

**Technische Universität Berlin**

Technische Universität Berlin offers an open position:

### Research Assistant - salary grade E13 TV-L Berliner Hochschulen

under the reserve that funds are granted - part-time employment may be possible

The Technische Universität Berlin (TUB) is coordinating the research project AMUSE (Advanced Multi-GNSS Array for Monitoring Severe Weather Events), funded by the German Research Foundation (DFG). AMUSE is aiming at improving the forecast of strong precipitation events in Germany in cooperation with the German Research Centre for Geosciences GFZ and the German Weather Service (Deutscher Wetterdienst, DWD). Data of a regional GNSS (Global Navigation Satellite System) network, consisting of more than 300 stations will be analysed for this purpose and atmospheric data products as atmospheric propagation delays or vertically integrated water vapour are provided for appropriate weather situations to the DWD for specific impact studies.

GFZ and TUB have long-term experience with the processing of GNSS data for atmosphere sounding and operational provision for assimilation to numerical weather forecasts. AMUSE is focused on the recent challenges in this field: derivation and application of GNSS based atmospheric gradients and slant propagation delays to the satellites of all existing Global Navigation Satellite Systems (Multi-GNSS) under consideration of Real-Time aspects. The project work is executed in cooperation with the GFZ Section 1.1 „Space Geodetic Techniques“ and the German Weather Service (DWD).

We look for a motivated and talented scientist for this challenging GNSS research. It was originally designed as PostDoc project. However with appropriate experience of the candidate in GNSS data analysis the expected innovative project results can also be utilized as base for a PhD thesis in the field of GNSS and/or meteorological research.

#### Faculty VI - Institute of Geodesy and Geo Information Sciences / GNSS Remote Sensing, Navigation and Positioning

**Reference number:** VI-355/19 (starting at the earliest possible / for a period of 36 months / closing date for applications 02/08/19)

#### Working field:

- Processing GNSS data of a regional GNSS network in Germany, consisting of about 300 stations
- Operational handling of the GNSS processing software EPOS.P8 and periphery
- Implementation and application of improved methods for the derivation of atmospheric parameters, as propagation delays in zenith or in direction to the individual GNSS satellites (slants)
- Validation of the GNSS results with numerical weather models and water vapor radiometers
- Cooperation with the German Weather service for the assimilation studies
- Presentation of the results in project meetings, conferences and scientific journals.
- PhD thesis preparation is possible

#### Requirements:

- Successfully completed university degree (Master, Diplom or equivalent) in geodesy or related (e.g. Mathematics, Geoinformatics etc)
- Expertise in GNSS data analysis and satellite geodesy
- Interest and if possible experience in GNSS meteorology
- Expertise in data processing under LINUX and in FORTRAN
- Ability for independent working
- Ability for and willingness to work in a multidisciplinary team and to communicate with external partners
- Good command of English

Please send your written **application** with the **reference number** and the usual documents (in particular curriculum vitae, university certificates and transcripts, list of publications and eventually up to three references) to **Technische Universität Berlin - Der Präsident - Fakultät VI, Institut für Geodäsie und Geoinformationstechnik, FG GNSS-Fernerkundung, Navigation und Positionierung, Prof. Dr. Wickert, Sekr. H12, Straße des 17. Juni 135, 10623 Berlin** or by e-mail to [rosemarie.kunkel@tu-berlin.de](mailto:rosemarie.kunkel@tu-berlin.de).

To ensure equal opportunities between women and men, applications by women with the required qualifications are explicitly desired. Qualified individuals with disabilities will be favored. The TU Berlin values the diversity of its members and is committed to the goals of equal opportunities.

Please send copies only. Original documents will not be returned.

The vacancy is also available on the internet at <http://www.personalabteilung.tu-berlin.de/menue/jobs/>

