



GEORG-AUGUST-UNIVERSITÄT
GÖTTINGEN

The Department of Crop Sciences, Division Tropical Plant Production and Agricultural Systems Modelling (TROPAGS) at the University of Göttingen offers a position, preferably starting 1 April 2020.

Postdoc position “Systems Agronomy: Crop and model-based ideotyping and model improvement”

Salary TV-L 13/100% (according to the German salary scale), initially for the duration of 2 years

Responsibilities and working environment

We are seeking to fill a position that is at the core of our division’s research foci, i.e. model-based crop ideotyping for future environmental conditions. Research will focus on development and application of innovative modelling tools in support of breeding climate-resilient future crop cultivars for Europe. A key responsibility of the Postdoc will be to evaluate different eco-physiological crop simulation models (CSMs) based on available detailed field experimental data, improve models on abiotic stress response mechanisms and further develop approaches to link CSMs with genomic prediction. Subsequently improved models and new approaches will be applied to support crop ideotyping for future climates in contrasting cultivation environments. TROPAGS research group deals with the improved management, modelling and design of globally important plant production systems. This includes of impact assessment of technology change and climate change on systems performance (for details, see [webpage](#)). We offer a stimulating, international and interdisciplinary research/working environment at Göttingen and exchange with excellent research groups/networks around the globe working on similar issues.

Required qualifications and skills:

- PhD in Agricultural Sciences, Bioinformatics/Mathematics, Environmental Sciences, Meteorology/Climatology, Physical Geography or related fields- with specific knowledge in crop ecophysiology
- Deep understanding of theory and concepts of crop simulation modelling, model evaluation methods, and model-aided crop ideotyping
- Excellent command and operational skills in calibrating and validating crop simulation models such as APSIM, DAISY, WOFOST and/or other widely used crop models
- Good knowledge and experience in big data management and statistics, and strong programming skills with one or more relevant/common languages (e.g. R, Python, C++ or Fortran)
- Experience in model development and improvement and good knowledge about associated requirements of data from field and controlled experiments and their utilization
- Keen interest and proven experience in writing peer-reviewed scientific articles
- Very good written and spoken English language skills

Desired qualifications:

- Experience in crop model-aided ideotyping
- Experience in applications of GIS and remote sensing to agricultural/environmental issues
- Experience in assessing extreme weather events (e.g. heat, drought and/or CO₂) on crops systems model improving crop models for better capturing of extremes
- Experience in designing experiments in support of model development and evaluation
- Ability to work in/with a multi-cultural team and research partners world-wide
- Interest and willingness to learn and communicate in German

The University of Göttingen is an equal opportunities employer and places particular emphasis on fostering career opportunities for women. Qualified women are therefore strongly encouraged to apply in fields in which they are underrepresented. The University has committed itself to being a family-friendly institution and supports their employees in balancing work and family life. The mission of the University is to employ a greater number of severely disabled persons. Applications from severely disabled persons with equivalent qualifications will be given preference.

Applications should be sent to **BEWERBERPORTAL** reimund.roetter@uni-goettingen.de (with cc to: apape2@gwdg.de) and should include a cover letter, a short summary of research interests, CV, complete certificates, and the names (with email addresses) of two potential referees. Interviews of invited candidates will most likely be held early March.

Closing date for applications: 25.02.2020. For further information, please, contact: Prof. Dr. Reimund P Rötter: reimund.roetter@uni-goettingen.de



Please note:

With submission of your application, you accept the processing of your applicant data in terms of data-protection law. Further information on the legal basis and data usage is provided in the Hinweisblatt zur Datenschutzgrundverordnung (DSGVO) <https://www.uni-goettingen.de/hinweisdsgvo>