3579 6184 PhD Student Meteorology - Urban Microclimate, Photo-Voltaic Technische Universität Dresden (TUD), as a University of Excellence, is one of the leading and most dynamic research institutions in the country. Founded in 1828, today it is a globally oriented, regionally anchored top university as it focuses on the grand challenges of the 21st century. It develops innovative solutions for the world's most pressing issues. In research and academic programs, the university unites the natural and engineering sciences with the humanities, social sciences and medicine. This wide range of disciplines is a special feature, facilitating interdisciplinarity and transfer of science to society. As a modern employer, it offers attractive working conditions to all employees in teaching, research, technology and administration. The goal is to promote and develop their individual abilities while empowering everyone to reach their full potential. TUD embodies a university culture that is characterized by cosmopolitanism, mutual appreciation, thriving innovation and active participation. For TUD diversity is an essential feature and a quality criterion of an excellent university. Accordingly, we welcome all applicants who would like to commit themselves, their achievements and productivity to the success of the whole institution.  
  
At the Faculty of Environmental Sciences, Department of Hydrosciences, Institute of Hydrology and Meteorology, the Chair of Meteorology offers a position as  
  
  
Research Associate / PhD student (m/f/x)  
(subject to personal qualification employees are remunerated according to salary group E 13 TV-L)  
  
  
  
starting as soon as possible. The position comprises 75% of the full-time weekly hours and is limited to 36 months, funded by the DFG project "The effect of roof-mounted photo-voltaic modules on the urban microclimate and indoor thermal comfort (EUPHORIC)". The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG). This project is conducted in close cooperation with the Leibnitz University Hannover and the Physikalisch-Technische Bundesanstalt in Braunschweig. The position offers the chance to obtain further academic qualification (e.g. PhD).   
Tasks: The main objective is the investigation the effect of area-wide PV deployment in urban areas on the urban microclimate in terms of thermal comfort and air quality. For this purpose, we plan to implement a new parameterization for roof-top PV panels in the LES model PALM and use the model to simulate and analyze the effects of the area-wide deployment of PV panels under realistic atmospheric conditions. These simulations will be evaluated by in-situ measurements of turbulent fluxes under the challenging conditions of urban environments. Requirements:   
  
 university degree (Master), preferably in meteorology, geoecology, environmental sciences, physics, hydrology, hydro science and engineering or similar programs of study with a focus on micrometeorology, numerical modelling and fluid dynamics  
 strong hands-on and problem-solving skills; high motivation, good organizational skills, and an independent and conscientious approach to work  
 reliability and a high degree of initiative; interest in environmental atmospheric sciences as well as interdisciplinary cooperation and good team spirit  
 good programming skills in data analytics, e.g. R, Python, ideally also FORTRAN  
 strong communication skills including good oral and writing skills. Very good English skills and at least a basic knowledge of German would be preferred. Physicist None 2023-03-07 15:57:53.518000