

In the Department of Production Engineering at the University of Bremen in the field of "Metrology, Automation and Quality Science" the position of a

**PhD student (f/m/d)** (Salary Scale E13 TV-L, 100%)

limited to three years in the research area

*Contactless measurement and evaluation of aeroelastic deformations  
of wind turbines in operation*

is to be filled.

The time limit is set for scientific qualification according to § 2 par. 1 WissZeitVG (Wissenschaftszeitvertragsgesetz). Accordingly, only applicants who still have the corresponding number of qualification periods after § 2 par. 1 WissZeitVG can be considered.

#### **Your duties:**

- laser optical measurement of the dynamic aeroelastic deformation of the rotor blades of multi-megawatt wind turbines during operation
- investigation of the effects of the dynamic rotor blade deformation (bending, torsion and natural oscillations) on the resulting angle of attack of the flow
- rotation angle dependent coordinate transformation of acquired geometry measurement data for the data fusion with the thermographic boundary layer flow measurement data
- publication of the results in international journals and participation in international conferences

#### **Your qualification\profile:**

- above-average university degree (university diploma/master's degree) in electrical engineering, computer science, production engineering / mechanical engineering, mechatronics, systems engineering, physics, industrial engineering or related fields of study
- high level of commitment and pleasure in working independently in a team
- very good spoken and written knowledge of English and German
- Programming knowledge for data evaluation and visualization e.g. with Matlab or PHP is advantageous

#### **We offer:**

- an interdisciplinary, dynamic and family-friendly team
- highly topical and socially significant research
- ideal conditions for your target-oriented additional scientific qualification (usually a PhD)
- excellent equipment and own design possibilities
- Possibility of producing high-quality publications
- Cooperation with renowned national and international partners
- scientific exchange at international meetings and conferences

The University of Bremen strives to increase the proportion of women in the scientific field and therefore strongly encourages women to apply. Severely disabled persons are preferred if they have the same professional and personal qualification. International applicants or applications in English are welcome.

We look forward to receiving your complete application documents, which you should send to the following address by **20.02.2020**, quoting the reference number **A387/19**:

BIMAQ – Bremer Institut für Messtechnik, Automatisierung und Qualitätswissenschaft  
Prof. Dr.-Ing. habil. A. Fischer  
Linzer Str. 13  
28357 Bremen

Please submit only copies and no folders in your application documents, as we cannot return them. Alternatively and preferred you can send your application documents in electronic form as a pdf file (incl. the cover letter, max. 10 MB) to [andreas.fischer@bimaq.de](mailto:andreas.fischer@bimaq.de).