

The Technische Universität (TU) Braunschweig is seeking to appoint a full time position (TV-L E14) as a

## Junior Research Group Leader (f/m/x)

to conduct independent research in the field of **Manufacturing in Space**. The additive manufacturing and assembly of components on orbit is a promising approach to sustainability on orbit. The aim of the Junior Research Group (JRG) "Manufacturing in Space" is to establish methods and technologies for sustainable manufacturing, assembly, and operations of large sensor networks in space. Possible application fields are remote sensing and Earth sciences.

Research Focus: The applicant shall develop new approaches and methods for 3D printing of spacecraft elements in space, such as structures, brackets, conducting paths, and data circuits, to connect different subsystems or payloads. That way the concept of a "warehouse" in space shall be established with new generations of high performance electronic components and sensors that can be exchanged in orbit. Robotic manipulators shall be used to support the additive process and connect subsystems and payloads. The methods can be demonstrated using the ELISSA test environment at the Institute of Space Systems.

**Qualifications:** Applicants to this position shall provide a record as an excellent junior researcher who will complete and continue the successful research at TU Braunschweig in the fields of space physics, space systems, and space technology. The applicants to this position must hold a doctoral degree (received no longer than 6 years ago) with excellent grades and shall **provide a convincing research** concept to the above addressed topic. The applicant shall have an excellent research competency from university or industry, shown by publications, successful acquisition of third-party funding, international research experience (min. 12 months), and experience with international cooperation. Ability and willingness to teach are explicitly appreciated.

**The Position:** This appointment will be offered for a period of four years. Payment and social benefits are in accordance with the regulations of the German salary agreement for public service employees (TV-L). The position includes core support for the funding of two to three PhD students, who will be supervised by the JRG leader. As an associated JRG group of TUBS.space institutional support including modern laboratory space and state-of-the-art facilities in addition to career advancing training and mentoring support will be provided.

**Benefits:** We offer a fixed-term full-time contract for a period of up to four years. The annual salary will be according to EntgGr. E14 TV-L. Contracts include health, retirement and unemployment benefits. The preferred start date for the position is 01.06.2020.

The Employer: The academic community at Technische Universität (TU) Braunschweig, founded in 1745, comprises 20,000 students and 3,600 staff. Engineers and natural scientists collaborate closely with economists, social and educational scientists, and the humanities. Home to more than 20 renowned research institutes and facilities, Braunschweig is one of Europe's most research-intensive regions, and an attractive location for scientists and their families. At TU Braunschweig we appreciate a team-oriented and communicative style of work. Gender Equality is an important factor for us. We would be pleased to receive applications from women. We support all our academics in their scientific and personality development and we offer a family-friendly workplace. Severely disabled persons with equivalent qualifications will be given preference. Please attach a form of evidence of your handicap to your application. Your personal data will be saved for the application procedures.

For further information, please contact Prof. Dr.-Ing. Enrico Stoll, Tel. +49 (0) 531 391-9960, e.stoll@tu-braunschweig.de. Please submit your application in English, **including a research proposal**, as a single PDF to <a href="mailto:aerospace@tu-braunschweig.de">aerospace@tu-braunschweig.de</a> by 05.03.2020.