The mission of the Leibniz Centre for Agricultural Landscape Research (ZALF) as a nationally and internationally active research institute is to deliver solutions for an ecologically, economically and socially sustainable agriculture – together with society. ZALF is a member of the Leibniz Association and is located in Müncheberg (approx. 35 minutes by regional train from Berlin-Lichtenberg). It also maintains a research station with further locations in Dedelow and Paulinenaue.

**ZALF’s Research Area 1 ‘Landscape Functioning’** investigates the functioning of agricultural landscapes and aims at contributions to the United Nations’ Sustainability Goals (SDGs) Zero Hunger, Climate Action, and Life on Land.

The Research Group “Landscape Pedology” is offering a 65% position (36 months) for a

**Ph.D. student (m/f/d)**

The announced position is part of the interdisciplinary project 'TilEro - Tillage erosion affects crop yields and carbon balance in hummocky landscapes’ (funded by DFG).

The main goal of TilEro is to clarify the impacts of tillage erosion upon crop yields and feedbacks on the carbon cycle at a regional scale. The study area “AgroScapeLab Quillow” is located in a hummocky ground moraine landscape of NE Germany. The work program includes (i) an empirical quantification of decadal soil erosion rates and C balance components (incl. field experiments), and, (ii) a spatio-temporal modelling of crop biomasses and yields using high-resolution, multi-temporal remote sensing. The PhD candidate will work closely together with our project partner from the University of Augsburg who focusses on model development and application.

**Your tasks:**

- Reconstruction of historical soil erosion rates by $^{239+240}\text{Pu}$, aerial photographs, and legacy soil data
- Determination of the spatio-temporal variability of crop biomasses and yields by remote sensing (2010-22)
- Quantification of the C inputs into eroded soils (selected field experiments, modelling)
- Publication of results in scientific journals

**Your qualifications:**

- MSc in soil science, geoecology, or agriculture
- Excellent communication skills (incl. English)
- A large interest in science and willingness to learn new methods
- A high capability in self-management
- Very good teamwork skills
- Willingness to travel in Germany and abroad
- Driving license

**We offer:**

- Technical support for field experiments and GIS-based modelling
- An interdisciplinary and international working environment
- Salary according to the collective agreement of the federal states (TV-L) EG13 (including special annual payment)
- A collegial and open-minded working atmosphere in a dynamic research institution
- Family-friendly working conditions
Women are particularly encouraged to apply. Applications from severely disabled persons with equal qualifications are favored. Please send your application preferably by e-mail (one PDF file, max. 5 MB) with the usual documents, in particular CV, proof of qualification and certificates, stating the reference number 02-2020 until February 15, 2020 to: Bewerbungen@zalf.de.

If you have any questions, please do not hesitate to contact us:
Prof. Dr. Michael Sommer (RG Landscape Pedology), phone +49(0)33432/82-282

For cost reasons, application documents or extensive publications can only be returned if an adequately stamped envelope is attached.

If you apply, we collect and process your personal data in accordance with Articles 5 and 6 of the EU GDPR only for the processing of your application and for purposes that result from possible future employment with the ZALF. Your data will be deleted after six months.

You can find further information at: www.zalf.de/en/ueber_uns/Pages/Datenschutzerklaerung.aspx