UNIVERSITY OF ALBERTA

WSML Watershed Science & Modelling Laboratory

DEPARTMENT OF EARTH AND ATMOSPHERIC SCIENCES | FACULTY OF SCIENCE

POSTING DATE: MAY 05, 2020

New PhD opportunity on:

Integrated surface water and groundwater modelling under changing climate and land management factors

The ***Watershed Science & Modelling Laboratory*** of the Earth and Atmospheric Department at the University of Alberta is looking for an innovative and highly motivated candidate to develop models and conduct research on *surface water- groundwater modelling in western Canada under uncertain future climate change*. The successful candidate will utilize advanced models and data for studying water quality and water quantity stressors by understanding processes associated with surface hydrology and hydrogeology and their interactions in time and space. The candidate will study the impacts of climate change and land management practices on water quality and quantity. The end goal is to provide scientifically credible knowledge for formulating sustainable management options for informed decision making in an uncertain future in western Canada.

Qualifications and Specific Skills

- MSc degree in Earth and Environmental Sciences, Civil and Environmental Engineering, Water Resources and Agricultural Engineering or a closely related fields.
- Proficient knowledge and understanding of watershed hydrology and hydrogeology
- Proficient knowledge and understanding of principles and applications of hydrologic models, groundwater models and statistical methods for processing and analysis of environmental data
- Proficient knowledge of scripting and programming for large database management
- Ability to work both independently and collaboratively, prioritize, adapt to rapidly shifting priorities and manage research projects from start to scientific publication
- Superior written, communication and interpersonal skills for effective and efficient development of scientific publications and interaction with other researchers and public

Location: Watershed Science and Modelling Laboratory (https://cms.eas.ualberta.ca/faramarzilab), Department of Earth and Atmospheric Sciences, University of Alberta.

Collaboration: Candidate will be supervised by **Dr. Faramarzi** and will extensively collaborate with **Dr. Dan Alessi** and **Dr. Duane Froese** within the Department of Earth and Atmospheric Sciences, University of Alberta.

Term: This is a full time position for 4 years.

Contact: Send your updated CV to Dr. Monireh Faramarzi via faramarz@ualberta.ca

Closing date: Position open until filled.