

PhD position (f/m/d): Simulation-Driven Development of High-Performance ElectroCeramics



ReferenceNr.: MCL_290

Materials Center Leoben Forschung GmbH (MCL) is a leading competence center in the field of materials research and technology. In this context, we support numerous companies in the production sector developing high-performance materials, manufacturing processes and products. By developing specific computer-aided technologies, we accelerate materials based innovation including the digitalization of the manufacturing chain as well as of products. Our portfolio includes cooperative research and development projects with international and national partners from the production and research sectors as well as several consulting, laboratory and simulation services in materials science.

*Would you like to work in an innovative and international setting?
Then MCL is the perfect work place for you!*

Your Profile

You have obtained, or will soon obtain, a Master's degree in Materials Science, Computational Materials Science, Physics, or a related discipline.

- You have a strong interest in computational materials development and simulation-driven design of advanced electroceramic materials and systems.
- Experience in programming (e.g., Python) and numerical methods is desirable.
- Knowledge of Finite Element Modeling (FEM) tools (e.g., Ansys) is an advantage.
- You are motivated to develop innovative digital approaches that accelerate the design and optimization of next-generation electroceramic materials and components.
- Excellent communication and teamwork skills in an international environment, combined with flexibility and fluency in both German and English, spoken and written; knowledge of Chinese is considered an asset.

Tasks & Responsibilities

- Development and application of FEM models for advanced electroceramic materials and components.
- Multiphysics simulation and performance optimization.
- Collaboration with industrial and academic partners, including support for experimental validation activities.
- Dissemination of results through scientific publications and conferences.
- Research stay at international production sites of the industrial partner to gain hands-on insight into manufacturing processes and application requirements

Our offer:



- flexible working hours
- further training/education
- home office
- employee events
- cooperation with Firmenradl

A permanent employment contract with an immediate start date and a gross annual salary of at least €52.862,74 (based on a 40-hour work week). The successful candidate will be employed under two separate employment contracts – one with MCL and one with the industrial partner.

*Please send us your application and a detailed resume. We are looking forward to it!
We would like to especially encourage women to apply.*

bewerbung@mcl.at