from organic compounds, and the ability to
 - be the X-ray diffraction subject matter expert for Triclinic Labs
 - utilize diffraction data to identify materials, quantitate small amounts of one phase in another, identify sample/diffractometer contributions to data sets, etc.
 - recognize changes expected in powder patterns related to temperature, compression, diffractometer configuration, etc.
 - index X-ray powder patterns
 - develop small molecule crystal structures from powders
 - perform sample characterization using a variety of solid-state and physical-chemical analytical techniques

The ideal candidate will have the following qualifications:

- Theoretical and experimental background in materials science
- The ability to communicate clearly using both written and spoken English
- A record of innovation substantiated by publications
- The ability to work effectively in an interdisciplinary team
- The ability to effectively work on multiple projects simultaneously and handle changing priorities
- Past experience with and the ability to work in an FDA/DEA regulated laboratory (cGMP)
- PhD in Chemistry, crystallography, or related field with minimum 3+ years crystallographic experience (does not need to be post-PhD experience)

Skills:

- Knowledge and application of safe laboratory procedures.
- Ability to work with minimal supervision.
- Ability to balance multiple tasks simultaneously.
- Flexibility to accommodate changing priorities and deadlines.
- Ability to operate effectively as part of a team, either as leader or member.