



The Institute of Thermodynamics and Fluid Mechanics is searching for scientific work at the large-scale convection experiment „Barrel of Ilmenau“ ([www.ilmenauer-fass.de](http://www.ilmenauer-fass.de))“ a motivated

### **Junior Researcher/ PhD student**

The position within the EU project „European High Performance Infrastructures in Turbulence“ ([www.euhit.org](http://www.euhit.org)) is a non-permanent one with an initial duration of 24 month. An extension of the employment depends on the disposability of funding. The salary is set according to the rules of the public sector and depends on the personal qualification (about 40 k€/a).

You may expect an ambitious, but also a versatile and exciting work in an internationally collaborating team. The position will focus on independent, self-governed research on laser based flow measurement technique (Particle Tracking Velocimetry) and will give the opportunity to write a PhD thesis.

#### **Responsibilities:**

- Adaption of the Particle Tracking Velocimetry technique to the large-scale convection experiment „Barrel of Ilmenau“,
- Flow measurements in the convection experiment,
- User acquisition for the utilization of the „Barrel of Ilmenau“ in the framework of the EuHIT project and the supervision of the attracted research projects,
- Supervision of bachelor and master students,
- Representation of the work in international journals and congresses.

#### **Qualification:**

- An excellent master’s degree in electrical/mechanical engineering or physics,
- Skills in Thermodynamics, Fluid Mechanics and Fluid Measurement Techniques,
- Independent but communicative way of working,
- A certain level of skills in practical manufacturing,
- The absolute will to gain skills outside your specific field,
- Good English language ability.

Specific skills in the following field would be advantageous on the following fields:

- Imaging flow measurement technique (Particle Image Velocimetry, Particle Tracking Velocimetry),
- Digitale Image processing,
- Thermal convection.

Ilmenau University of Technology has been awarded the Total E-Quality-predicate. It strongly urges women to apply. Disabled persons, having the same aptitude, and professional qualifications, have priority in hiring.

A paper copy of the application with the following documents (letter of application including: a statement as to why the candidate fits the research field, complete curriculum vitae, certificates, possibly references, and prior experience in project initiation if available) should be sent by July 31<sup>st</sup> 2013 under the code number 40/2013 to:

**Technische Universität Ilmenau  
Dezernat für Personalangelegenheiten  
Postfach 100 565  
98684 Ilmenau**

Alternatively, you may send an email application to:

Herrn Dr. Ronald du Puits  
03677 69-1353  
[ronald.dupuits@tu-ilmenau.de](mailto:ronald.dupuits@tu-ilmenau.de)