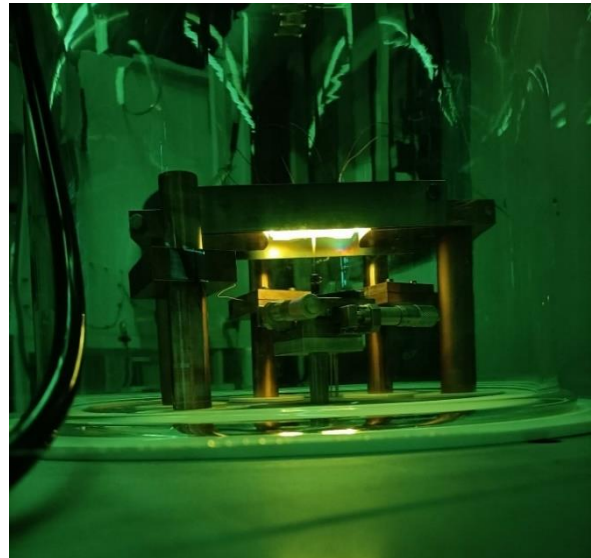


Bachelor/Master thesis

Interface creation for micro-pulling-down setup

The micro-pulling-down process is similar to the Czochralski process. Here, however, a seed is not pulled upwards but downwards out of the melt. There is a hole in the bottom of the crucible for this purpose. This process enables a significantly faster production of single crystals and thus a correspondingly large sample throughput in a comparatively short time.

The aim of this work is to create an interface with which the temperature can be read out via a Keithley and the chamber pressure via a vacuum gauge and displayed in real time. The power control of two TDK power supply units and the z-motor with an existing motor controller are to be integrated. The interface should be realised with Python on a Raspberry Pi.



Tasks

- Creation of a process interface
- Functional testing of the interface through experimental pulling tests

Requirements

- Degree in engineering, computer science or physics
- Python knowledge

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Starting date

- by arrangement