POSTDOCTORAL POSITION IN ARCTIC TERRESTRIAL ECOSYSTEM MODELING FOR METHANE DYNAMIC RESEARCH
UNIVERSITY OF ALASKA FAIRBANKS
Institute of Arctic Biology

Postdoctoral Research Scientist. The University of Alaska Fairbanks invites applications for a
arctic ecosystem modeler to primarily parameterize, test and apply a methane dynamic model
that represent the various pathways of methanogenesis and methanotrophy in boreal and arctic
ecosystems across the circumpolar region. These modeling activities will be conducted using
DVM-DOS-TEM, a process-based terrestrial ecosystem model developed for high latitude
ecosystems. The modeler will work closely with the projects leads and collaborators (UAF and
Woodwell Climate Research Center) and with a programmer that will help with code
development and management.

Responsibilities:
• Work closely with project lead and collaborators to parameterize, test and apply a methane
dynamic model integrated in DVM-DOS-TEM.
• Conduct modeling studies that include the development, parameterization, testing, analysis,
and application of DVM-DOS-TEM that simulates vegetation, carbon and permafrost dynamics in
arctic and boreal ecosystems.
• Apply the updated model using UAF computing resources for historical analysis, and longer-
term projections of permafrost, soil hydrology and carbon dynamics across the northern
permafrost region.
• Participate in team meetings, workshops and conferences.
• Synthesize, present, and publish results in international conferences and peer-reviewed
journals.

Required Qualifications, Education, and Experience:
• Ph.D. in ecosystem modeling, Earth system science, ecology, or biogeochemistry.
• Expertise in prognostic ecosystem modeling.
• Experience with Terrestrial Ecosystem Models strongly desired.
• Knowledge of carbon and nitrogen cycles in arctic-boreal environments.
• Ability to lead a research project and work both independently and collaboratively.
• Advanced computational and programming skills.
• Excellent written and oral communication skills.

Application Deadline: September 15, 2022 or until filled.
Desired Start Date: October 1st, 2022 or possibly later.
Location: UAF preferred, remote possible.
Classification: This position is for a two years fixed-term with the potential to extend dependent
upon funding.
Application Instructions: To apply, please send your cover letter addressing your experience and
qualifications in relation to the responsibilities of this position, a curriculum vitae, and contact
information for three references to Hélène Genet (hgenet@alaska.edu). Incomplete applications
will not be reviewed.

The University of Alaska is an equal employment/affirmative action employer and educational
institution. More information on the nature of the position can be obtained by contacting Dr.
H. Genet, hgenet@alaska.edu.