

The Chair of Geoenergy Productiong Engineering offers a master thesis topic of:

“Flow Pattern Prediction in Geothermal Wells”

with a ”Werkstudent” position at **Stadwerke München** (SWM) under supervision of Dr. Clemens Langbauer.

Research descriptions

The utilization of geothermal energy for heating and electricity generation is poised to make a substantial contribution towards achieving the European Union’s goal of a net-zero emission environment. To enhance the efficiency of geothermal plants, a thorough understanding of fluid flow behavior within the production tubing is essential. Geothermal fluids often contain gases that are dissolved under high pressure, which partially liberate as the fluids ascend to the surface. This research will evaluate existing multiphase flow models with respect to their suitability for predicting flow behavior in geothermal wells, utilizing Python-based software tools. By analyzing data from several operational geothermal wells, we will identify the models that best align with actual field conditions. The findings of this thesis will offer deeper insights into flow dynamics and propose optimization strategies for geothermal energy systems.

SWM can offer a position as a ”Werkstudent” for a duration of 6 months. If interested, please contact:

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