

Crystallographer & Course Instructor

Temporary, full-time position (from May 3, 2021 to April 28, 2023) – Guelph, ON

The Department of Chemistry is a central academic unit within the University of Guelph's College of Engineering and Physical Sciences. With a dynamic, growing portfolio of teaching and research programs, we work with ~6,000 undergraduate and graduate students each year and provide a wide range of services to support these activities. This is an exciting place for a Crystallographer who seeks new challenges and is prepared to take on the role of Course Instructor.

Reporting to the Chair, you will provide technical expertise in support of the Department's crystallographic "X-lab" facility, in the form of: research experiment design; HQP training; structural data collection and refinement; preparation of publishable crystallographic information files (CIFs) and related co-authorship on research publications; instrument maintenance; and usage management. A vital aspect of your role will involve encouraging and supporting widespread usage of the "X-lab" infrastructure beyond the Department of Chemistry, and providing expertise and writing skills to support grant applications for future replacement of "X-lab" infrastructure, as needed. Leveraging your strengths as a communicator and experience in designing and performing experiments, you will develop new undergraduate and graduate courses within the Department of Chemistry, and teach both new and existing undergraduate courses.

REQUIREMENTS

The following skills and experiences will set you apart as a candidate for the role of Crystallographer & Course Instructor:

- PhD degree in Chemistry plus 1 year of related experience, or an equivalent combination of education and experience.
- Experience as a small-molecule crystallographer for single crystal (SCXRD) and powder X-ray diffraction (PXRD) experiments, including a track record (minimum 10 CIFs as lead crystallographer) of published, peer-reviewed crystallographic data.
- Experience handling air-sensitive samples for SCXRD and PXRD.
- Experience designing and performing crystallographic data collection experiments under high-pressure.
- Experience using Rietveld refinement methods for PXRD.
- Experience using ab initio methods to solve structures for small molecules using PXRD.
- Willingness to design, develop, and instruct Chemistry courses at all undergraduate levels.
- Strong oral and written communication skills, including excellent interpersonal skills and the ability to develop and maintain positive working relationships.
- Ability to demonstrate critical thinking and problem-solving skills.
- Excellent organizational skills, including multitasking, planning and prioritization.

ASSETS:

- Experience solving structures exhibiting disorder and twinning..
- First-hand experience in X-ray fluorescence (EDXRF or WDXRF).
- Teaching experience.

NOTE: This appointment is regularly performed on-campus but, due to the COVID-19 pandemic, will be initially fulfilled both remotely (off-campus) and on-campus until the University resumes its regular operations.

The **University of Guelph** (www.uoguelph.ca) is one of Canada's leading research-intensive comprehensive institutions, with a record of outstanding scholarship in the arts, humanities, social

sciences, life sciences, physical and engineering sciences, agriculture and veterinary sciences. This is your chance to join us in our endeavour to improve life.

To view a detailed posting for the position of Crystallographer & Course Instructor, please go to our website at www.uoguelph.ca/jobs. Applications, quoting **Hiring #2020-0421**, must be sent to: careers@uoguelph.ca.

At the University of Guelph, fostering a [culture of inclusion](#) is an institutional imperative. The University invites and encourages applications from all qualified individuals, including from groups that are traditionally underrepresented in employment, who may contribute to further diversification of our Institution.
