Research Assistant Opportunity

Holistic Building Strategies for Low-Embodied Carbon

Position Start Date: As soon as possible

Overview:

This research assistant(s) position (various positions) is intended to support Prof. Veronica Madonna, Associate Professor, RAIC Centre for Architecture at Athabasca University to investigate holistic building strategies for low-embodied carbon.

This project focuses on developing educational resources, toolkits, and prototype frameworks to support rural, regional, and Indigenous communities across Canada in advancing low-carbon solutions for both new construction and the adaptive reuse of housing and community buildings. By centering regenerative design, wood technologies, forest-based biomaterials, and life cycle thinking, the project enables stakeholders—including architects, municipalities, developers, and community members—to make informed, sustainable building decisions.

Key activities include literature review, data collection, case study analysis, building prototype development, and community engagement support, to develop regionally appropriate educational modules, toolkits, carbon accounting guidelines and research website. A central objective is to support low-carbon regional building practices that are rooted in local traditions and knowledge systems, aligning these with innovative building technologies to foster place-based resilience and climate adaptation. Through inclusive and collaborative approaches, the project aims to reduce embodied carbon while enhancing cultural continuity, social equity, and long-term sustainability in the built environment.

The successful candidate(s) would help with research including qualitative studies into low carbon building strategies.

Specific duties include, but are not limited to:

1. Research coordination:
   - Supporting grant and research ethics applications
   - Organizing and updating research materials and tools (e.g., calendars, websites, etc.)
   - Communicating with Prof. Veronica Madonna's research network
   - Collaborating with Prof. Veronica Madonna's research team and graduate students
   - Budget management
2. Opportunities to contribute to research:
   - Conducting and supporting literature reviews
   - Data collection (e.g., document collection, interviewing)
   - Data analysis

- Case study research
- Community engagement support
- Toolkit and educational content development
- Mapping and visualizations
- Prototype development
- Administrative tasks
- Knowledge mobilization
- Writing and/or presenting results (policy briefs, manuscripts, research talks)

3. Regular meetings with Prof. Madonna and additional research team members and subject matter experts.

The successful candidate will work with, and directly report to, Veronica Madonna at Athabasca University. Veronica Madonna will provide training and mentorship for all activities. The successful candidate will gain experience in research coordination, as well as qualitative, social sciences, and interdisciplinary research.

This is a casual position with flexible hours. The rate of pay, specific job title, and duties will be commensurate with experience and collective agreement provisions. All duties can be completed remotely.

Qualifications:
Various positions are available:
1. Undergraduate, Graduate, and Post Graduate positions are available
2. Strong organizational skills (e.g., calendars, budgets, etc.)
3. Strong communication skills, including written and spoken
4. Experience with research management preferred
5. Experience working with relevant software (e.g., Microsoft Office, video-conferencing)
6. One position requires architectural design experience and knowledge with the following programs: Revit, AutoCAD, Enscape, Twinmotion, and Adobe Creative Suites
7. Interest in environmental, social, economic and cultural impacts of the building industry
8. Affinity towards learning and adapting skills to fit the duties specified above

How to apply:

Interested candidates can submit their application by email to Veronica Madonna at vmadonna@athabascau.ca. Applications should include a single PDF document with the following:

1) A **brief cover letter** summarizing your relevant experience, skills, and interests
2) A current **curriculum vitae** *or* **resume**
3) A list of 2 references (to be contacted after candidates are selected for an interview)

Evaluation of applications will begin immediately and continue until a suitable candidate is found. All applicants are thanked for their interest in this position. However, only candidates selected for an interview will be contacted.

Athabasca University and the researchers here are committed to equity in employment opportunities. We encourage applications from women, Indigenous Peoples, persons with disabilities, racialized minorities, 2SLGBTQI+ people, and anyone who identifies with a historically marginalized group. Applicants are welcome, but not required, to self-identify in their letter of application.

For more information or to ask questions about this opportunity, please contact Prof. Veronica Madonna, vmadonna@athabascau.ca