Laboratory of preparation and thermal treatment of samples

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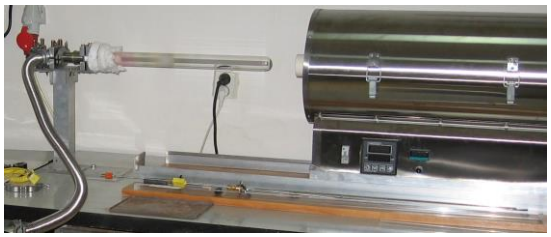
Tube furnace LAC

- maximum temperature 1000 °C, inert atmosphere, vacuum up to 10^{-6} mbar
- sample dimensions: 100 mm x 10 mm x 5 mm



Annealing devices for thermal treatment in external magnetic field

- maximum temperature 800°C, inert atmosphere, vacuum up to 10^{-3} mbar
- sample dimension: 60 mm x 10 mm x 2 mm
- solenoid: longitudinal magnetic field with strength 0 – 40 kA/m
- permanent magnet (Halbach cylinder): transverse magnetic field 0,8 T

Turbomolecular vacuum system Oerlikon Leybold Vacuum PT 361 KIT

- for evacuation of tube furnace and annealing devices for thermal treatment in external magnetic field
- rotary pump with pumping speed 16 m^3/h and ultimate pressure without balast $5x10^{-3}$ mbar
- turbomolecular pump with pumping speed 345 l/s and ultimate pressure 10^{-8} mbar

Gas pycnometer Micromeritics AccuPyc II 1340

- automatic gas pycnometer for density measurements of solids
- measuring chamber 1 cm^3 + inset 0,1 cm^3