





Laboratory internship/ study project/ Thesis

Thermofluid investigations of porous media in heat pipes and fuel cell applications

The Chair of Aeroengine Design (FTD) is seeking master's students with a background in mechanical/ aerospace/ electrical engineering for collaborative research with Pusan National University (PNU), South Korea on topics related battery thermal management in electrified aircrafts.

Objective:

- Software/ Analysis:
 - Work with ANSYS workbench, MATLAB, potentially Openfoam.
- Experimental support:
 - o Possible future work with the test bench and experiments.
- Miscellaneous points
 - \circ $\;$ Possibility of a short research stay at the Pusan National University.
 - o Possibility of extending the research as a master's thesis.
 - Co-authoring research papers for conferences and scientific journals.
 - \circ $\;$ Joint supervision by PNU and FTD members.

Requirements:

- Bachelor's or Master's degree in Mechanical Engineering or a related field.
- Good Knowledge on fluid mechanics, heat transfer, fuel cells.
- Familiarity with MATLAB, CFD tools like ANSYS.
- Strong communication and teamwork abilities.

> Are you interested or do you know someone who likes this?

Please send the below documents to <u>mathiaki@b-tu.de</u> or akilanmathi.btu@gmail.com:

- CV
- A short description (max. 600 words) explaining (1) your skill set relevant to the job (2) and a technical problem (ideally related to above description but not mandatory) you have worked in the past.

Further Questions?

Contact: Akilan Mathi, Raum 130, LG 3A



https://www.avl.com/en/simulation-solutions/e-mobility-simulation/fuel-cell-simulation/simulation-and-modeling-pem-fuel-cells