

Thermal Analytical Laboratory

- ▶ specific heat capacity c_p (T)
- ▶ Transformation enthalpies
- ▶ Density ρ (T)
- ▶ thermal expansion coefficient β (T)
- ▶ Temperature leading coefficient A (t)
- ▶ Thermal conductivity λ (T) to 1600 ° C , among other for
 - ▶ Metals (including liquid)
 - ▶ Ceramics
 - ▶ Insulation

- ▶ Dynamic differential scanning calorimeter Netzsch DSC 404 C Pegasus (20 ° C - 1650 ° C measuring error < 5 % , measured in different atmospheres)
- ▶ Dilatometer Netzsch DIL 402 C (20 ° C - 1700 ° C , measuring error < 3 %)
- ▶ Laser Flash system Netzsch LFA 427 (20 ° C - 1600 ° C , measurement error ± 3 % , 0.001
- ▶ Thermal analyzer Setaram TG92
 - ▶ Simultaneous , caloric and thermal gravimetric measurements
 - ▶ DTA / DSC and TG in conjunction with a mass spectrometer (Thermolab 1210)
 - ▶ Temperature range -100 ° C - 1600 ° C
- ▶ Hot-Disk-System
 - ▶ Determination of thermal conductivity of solids and liquids
 - ▶ Measuring range : 0,01 - 500 W / (m · K)
 - ▶ Temperature range: RT to 230 ° C (Kapton) sensor , RT to 750 ° C (Mica sensor)



Technology

- ▶ PC and Server Technology of Thermodynamics
- ▶ Pilot Plant Rotary Kilns
- ▶ Thermal Analytical Laboratory
- ▶ Thermal Laboratory

