

MASTER THESIS OPPORTUNITY – DIRECT AIR CAPTURE (DAC) FILTER DESIGN DEVELOPMENT

Are you passionate about addressing climate change and interested in

conducting cutting-edge research in the field of Direct Air Capture (DAC) development, specifically flow optimization?

Join our team and contribute to our mission of developing innovative DAC technologies to combat carbon emissions.

RESPONSIBILITIES:

- Conduct a literature review on filter geometry optimization focusing on high volume flow and low pressure drop
- Define relevant geometric parameters for the filter to use the design space in an ideal way
- Develop a CFD model to investigate flow and filter interactions, regarding homogeneous filter bed wetting and resulting pressure drop for different volume flows
- Utilize the CFD model to compare the identified geometric parameters and find the optimal filter geometry
- Evaluate the performance of the optimized filter design



**JOIN OUR TEAM
APPLY NOW**

apply@dacma.de

REQUIREMENTS:

- Enrolled in a Master's program in Aerospace Engineering or related field with a focus on fluid dynamics
- Strong interest in flow simulation and familiarity with relevant literature and research methods
- Strong knowledge of thermodynamics, mass and heat transfer, and process modeling.
- Preferred knowledge in CFD software and relevant tools for data analysis
- Excellent analytical and problem- solving skills
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We offer a stimulating and collaborative research environment, the opportunity to work on a cutting-edge topic in environmental engineering, and the potential for publication of research findings. Join us and contribute to the advancement of DAC engineering and the fight against climate change.

You're also welcome to apply if you want to work this topic for your practical project in combination with your bachelor thesis

Join us and contribute your design engineering expertise to shape a more sustainable future!



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