



Master's Thesis in Department 3 – Research

Department 3 at the IBK Heyrothsberge sees itself as a practice-oriented research institution primarily concerned with operational hazard control. As part of investigations for a current research project, we offer the opportunity to write a master's thesis on the following topic:

Simulation of Fire and Explosion Hazards Caused by Residential Electrical Storage Systems (<20 kWh) and the Development of Preventive and Defensive Measures.

Your Tasks

- Supporting the research of typical installation scenarios and damage events involving residential electrical storage systems
- Developing representative simulation scenarios based on prior research
- Simulating fire and explosion events using suitable software environments (FDS, FireFOAM, etc.)
- Designing and simulating preventive and defensive hazard-control measures
- Supporting the experimental evaluation of the simulations

Your Profile

- Above-average bachelor's degree in a relevant field (e.g., Safety and Hazard Defense, Process Safety and Environmental Engineering, Process Engineering, Chemical Engineering, Chemical and Energy Engineering, Computational Methods in Engineering, etc.)
- (Very) good performance in current Master courses in a relevant field
- Experience with simulations of (fluid) dynamic systems
- Ability to work independently and conscientiously
- very good English and ideally also good German skills

If you have any questions, please contact Dr.-Ing. Peter Schulze (contact information on the right side).

Sachsen-Anhalt
#moderndenken

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