

Postdoctoral Associate

Mass Spectrometry – Drug-Checking Research
Department of Chemistry, Western University

About Western

Western ranks as one of Canada's top research-intensive universities. From fundamental to applied discovery and other scholarly activities, its scholars advance knowledge that provides tangible benefits for the economic, social, health and cultural development of citizens in London, in Canada and around the world. Western Research supports scholars through collaboration, communication, and service. Western University and its affiliate colleges received more than \$267 million in research funding over the past year.

About the Role

The Laguné-Labarthe group in the Department of Chemistry at Western University invites applications for a [Postdoctoral Associate](#) position in mass spectrometry, supporting a Health Canada-funded analytical program characterizing opioids and adulterants in the unregulated drug supply. The position centres on a project-dedicated Agilent HPLC-MS platform and combines targeted analysis with untargeted detection of new and emerging compounds. The project is conducted with industry collaborator Scatr Inc., a developer of drug-checking technologies, and pairs HPLC-MS with Raman spectroscopy on shared samples to support multi-modal analytical comparison. Training on the Raman instrument is provided.

Responsibilities include:

- Operating and maintaining a project-dedicated Agilent HPLC-MS system, including calibration for selected target molecules and routine hardware and software troubleshooting (instrument under annual service contract).
- Acquiring and interpreting MS data on samples submitted by partner sites, with emphasis on identifying previously uncharacterized compounds in complex, real-world matrices.
- Acquiring complementary Raman spectra on the same samples using an instrument purpose-built for street-drug analysis.
- Curating, organizing, and transferring datasets to the industry collaborator.
- Managing sample intake and labeling, calibration standard procurement, and hazardous waste disposal in line with laboratory safety protocols.

The role carries clear scope for first- and co-authored publications. The group's recent work appears in Harm Reduction Journal: "Street drug monitoring with networked spectrometers powered by machine learning: a pilot study in Ontario, Canada" ([DOI: 10.1186/s12954-026-01403-3](https://doi.org/10.1186/s12954-026-01403-3)). The successful candidate will join a

team of graduate students and interact regularly with the Principal Investigator and project managers, reporting at weekly project and group meetings.

- **Supervisor and academic unit:** Prof. François Lagurné-Labarhet, Department of Chemistry, Western University.
- **Remuneration:** \$60,000–\$65,000 CAD per annum, depending on experience, plus [benefits](#).
- **Start date:** Fall 2026.
- **Duration of appointment:** until March 2028, with potential for extension.
- **Location:** Western University, London, Ontario, Canada.
- **Application deadline:** applications will be reviewed as received until the position is filled.

How to Apply

To apply, please email Prof. François Lagurné-Labarhet (flagugne@uwo.ca) with a curriculum vitae highlighting your experience in mass spectrometry, together with a cover letter.

Required qualifications:

- PhD in Chemistry with demonstrated and recent experience in mass spectrometry coupled to a separation technique.
- Deep technical and conceptual command of mass spectrometry, with fluency in the associated acquisition and data-analysis software.
- Capacity for independent troubleshooting of both software and hardware.
- Strong scientific communication skills.
- Openness to acquiring new methods; familiarity with Raman spectroscopy is an asset but not required.

Western Values Diversity

The University invites applications from all qualified individuals. Western is committed to employment equity and diversity in the workplace and welcomes applications from women, members of racialized groups/visible minorities, Indigenous persons, persons with disabilities, persons of any sexual orientation, and persons of any gender identity or gender expression. Accommodations are available for applicants with disabilities throughout the recruitment process.