

Phd and MSc Positions in Maple Syrup Production

This project proposes the development of an integrated monitoring and modeling framework to assess and predict sap production in sugar maple stands under changing climatic conditions. By combining high-frequency sap exudation measurements, local weather, and tree-level physiological indicators, the study aims to identify the key drivers of interannual variability in sap yield. The ultimate goal is to develop predictive models that can support adaptive tapping strategies and guide producers in mitigating the impacts of climate variability on maple syrup production.

Candidate profile: The students are expected to develop their project autonomously, work collaboratively with other team members, including academic and governmental scientists and practitioners, and disseminate knowledge both within the scientific community and to maple producers. Candidates must demonstrate:

- A background in forest sciences, ecology, biology, or related disciplines;
- Strong skills in mathematics, statistics, data analysis, and modeling;
- Passion and willingness to work in both field and laboratory settings;
- Ability to communicate in English both orally and in writing (Knowledge of French will be considered an asset);
- A valid driver's license.

Working environment: The candidates will be based at the Université du Québec à Chicoutimi (QC, Canada), under the supervision of Sergio Rossi and Roberto Silvestro. The university is located in a French-speaking province at the boundary between temperate and boreal forests. Annual scholarships of \$25,000 (PhD) and \$20,000 (MSc) are available for the duration of the study period.

Application: Applicants should send their application by email to both Sergio Rossi (srossi@uqac.ca) and Roberto Silvestro (rsilvest@uqac.ca), including a single merged PDF containing:

- A letter of motivation demonstrating how the required skills are met and including the contact details of three academic references;
- Curriculum Vitae;
- Academic transcripts.

The call will remain open until the positions are filled. Only shortlisted candidates will be contacted for an interview with the research group.

Start date: As soon as possible.

The employers promote excellence through diversity, equity, and inclusion: we strongly encourage applications from women, individuals from historically underrepresented groups, Indigenous peoples, members of visible minorities, persons with disabilities, members of the LGBTQIA+ community, and any individuals who bring diverse perspectives and experiences.