

[TransCoastal Adaptations Centre for Nature-Based Solutions](#) (TCA) at Saint Mary's University is seeking a full-time **Coastal Research Instrument Technician**. The Coastal Research Instrument Technician will be based at Saint Mary's University, working within the TransCoastal Adaptations team which is led by Dr. Danika van Proosdij, Professor in the Department of Geography and Environmental Studies Department. They will work alongside a dedicated and dynamic team of staff and students on various applied research projects related to nature-based solutions for climate change adaptation, tidal wetland restoration and sediment dynamics in coastal systems. The primary responsibilities of the Coastal Research Instrument Technician will include taking care of scientific instruments, safety and inventory, conducting field work to collect environmental data, processing samples in the lab, reporting and coordinating lab and field schedules.

**Position Title:** Coastal Research Instrument Technician

**Start date:** June 2023

**Salary:** \$46,410, plus benefits

**Status:** Full-time (35 hrs a week)

**Duration:** End Date March 31, 2027

**Location:** Halifax, Nova Scotia

*TransCoastal Adaptations* (TCA) is a Centre of Expertise for nature-based adaptation to climate change at Saint Mary's University. Our mission is to help build climate resilient coastal communities and ecosystems by protecting, enhancing, and restoring natural processes through innovative research and collaboration, implementing nature-based adaptation solutions ([www.transcoastaladaptations.com](http://www.transcoastaladaptations.com)). The Intertidal Coastal Sediment Transport Research Unit (In\_CoaST) is one of the core research facilities within TCA conducting applied research in nature-based climate solutions to mitigate coastal erosion and flooding, human and natural drivers of coastal change and habitat restoration. In\_CoaST supports collaborative research with academic, NGO, government, and industry partners.

## RESPONSIBILITIES

- Coordinate and conduct field work in muddy intertidal zones to collect environmental data, including but not limited to deploying sensors to measure waves, currents, water levels, turbidity; taking sediment and water samples; conducting vegetation surveys; assisting with Remotely Piloted Aircraft System flights;
- Research, procure, test, and maintain scientific equipment such as weather stations, wave loggers, remote cameras, turbidity sensors, and others;

- Supervision of students for both lab and field activities;
- Oversee safety in both field and lab;
- Maintain lab and field equipment, and coordinate use;
- Operate a Coulter Counter Multisizer particle size analyzer to conduct grain size analysis on fine- grained sediments;
- Process sediment cores for organic matter, water content, and bulk density;
- Perform lab calibrations of suspended sediment concentration data;
- Analyze data using R or Matlab;
- Contribute to technical reports by providing analysis, figures, and summaries;
- Maintain a safe and organized working space;
- Other duties as required.

## PROFILE

We are looking to hire a dedicated and flexible professional who thrives in a dynamic, academic environment and who strives to support the success of our projects and the research team. The Coastal Research Instrument Technician will be comfortable troubleshooting and gaining hands-on experience with our monitoring equipment, enjoy working outdoors, and is passionate about the environment.

### Skills and Qualifications:

- Completion of a degree in Oceans Technology, Oceanography, Earth Science, Environmental Science, Geography, Biology, or related discipline;
- Completion of a Masters degree an asset but not required;
- Experience operating scientific equipment such as current meters or wave loggers an asset;
- Ability to troubleshoot unexpected problems and develop innovative solutions;
- Must be able to undertake strenuous activities, work long hours in the field, navigate difficult terrain, must be comfortable working in/near mud and water, and must be able to carry ~50 lbs
- Flexibility to occasionally work outside normal office hours, including evenings and weekends;
- Proven ability to problem solve and to take initiative to complete tasks;
- Must be adaptable within a changing work environment;
- Capable of learning new skills; particularly in data analysis and field methods;
- Capable of thinking analytically;
- Demonstrated ability to work with a multi-disciplinary research team;
- Must have strong organizational, time management skills;
- Must be highly motivated, independent and hard-working;
- Experience using a variety of computer applications such as Geographic Information Systems (GIS), R, and Matlab, considered an asset;
- Valid driver's license;
- Must be a Canadian citizen or legally entitled to work in Canada;

## APPLICATION

**To apply:** If you are interested in this position, please send a cover letter describing your background and fit to the position, along with a resumé or CV and list of references, merged into one document, via email to TCA Project Manager Kristie McVicar, [kristie.mcvicar@smu.ca](mailto:kristie.mcvicar@smu.ca) and please copy Dr. Danika van Proosdij, [dvanproo@smu.ca](mailto:dvanproo@smu.ca)

**Application deadline:** Open until filled. We will begin reviewing applications May 19, 2023. We thank all applicants, however, only candidates selected for an interview will be contacted.

At Saint Mary's University, equity and diversity are integral to excellence and enrich our community. As an institution committed to fostering an environment of inclusion and respect, we welcome applications from women, Indigenous peoples, racialized persons/visible minorities, persons with disabilities, persons of minority sexual orientation or gender identity and others who might contribute to the growth and enrichment of our community. Applicants are encouraged to self-identify. If you require accommodations during the recruitment process, please contact [kristie.mcvicar@smu.ca](mailto:kristie.mcvicar@smu.ca)