POST-DOCTORAL SCHOLAR

Project Manager, Nelson River basin Multi-model Intercomparison Project (MiP)

Position Start Date: December 2020

JOB DESCRIPTION

Nelson MiP is part of the Global Water Futures (GWF) Integrated Modelling Programme for Canada, IMPC (https://gwf.usask.ca/impc/articles/2019/impc-pilot-tools-launched-2019.php) seeking to improve knowledge of changing hydrology in Canada's largest rivers basins, and the impact of water management decisions. GWF is a University of Saskatchewan-led research program that is funded in part by a $77.8-million grant from the Canada First Research Excellence Fund, for which Dr. Stadnyk leads the Water Resources Management core modelling team and is a team lead for the IMPC project. This position entails managing a team of highly skilled modellers from across Canada, in academia and industry, who are contributing to the MiP, including identifying and disseminating foundational modelling data, and compiling model and analysing results for dissemination to the team and broader research networks (including peer reviewed publication). In addition, the PDS will lead the development and contribution of the Nelson River basin HYPE model to the MiP, with the support of a PhD student who will be assisted by the PDS candidate. The PDS will also participate in the GRIP-GL project, leading HYPE development and contributions for the Great Lakes Basins, as part of the IMPC programme.

EXPECTATIONS & OUTPUT

- Project manager: scheduling and leading monthly meetings, coordination of data dissemination and model evaluation decisions, and correspondence with project stakeholders
- Assist with supervision of a PhD student
- Contribution to the GRIP joint publications; lead at least one Nelson MiP peer-reviewed publication, in addition to various conference contributions (e.g., AGU)
- Attend GRIP-GL monthly meetings, and any GWF project meetings
- Assist with annual reporting, including financial summaries

QUALIFICATIONS

- Proficient hydrologic modeller, experience with HYPE is an asset
- Experience with R, Fortran and GIS an asset
- Knowledge of best practices in model evaluation, calibration and validation
- Experience with CMIP5/6 climate scenarios and climate change impact assessment modelling
- Knowledge of Canadian continental-scale river basins is an asset, and/or cold regions hydrology
- Knowledge of hydropower and river regulation controls in the Nelson River basin is an asset

UC-HAL

The University of Calgary Hydrologic Analysis Laboratory is a transdisciplinary group of hydrologic researchers that focuses on regional and continental-scale water supply issues and climate change analyses. We focus on developing tools and state-of-the-art coupled modelling and analysis tools to facilitate cumulative impact assessment for river basins, particularly the high latitude and Arctic regions. We work closely with practitioners to design and implement systems-based approaches that are realistic for real-time simulation. We are dedicated to SciComm and collaborate with the Arts to communicate our work to a broad audience. We reside within the Faculty of Arts, Department of Geography, with membership from Arts, Civil Engineering and Science.

TO APPLY, OR FOR MORE INFORMATION, CONTACT

Dr. Tricia Stadnyk, P.Eng.
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WEBSITE:
Ucalgary.ca/Labs/HAL

RESUMES will be considered until the position is filled.

UNIVERSITY OF CALGARY INFORMATION

PDS Faculty:
https://research.ucalgary.ca/postdocs

Eyes High PDS recruitment scholarship:
https://iac01.ucalgary.ca/FGSA/Public/SpecificAward.aspx?AwardID=5461