

Reference Number: 50023\_BE\_04

## Master Student (m/f/d) 0D/1D/3D Simulation of Thermal Runaway and Propagation in Battery Packs



Location:

Germany, Aachen



Worktime:

Full-time

### Tasks

- You will be involved in current simulation topics on thermal runaway (TR) and propagation (TP) in battery packs, depending on your interests and skills you will have the opportunity to work on one of the following topics: flammability of ventilation gases, development of a detailed TR cell model, simulation of particle flow, layout tool for TP safe modules, and many more
- You develop the corresponding models and perform numerical simulations in 0D, 1D or 3D
- You regularly present your results to the team and successively optimize your models
- You design parameterization and validation methods for your models

### Qualification

- You are studying mechanical engineering, energy engineering, automotive engineering, physics or similar
- You are interested in numerical simulation and electromobility
- You have knowledge in several of the following topics: thermodynamics, fluid mechanics, heat transfer, chemical energy conversion
- You already have experience in at least one of the following softwares: StarCCM+, Matlab/Simulink, Python, ANSA
- You are not intimidated by complexity tasks and work independently, diligently and in a structured manner

Nicole Bahr

FEV Europe GmbH

Phone: +49 (241) 5689-355

### DATA PROTECTION FOR APPLICANTS

Here you can find our current privacy agreement for applicants: [FEV Data Protection for Applicants](#)

