Scientist, Wood-Based Building Components and Systems
Vancouver, British Columbia

About FPInnovations

FPInnovations is among the world's largest, not-for-profit forest research centres, specializing in the creation of innovative scientific solutions, in order to support the Canadian forest sector's global competitiveness. Our organization develops ground-breaking products and solutions based on the unique features of Canada's forest resources, with a view to sustainable development, while taking full advantage of the industry's considerable scientific, technological and commercial assets.

Description

Building Systems helps develop 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.

Reporting to the Manager, Building Systems, the Scientist will work closely with the team of scientists and technologists in the Building Systems group as well as researchers from 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 seismic structural engineering, lumber design values, mechanical properties of wood and acoustics.

Responsibilities

- Conduct numerical analyses, including applying judgment in the selection/development of modeling assumptions and input parameters;
- Plan, design and conduct laboratory tests ;
- Analyze and interpret results from analytical and experimental studies;
- Recommend projects and contracts;
- Write, review and edit presentations, technical reports and journal papers;
- Input to the planning of projects, design of experiments, analysis of results and dissemination of information;
- Carry out and deliver studies, reviews, tests, measurements, and analyses by applying fundamentals of wood engineering and wood sciences ;

- 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;
- Provide scientific data to support changes in codes and standards and market access strategies of the timber industry;
- Supervise, coach and train technical staff during the execution of projects or contracts.

Qualifications

- Master's degree, preferably a PhD, in civil engineering or wood sciences;
- Be eligible for or have a professional engineering registration in British Columbia;
- Demonstrated experience in applying numerical analysis to study the static and dynamic behavior of timber structures using computer programs such as ABAQUS or its equivalent;
- Experience in material testing and engineered wood products;
- Experience working with governments, industry, trade associations as well as architects, engineers and contractors;
- Knowledge of regulatory process related to building construction in North America would be an asset;
- Knowledge of engineering law such as liability, contract and tort as well as structural reliability analysis, stochastic modeling, statistics and acoustic performances of assemblies would be assets;
- Functional knowledge of MS Office (Word, Excel, PowerPoint, Outlook);
- Strong oral and written communication skills in English to converse with a technical and non-technical audience. French is considered an asset;
- Strong skills in organizing, planning and completing research projects;
- Available for occasional business travel.

Please submit your resume to:

Recruitment_recrutement@fpinnovations.ca

IMPORTANT: please indicate the reference number 439 in the subject line.