

Researcher, Sustainable construction, Building Systems

Québec, QC

About FPInnovations

FPInnovations is among the world's largest private, non-profit forest research centres. The organization helps the Canadian forest industry to develop ground-breaking solutions based on the unique attributes of Canada's forest resources, favouring a sustainable development approach and taking full advantage of the industry's considerable scientific, technological and commercial capital.

The role of our Innovation Centers of Excellence (ICE) is to carry out scientific R&D and innovation projects to meet the industry's short- and long-term objectives. The work of each of the ICEs is focused on the development and implementation of technologies to improve the overall competitiveness of the industry on all markets. Within the Sustainable Construction ICE, the Building Systems group develops knowledge about the performance of conventional and advanced wood-based building components and systems. Working with other research institutes and the design and construction communities, the Building Systems group carries out multi-disciplinary research on safety, comfort, durability and sustainability to facilitate market acceptance and regulatory acceptance of wood products and systems.

Description

Reporting to the Manager for Building Systems (Sustainable Construction group), the researcher will contribute to a portfolio of projects in collaboration with researchers and technologists. Also, the incumbent will work with other groups within FPInnovations to carry out and deliver funded and contracted research projects. Work encompasses a variety of subject areas, including but not limited to acoustics, vibration and energy-efficient building enclosures.

Responsibilities

Mentored especially by a senior scientist, the researcher will:

- Develop design solutions to control sound and vibration in wood-based and hybrid construction in conjunction with scientists and technologists of the building systems group and the design and construction communities;

- Support research related to the regulatory process of building construction in North America;
- Provide scientific data to support changes in codes and standards and market access strategies for the timber industry;
- Transfer knowledge through presentations directed at the scientific community, industry, or government.
- Identify and take the additional steps to transfer or implement the research results to maximize the benefits of the work for clients;
- Analyze and interpret results from analytical and experimental studies;
- Write and edit presentations, technical reports and journal papers;
- Carry out and deliver studies, reviews, tests, measurements, and analyses by applying fundamentals of wood engineering and building sciences ;
- Working with governments, industry, trade associations as well as architects, engineers and contractors.

Qualifications

- 1 to 5 years of experience, Master's degree, preferably a PhD, mechanical engineering, civil engineering, building science, wood science;
- Good theoretical background in thermal physics or mechanical engineering specified in sound and vibration;
- Good numerical modelling skill;
- Good experimental skill for conducting laboratory and field tests;
- Good problem-solving and consensus-building skills;
- Good communication skills in French and English (oral and written);
- Be eligible for or have a professional engineering registration in Canada;
- Redactionnal ability;
- Available for business travelling.

N.B.: The masculine has been used above to include the feminine, solely for the purpose of easier reading.

Please submit your resume to: Recruitment_Recrutement@fpinnovations.ca

IMPORTANT: Please indicate reference no. 592 on the subject line.