



The University of Bayreuth is a research-oriented university with internationally competitive, interdisciplinary focus areas in research and teaching. The Faculty of Engineering Science at the University of Bayreuth is currently seeking to appoint a



# Full Professor of Electrode Design of Electrochemical Energy Storage Systems

at pay grade W 3 (minimum salary per month: 7,217 euros) to commence as soon as possible. This is a permanent civil service position.

We are looking for an engineering scholar with an outstanding international track record in research and development in the design of electrodes for electrochemical cells, especially in their structuring on various length scales for electrochemical energy applications, as well as in the production and research of failure mechanisms and the engineering countermeasures to increase failure safety. New coating or imaging and analysis methods of failure mechanisms in production are to be established. The successful applicant will complement the expertise already present in the Faculty of Engineering Science as well as continue inter-faculty cooperation, also with non-university institutions, and develop new concepts. The willingness and ability to attract third-party funding, also in coordinated programmes, must be evident.

The incumbent will be expected to play an active and leading role in the newly founded **Bavarian Centre for Battery Technology (BayBatt)** and in the sample cell production currently under development, and in particular to contribute his or her knowledge of coating technology, coating processes, methods for layer characterization, and upscaling of electrode production.

The research focus of the chair should lie in at least three of the following areas and have relevance for the development of electrochemical cells for energy technology:

- Material process technology for the production of particulate layers and porous or hierarchically structured electrodes
- Electrode structuring on different length scales
- Development of new coating methods and their upscaling
- Imaging techniques
- Simulation and analysis of failure mechanisms on electrochemical cells
- Lifetime analysis and modelling of the reliability of electrochemical systems
- Methods for improving the long-term stability of electrochemical cells on the material side.

The postholder will play a central role in the interdisciplinary master's programmes in battery technology that are currently under development. In addition to this research-related teaching, undergraduate teaching will also be required, e.g. in the degree programmes Engineering Science, Materials Science, and Environmental & Resource Technology. The ability to teach in German and English is expected.

The general administrative requirements for hiring professors at universities in Bavaria apply. A complete description of the vacancy can be found at [www.uni-bayreuth.de/en](http://www.uni-bayreuth.de/en) (**University / Work at the University / Job Vacancies**). You can find the job advertisement of **four further full professorships at BayBatt** there.

Applications (CV, outlining education and academic career, list of publications, list of courses taught, experience obtaining external funding, as well as copies of all diplomas and certificates) are to be submitted electronically to the Dean of the Faculty of Engineering Science, Prof. Dr.-Ing. Frank Döpfer, via <https://uni-bayreuth.berufungsportal.de> by **7 November 2021**. Applicants are welcome to direct questions and requests for further information to the Dean at [dekanat.ing@uni-bayreuth.de](mailto:dekanat.ing@uni-bayreuth.de). Application documents will be permanently disposed of in accordance with data protection law following the conclusion of the appointment process.