



The Collaborative Research Center SFB 1076 “**AquaDiva** – Understanding the Links between Surface and Subsurface Biogeosphere” is funded by the Deutsche Forschungsgemeinschaft (DFG). AquaDiva is an ambitious research center with more than 70 researchers and Institutes at four faculties of the Friedrich Schiller University Jena (FSU) and three non-university research institutes in Jena or Leipzig. The integrated Research Training Group AquaDiva is educating doctoral researchers in a structured, interdisciplinary training program. AquaDiva combines different research areas, such as ecology, microbiology, hydrogeology, soil science, geomorphology, geochemistry, geology, geophysics, chemistry, and information science, to a comprehensive picture of subsurface research ([www.aquadiva.uni-jena.de](http://www.aquadiva.uni-jena.de)).

The Integrated Research Training Group AquaDiva invites applications for a  
**Doctoral Researcher Position (m/f; Ref.No. 189/2017)**  
at the group Terrestrial Ecohydrology at the Friedrich Schiller University Jena  
(renewal)

### **Effect of Canopy-Induced Heterogeneity on Water Flux Patterns below the Root Zone**

**The project aims at understanding whether canopy-induced small-scale patterns of water fluxes have potential to affect area-averaged water fluxes below the rooting zone. This project goes beyond assessing the effect of canopies on precipitation, by accounting specifically also for vegetation-induced patterns of soil hydraulic properties and transpiration. This work will be conducted at an intensive monitoring site already equipped with an expansive soil sensor network and forest lysimeters. An important technical task will be the extension of the soil sensor network by potentiometers and the development of a low complexity soil water model for a model-data-fusion exercise.**

#### **Requirements:**

- A Master’s degree (or equivalent) in **hydrology, soil science, geo-ecology**, or related discipline in the environmental sciences; candidates expected to earn their degree by September 2017 are welcome to apply
- Solid knowledge of unsaturated water flow, including both modelling and observation; background in statistics; ideally with knowledge of geostatistics, sensing technology, and/or a script language (such as python, R, or Matlab)
- Readiness to work for extended periods in the field
- Enthusiasm to play an active role in the **interdisciplinary research team** of AquaDiva
- Highly motivated and creative personalities, with an interest to shape their own thesis project
- Excellent written and oral communications skills in **English**

#### **We offer:**

- A doctoral researcher position (TV-L E13 - salary agreement for public service employees, 65%) with funding from Sep 1, 2017, until Jun 30, 2021, as well as generous research funding with the possibility of a three-months research stay abroad
- Opportunity for research on an innovative and unique Critical Zone research platform
- A comprehensive mentoring program with supervision by a team of advisors
- A communicative atmosphere within a scientific network providing top-level research facilities and training program, including participation in international and national conferences and workshops
- The place of work is Jena, Germany, a young and lively university town with dynamic business activities, successful scientific centers of innovation, and a vibrant cultural scene around a university with a rich tradition

Severely disabled applicants with equal qualification and aptitude are given preferential consideration.

Applications should be written in English. The **application deadline is July 26<sup>th</sup>**, 2017. The position is open until filled.

Applications are submitted exclusively via an online application tool: <https://apply.jsmc.uni-jena.de>

Selected applicants will be invited to a recruitment symposium in Jena, Germany, presumably in August, 2017.

For more **information on the position**, feel free to contact Anke Hildebrandt ([hildebrandt.a@uni-jena.de](mailto:hildebrandt.a@uni-jena.de)). For more **information on the application process**, please contact the coordinator, Maria Fabisch ([maria.fabisch@uni-jena.de](mailto:maria.fabisch@uni-jena.de)) or write an email to [aquadiva-recruitment@listserv.uni-jena.de](mailto:aquadiva-recruitment@listserv.uni-jena.de). More **project details**: <http://www.aquadiva.uni-jena.de/Graduate+school/Open+positions-p-213.html>.

Please refer to the notes on: [www.uni-jena.de/stellenmarkt\\_hinweis.html](http://www.uni-jena.de/stellenmarkt_hinweis.html)