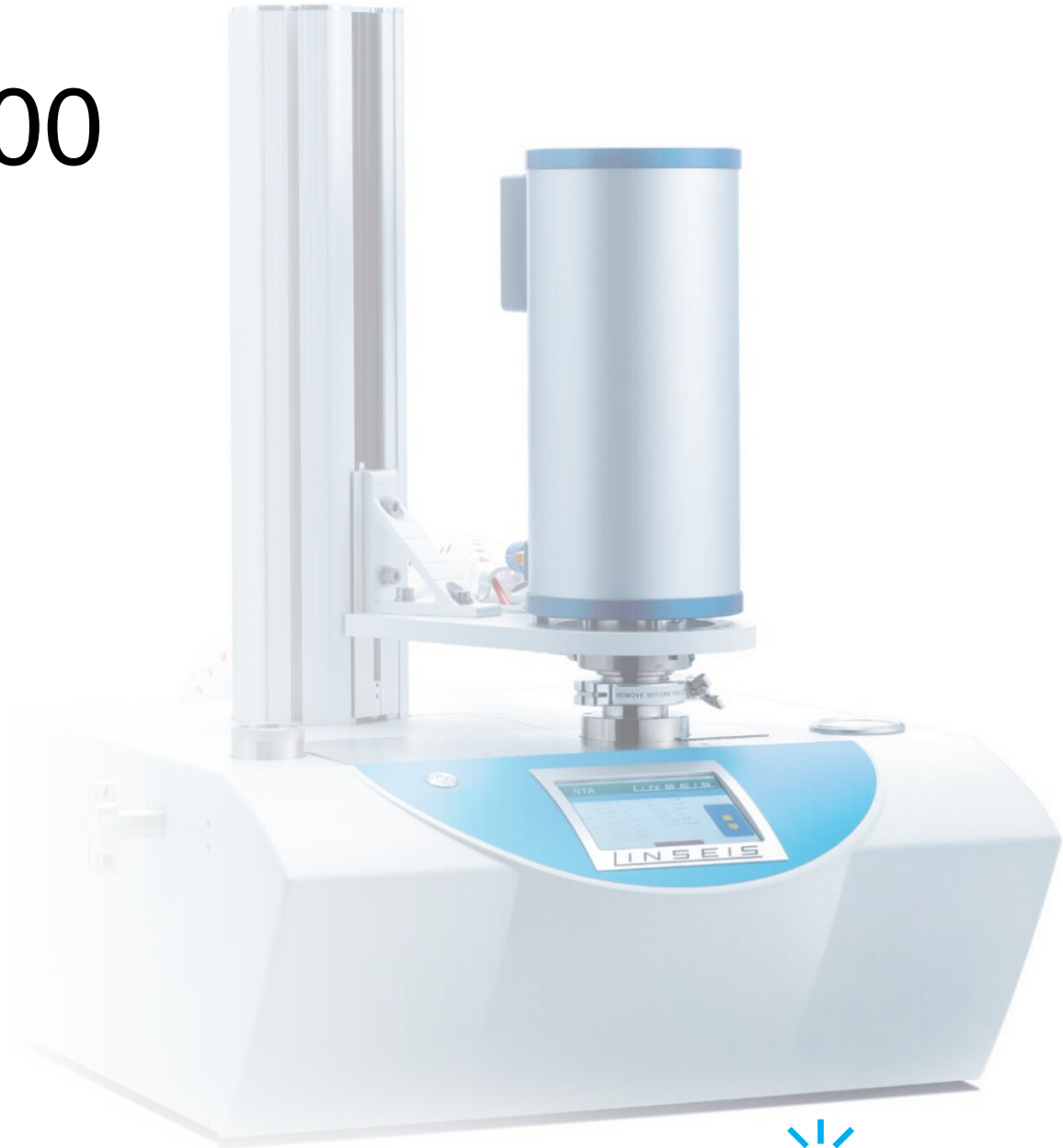


Linseis STA PT1600

- Simultaneous mass and heat difference measurement with optional mass spectrometer gas analysis in reducing atmosphere up to 1600°C.
- Available gases include CO, CO₂, H₂, H₂O and N₂.
- Sample size may vary between 1–200 g with maximum diameter 24mm and 30mm.
- Will be used for hydrogen reduction tests.



Netzsch STA 449 F3 Jupiter

- Simultaneous measurement of mass changes and thermal effects between 30°C and 2000°C using reducing, inert or oxidizing atmosphere and modulated heating.
- Available gases include CO, CO₂, H₂, N₂, Ar, He, CH₄ and air.
- Sample size may vary between 3–50 mg (DSC-TG) and 10–1000mg (TG)
- Can be combined with Netzsch QMS 403 D quadrupole mass spectrometer for evolved gas analysis (EGA).
- Used for:
 - Melting point determinations
 - Removal of evaporated gases as a function of temperature and time
 - Hydrogen tests
 - Etc.

Netzsch STA 409 PC Luxx

- Simultaneous measurement of mass changes and thermal effects between 40°C and 1500°C using reducing, inert or oxidizing atmosphere.
- Available gases include CO, CO₂, H₂, N₂, Ar, He, CH₄ and air.
- Sample size may vary between 3–50 mg (DSC-TG) and 10–1000mg (TG).
- Can be combined with Netzsch QMS 403 D quadrupole mass spectrometer for evolved gas analysis (EGA).
- Used for:
 - Melting point determinations
 - Removal of evaporated gases as a function of temperature and time
 - Hydrogen tests
 - Etc.



Netzsch QMS 403 D quadrupole mass

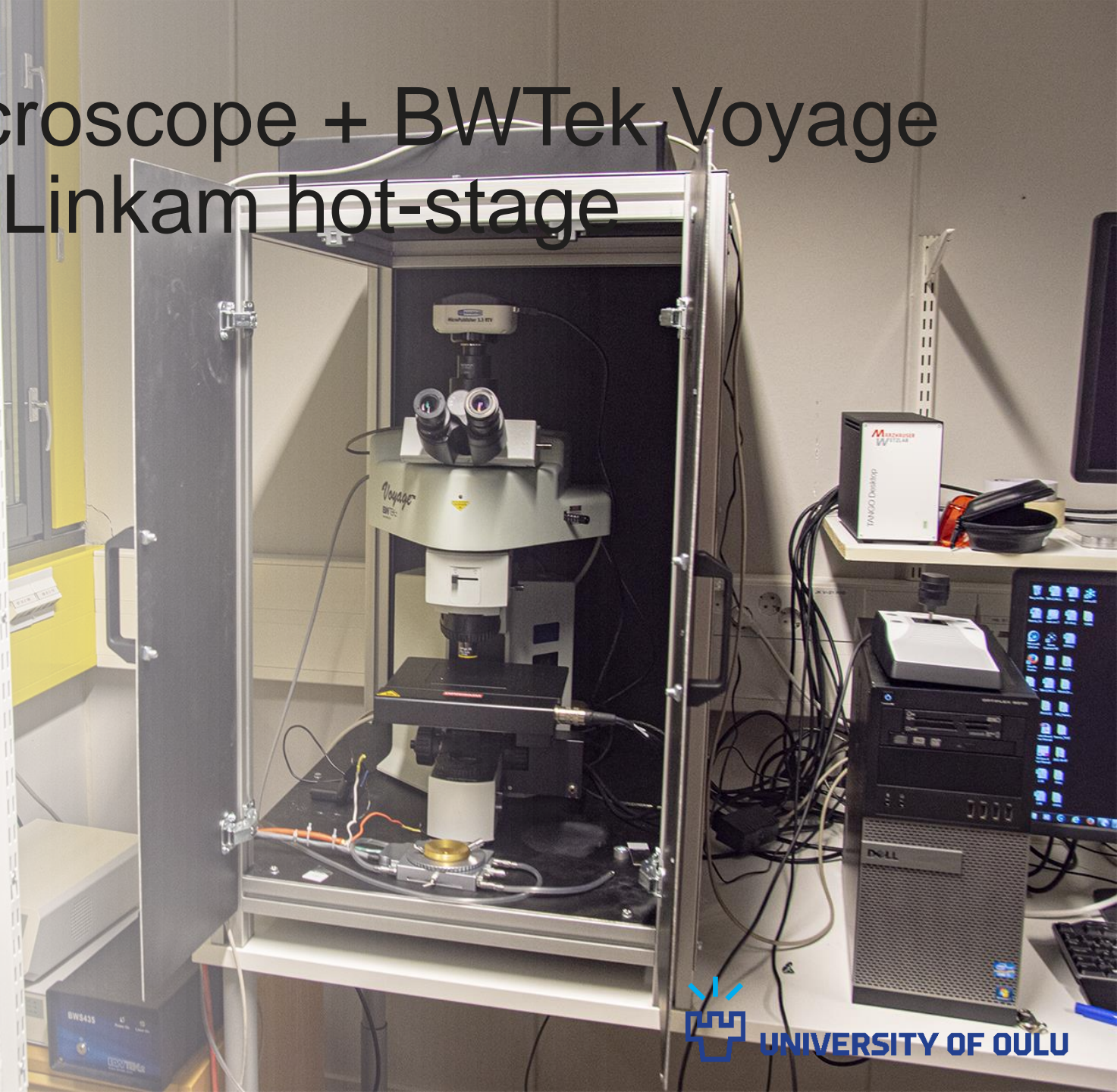
- Coupling with Netzsch STA 449F3 and STA 409 PC.
- Evolved gas analysis with 0–300 amu range.

Optical dilatometer

- Dimensional change measurement up to 1500°C with inert or oxidizing atmosphere.
- Available gases include CO₂, N₂, Ar, He and air.
- Sample size may vary between 4–10mm.
- Used for:
 - Melting point determinations
 - Dimensional changes as a function of temperature
 - Wetting angle measurements
 - Electro-wetting
 - Reactive wetting
 - Etc.

Olympus BX51 microscope + BWTek Voyage confocal Raman + Linkam hot-stage

- Optical microscopy and Raman spectrum measurement with high temperature stage up to 1500°C.
- Magnification 40X – 200X
- Available gases include CO₂, N₂, Ar, He and air.
- Maximum sample diameter 6 mm and weight 100mg.



High temperature viscometer

- Rotational viscosity measurement up to 1700°C.
- Available gases include CO, N₂ and Ar.
- Molybdenum crucible with diameter of 20mm.
- Used for effective viscosity measurements for slag and high temperature (non-metallic) melts.



Nabertherm chamber furnace

- Chamber size 150 x 150 x 300mm
- Maximum temperature up to 1800°C.
- Maximum sample is 1–3kg.
- Available gases include CO, CO₂, N₂ and air.
- Used for material (slag mixing, synthetic oxide melts, etc.) pretreatments and preparation.

Entech chamber furnace

- Chamber size 150 x 150 x 300mm
- Maximum temperature up to 1800°C.
- Maximum sample is 1–3kg.
- Available gases include CO, CO₂, N₂ and air.
- Used for material (slag mixing, synthetic oxide melts, etc) pretreatments and preparation.

