

Research Staff Member / PhD student / (m/w/d) - Plastic Bending using Microwave Heating -

For our Department Microwave Engineering we are looking for a research staff member / PhD Student.

(Reference number 05/20)

The Ferdinand-Braun-Institut is developing microwave-driven plastic pipe bending systems together with a partner from industry. Conventional pipe benders use hot air or steam to bring plastics to the melting temperature and to bend them. The new microwave-driven approach allows for local heating of the plastics only at the bending regions, thus saving energy. The research work includes the characterization of complex material properties and the design of special microwave resonators for field concentration. For this purpose, electromagnetic and thermal simulations as well as experimental investigations to heat the plastics with microwaves are required.

For these activities we are looking for a (junior) researcher from the field of engineering or natural sciences with relevant experience in the field of microwave engineering as well as in the use of the appropriate simulation software (e.g. CST Studio Suite®).

Candidates must have successfully completed their university education (master's degree, diploma) in the field of electrical engineering, physics, or related subjects.

Teamwork and committed, independent work as well as very good knowledge of the German language, both spoken and written, are required. Appropriate English language skills are desired as well. There is also the possibility to pursue a PhD.

The position can be filled immediately and is initially limited to two years. Payment is according to TVöD (collective salary scheme for German public service).

FBH is an equal-opportunity employer. Female candidates are encouraged to apply. Among equally qualified applicants, preference will be given to handicapped candidates.

Have we piqued your interest? Then we look forward to your online application. Please click on "[Apply online](#)" and submit your complete application documents by **March 6th 2020**.

If you have any questions about the application, please contact Ms. Manuela Münzfeld, Tel.: 0049 30 6392-2641
Mail: Manuela.Muenzfeld@fbhb-berlin.de

Profile

The Ferdinand-Braun-Institut, Leibniz-Institut für Höchstfrequenztechnik (FBH) within the Forschungsverbund Berlin e.V., is a leading international research institute that studies diode lasers, LEDs and microwave devices.

On the basis of III/V semiconductors, it researches and implements components and systems for applications in communications, traffic and production technology, medicine and biotechnology. It covers the entire value chain from design to ready-for-delivery systems.

For more details, visit:
www.fbh-berlin.com