



Université   
de Montréal

Institut  
**Courtois**  
Faculté des arts et des sciences



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de Montréal

## Become a postdoctoral fellow – Bouilly Laboratory

The **Bouilly Lab** focuses on creating on-chip electronic sensors based on nanomaterials including graphene and carbon nanotubes. Our objectives are to better understand the fundamental mechanisms governing these sensors, and to develop them into innovative technologies. Led by **Prof. Delphine Bouilly**, our laboratory is located at the **Institute for Research in immunology and cancer (IRIC)** on the main campus of the Université de Montréal and is also part of the **Institut Courtois** in materials research. Our group applies an interdisciplinary approach at the frontier between materials physics, device engineering and biomedical applications, and we value scientific rigor, creativity and resourcefulness, as well as commitment and teamwork.

We are currently seeking a **postdoctoral fellow** to work on a project entitled “Graphene Surface Engineering for Aqueous Analyte Profilometry”, conducted as part of a collaboration with the National Research Council of Canada (NRC), McGill University, and Cégep de Saint-Jérôme.

### Role and Responsibilities

This project aims to combine microfabrication, surface chemistry and advanced characterization techniques to optimize the graphene interface in nanoelectronic chips operated in solution. Responsibilities of the postdoctoral fellow will include:

- 1) Assembling graphene electronic chips, using nanomaterials transfer techniques and micro/nanofabrication techniques in a clean room environment.
- 2) Characterizing chemically modified graphene electronic chips in aqueous environment, using electrical, electrochemical, microscopy and spectroscopy techniques (Raman, XPS).
- 3) Analyzing, interpreting and documenting experimental data, writing scientific reports and collaborating closely with other team members.

### Candidate Profile

Applicants must hold a PhD degree in applied physics, physical chemistry, materials sciences and engineering, nanoscience or a related field, with experience in one or more of the following areas: graphene or other 2D or thin film materials, microfabrication, surface characterization, electronic transport characterization. Demonstrated ability to conduct and publish research is considered an asset.

### Additional Information About the Position

- Unionized position (Syndicat des stagiaires postdoctorant(e)s de l'Université de Montréal – SERUM-SPD)
- Status: Full-time
- Salary and benefits according to the collective agreement (group health insurance, paid vacation, voluntary retirement savings plan, etc.)
- Immediate research supervisor: Prof. Delphine Bouilly
- Start date: As soon as possible

### How To Apply

Interested candidates should submit (1) a complete CV, (2) a cover letter, and (3) the names and contact information of two references, all combined into a single PDF file, by **June 1<sup>st</sup>, 2026**, to:

Joaneve Milette, agente de coordination ([bouillylab@iric.umontreal.ca](mailto:bouillylab@iric.umontreal.ca))

We look forward to meeting you very soon!