

Federal Department of Economic Affairs, Education and Research EAER

Agroscope

# Job advertisement Agroscope

## Title

PhD Position in agro-ecosystem modelling 100%

## Organisation

Agroscope is an innovative research institute for agriculture and nutrition with research stations at a number of sites around Switzerland. Agroscope conducts research to benefit environmentally friendly, competitive agriculture. We consider ecology, economy and agricultural technology in an integrated research approach. Our research work aims at providing a scientific basis for decision support for farmers, government and society. The Climate and Air Pollution Group at Agroscope offers a PhD position in the field of agro-ecosystem modelling.

## Tasks

The PhD project will be integrated in the BiodivERsA/FACCE-JPI project TALE (Towards multifunctional agricultural landscapes in Europe: Assessing and governing synergies between biodiversity and ecosystem services), which will allow the candidate to benefit from collaborations within an international and interdisciplinary project consortium. The research work aims at investigating through model simulations synergies and trade-offs between food supply, biodiversity and ecosystem services under current and future climatic conditions. Project tasks involve the calibration and validation of the ecohydrological model SWAT, as well as model analyses including sensitivity and uncertainty studies. Multi-objective optimization will be applied to systematically explore synergies and trade-offs between competing demands in an agricultural landscape.

#### **Position Requirements and What We Offer**

We are looking for a motivated PhD candidate with a master degree in natural sciences (e.g. Environmental Science, Geography, Biology), with a strong interest in biophysical system linkages and interactions in agroecosystems, and in conducting interdisciplinary research. Experience in eco-hydrological modelling (e.g. SWAT), programming (e.g. Fortran, Python, C/C++) and statistical analysis are required. Knowledge of GIS application is appreciated. Good knowledge of spoken and written English in addition to German or French is required.

The dissertation (PhD in Climate Sciences) will be part of the PhD program at the University of Bern (Oeschger Center for Climate Change Research; www.oeschger.unibe.ch) (Prof. Dr. J. Fuhrer).

The successful candidate will benefit from flexible working hours and good employee benefits.

Start date: 1 April 2015, or as agreed. Duration of contract is 3 years.

Place of Work	Agroscope Institute for Sustainability Sciences in Zurich-Affoltern
Salary Category	According to the guidelines of the Swiss National Science Foundation
Employment Level	100%

#### **Application Address**

If this challenge appeals to you and you meet our requirements profile, we look forward to receiving your online application (human.resources@agroscope.admin.ch). Online applications consist of a single PDF containing a complete academic record, CV, list of publications, copy of certifications and addresses of 2 referees.

For further information, please feel free to contact Dr. Annelie Holzkämper, Climate and Air Pollution Group, Tel. +41 58 46 87516, annelie.holzkaemper@agroscope.admin.ch (Do not send applications to this e-mail).

Closing date for applications: 18 January 2015