





Universität Bayreuth, Universitätsstraße 30, 95447 Bayreuth

Chair of Inorganic Active Materials for Electrochemical Energy Storage

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At the chair of Inorganic Active Materials for Electrochemical Energy Storage (Prof. Dr. Matteo Bianchini) the following position is available, starting in **January 2026** or soon thereafter:

Postdoctoral researcher, German salary scale TV-L E13,

Topic: Computational Investigation of Battery Materials (development of thermo-kinetic phase diagrams based on ab initio computations and in situ x-ray diffraction)

I am looking for an excellent postdoctoral researcher to integrate our group at the Bavarian Center for Battery Technology (BayBatt, University of Bayreuth). The research work will deal with the **Computational Investigation of Battery Materials**, in strict collaboration with the ERC-funded 4SBATT project. To reach its goals, the project aims to explore various chemical spaces in order to identify the most promising candidate materials to be used as electrodes and as electrolytes. Such exploration will be based on phase diagrams computed from ab initio simulations (density functional theory) to understand materials stability and enriched with experimental inputs to understand materials synthesizability; these inputs coming from in situ x-ray diffraction, carried out in our lab, will yield information related to kinetic aspects during the synthesis of materials.

This postdoctoral position specifically deals with computational aspects. Hence PhD holders with a background in inorganic/physical chemistry, materials science or physics are particularly welcome to apply. However, strong a priori knowledge of quantum chemical methods (DFT) and ab initio computations is a <u>mandatory prerequisite</u>. Knowledge of batteries and electrochemistry is a plus. The initial contract is for 2 years with the possibility for further extension. I am striving to build a diverse and inclusive research group, hence open-minded and free-thinking individuals are welcome.

The University of Bayreuth values the diversity of its employees and is expressly committed to the goal of gender equality. Women are strongly encouraged to apply. Applicants with children are very welcome. The University of Bayreuth is a member of the Best Practice Network "Familie in der

Hochschule e.V.", and has successfully participated in the HRK audit "Internationalization of the University". Persons with severe disabilities will be given preferential consideration if equally qualified.

Please apply online with <u>your CV, BsC/MsC transcripts and cover letter specific to this position</u> by 30th July 2025 using the key word "Computational Postdoc Inorganic Active Materials" via email or via the online application portal of the University of Bayreuth. The documents will be deleted in accordance with data protection requirements once the position has been filled.

For further information about the position, about our group or about the chair, please contact <u>matteo.bianchini@uni-bayreuth.de</u> or visit <u>www.bianchini.uni-bayreuth.de</u>.