



The Paderborn University is a high-performance and internationally oriented university with approximately 20,000 students. Within interdisciplinary teams, we design forward-looking research, innovative teaching and the active transfer of knowledge into society. As an important research and cooperation partner, the university also shapes regional development strategies. We offer our more than 2,300 employees in research, teaching, technology and administration a lively, family-friendly, equal opportunity environment, a lean management structure and diverse opportunities.

**Join us to invent the future!**

The department of **Power Electronics and Electrical Drives** at the faculty for Electrical Engineering, Computer Science and Mathematics is currently looking for a

**Research Assistant /  
Doctoral Co-Worker**  
(pay scale 13 TV-L)

Starting as early as possible, this full-time position is initially limited to 2 years due to external funding in accordance with the federal state Science Employment Law (WissZeitVG). The contract period corresponds to the approved project period - an extension is possible and intended. The research project is in close cooperation with an industrial automotive partner and the opportunity to acquire the doctoral degree is given.

**Project description and responsibilities:**

- Modelling of the electrical drive systems for electric and hybrid vehicles
- Development of advanced control and monitoring techniques for normal and emergency drive operations (e.g. field-oriented control, Kalman-Filter,...)
- Focus: Permanent magnet synchronous motors and induction motors
- Management of the cooperation with the industrial partner
- Teaching duty totalling approx. 2 semester hours per week

**Your qualifications:**

- Very good university degree (master or similar) in the field of electrical engineering, mechatronics, physics or other relevant study programs
- Profound knowledge of electrical drive systems
- Profound knowledge of software-related engineering tools and programming languages (e.g. Matlab/Simulink, Mathematica, finite-element analysis, Python, C/C++...)
- Desirable: Experience in working at laboratory test benches (dSPACE-based)
- Independent and team-oriented approach to work
- Very good command of written and spoken English or German, and the general willingness to learn German (language courses are provided)

**We offer:**

- Exciting, highly relevant research topics with direct transfer to practice
- Cooperative working environment that invites you to be creative
- Diverse teaching- and research-related training programs
- State-of-the-art laboratory infrastructure (e.g. automotive drive test benches)

Further information regarding our department you can find at:

<http://ei.uni-paderborn.de/en/lea/>

Applications from women are strongly encouraged and will be favoured in the case of equal qualification, competent and professional performance unless reasons specific to any individual candidate predominate (according to LGG state law). The position is full-time but part-time employment is possible in general. Qualified disabled people are also encouraged to apply (in the sense of the German social law SGB IX).

Please send your application under the **reference ID 3848**, including cover letter, your CV, certificates and other accompanying documents via email to:

(Informal inquiries can be directed the following e-mail address, too.)

**Prof. Dr. Joachim Böcker**  
[sekretariat@lea.uni-paderborn.de](mailto:sekretariat@lea.uni-paderborn.de)  
**Paderborn University**  
**Warburger Str. 100**  
**33098 Paderborn**  
**Germany**

[www.upb.de](http://www.upb.de)

