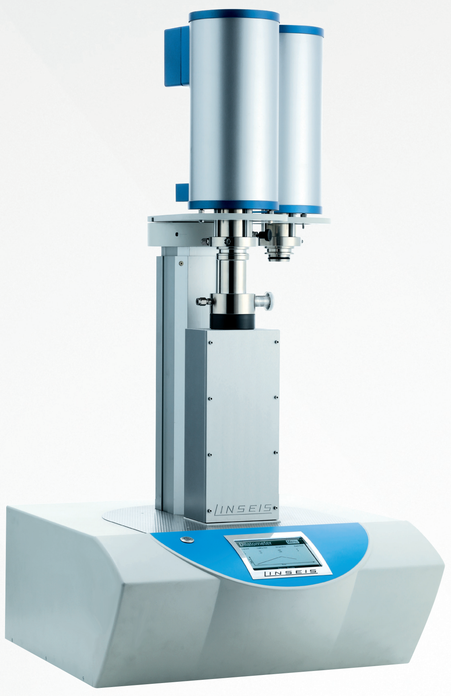
Dilatometry

LINSEIS
THERMAL ANALYSIS



DIL L 75 Vertical

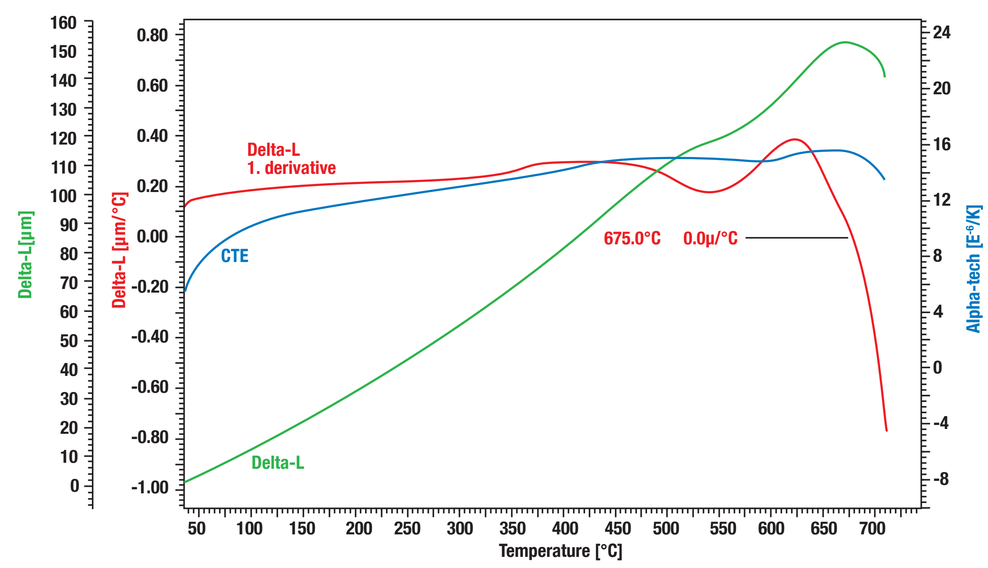
The technique

A dilatometer is a high precision instrument for the measurement of dimensional changes in material as a function of temperature. Dilatometry can be used to test a wide range of materials, including traditional and advanced ceramics, glasses, metals and polymers.
The unique vertical design of this system is perfect for low or ultra-low expansion materials, since the vertical "Zero-Friction" design guarantees superior measuring results.

DETERMINATION OF:

- Thermal expansion coefficient (CTE)
- Linear thermal Expansion (ΔL)
- Sinter-temperatures and sinter steps
- Determination of glass transition (Tg)
- Phase changes
- Optimization of burning processes
- Volume changes
- Rate Controlled Sintering (RCS)
- Decomposition
- Density change

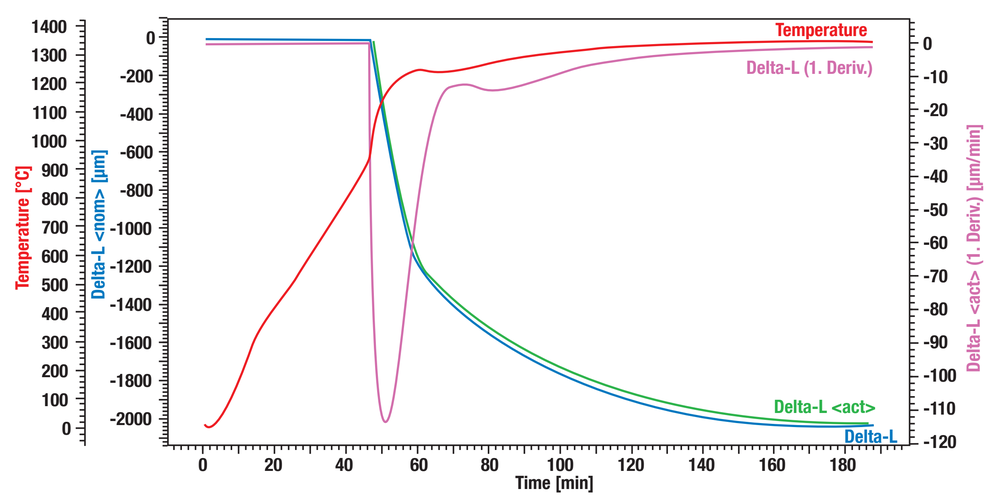
Measuring a Glass Ceramic



FEATURES:

- Multiple furnace options (from -263°C up to 2800°C)
- LVDT or optical encoder
- Variable gas dosing and regulation systems
- Linseis Platinum Software incl. features like thermal library, Rate Controlled Sintering (RCS), glass transition and softening point evaluation and many more

Sintering of ZrO_2



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