Title
PostDoc

Area: Modelling the input of plant protection products (PPP) into surface waters at the catchment scale

The project is part of the Plant Protection Project in the canton of Berne (Berner Pflanzenschutzprojekt, BPP), which was launched by the Office for Agriculture and Nature of the Canton of Berne (LANAT), together with the Farmers’ Association of Berne and the Federal Office for Agriculture. The aim of the project is a significant reduction of the pollution of water bodies from agricultural use of plant protection products. The reduction is accomplished by the implementation of a set of measures that is supplemented with a farmer’s survey on the actual use of PPP and a monitoring program in two small catchments. The announced position will provide validated hydrological models describing the relevant processes that contribute to diffuse inputs of PPP into surface waters at the catchment scale by integrating all information available within the BPP.

Tasks
- Processing of input data relating to topography, soil maps, land use, climate, and use and properties of PPP
- Catchment-scale modelling of diffuse pollution (PPP) from agricultural sources (model calibration and validation), including parameter sensitivity and uncertainty analyses and calculation of selected scenarios
- Reporting on results in the form of a final report and a scientific publication

Requirements
- PhD in the field of hydrology, agronomy, environmental or natural sciences
- Solid background in hydrological/water quality modelling at the catchment scale (e.g. SWAT)
- Knowledge of GIS and RStudio is an asset, as is modelling experience with diffuse pollution from agricultural sources
- Communicative personality with an independent and solution-oriented working style
- Proficiency in English; good knowledge of two official Swiss languages round out the requirements profile (working languages of the group are German and English)

Information about Agroscope
Agroscope is the Swiss centre of excellence for research in agriculture, nutrition and the environment. Researchers carry out their work at multiple locations in Switzerland. The main site is Bern-Liebefeld. Agroscope is affiliated with the Federal Department of Economic Affairs, Education and Research EAER.

The research group Plant-Protection Chemistry, situated in Wädenswil near Zürich, carries out research related to fundamental and methodological questions regarding environmental risks arising from the authorisation of PPP.

We offer a challenging job in a dynamic working environment at the interface of research and practical applications, cooperation in a dynamic team, as well as modern employment conditions and an attractive infrastructure.

Starting date: October 1, 2020 OR by agreement; duration: one year with option for extension.

Work location
8820 Wädenswil (ZH)

Wage bracket
According to standards of the Swiss National Science Foundation

Level of employment
80-100 %

Contact
If this position interests you and you fulfil the profile of requirements, we look forward to receiving your online application including contact information of 2-3 referees here: human.resources@agroscope.admin.ch (Ref.nr. 42569). Closing date: June 30, 2020

For further inquiries, please contact Dr. Roy Kasteel, scientific assistant, Plant-Protection Chemistry, Tel. +41 (0) 58 469 60 46; romualdus.kasteel@agroscope.admin.ch (please do not send applications to this email address).