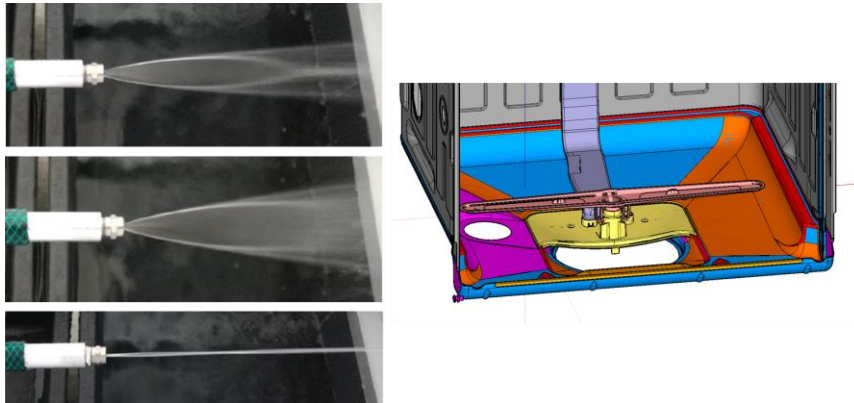


# STUDENTISCHE HILFSKRAFT

Chair of Acoustics and Haptics is looking for a student (**SHK Stelle, 5-10 h / Week**) for the topic of Investigating the water flow parameters on noise generation mechanisms in dishwashers. The position is limited for **3 months** at the beginning. The duration of the employment is according to the WissZeitVG.



The position takes place in the context of an industrial research project on the sound quality improvements of dishwashers. The focus of the project is the noise generation mechanisms of water splash onto metal surfaces and effect of different nozzle designs, drop formations, flow parameters etc. on noise generation mechanisms. The topic includes the vibroacoustical measurements of a sample dishwasher by using the different nozzle designs on a lower spray arm under the different conditions of water pressure, mass flow rate, and nozzle angle and water velocity.

Tasks include, but are not limited to, one or more of the following:

- Restructuring the sample dishwasher so that the single nozzle measurements are possible
- Obtaining a database of dishwasher noise under different conditions of nozzle type, water pressure, and water flow velocity and impact angle. Database should include the overall noise / vibrations levels as well as the calculated psychoacoustical quantities.
- Evaluating the advantages and disadvantages of using different working conditions, nozzle types etc.

Requirements:

- Being a student in *Elektrotechnik / Mechatronik / Maschinenbau* or similar fields
- Prior knowledge on acoustics and vibration
- Good measurement practices, working and presenting the gathered data in a structured way, very good knowledge of MS Office applications
- Fluent English

Female candidates are strongly encouraged to apply. The same applies to people with disabilities.

If you are interested, please contact:

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