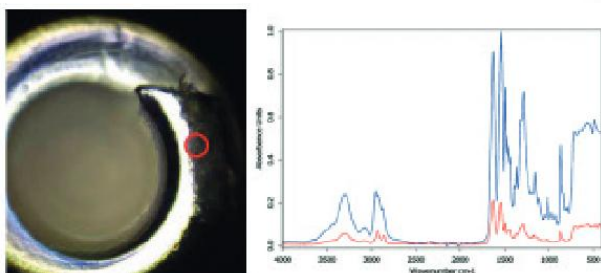




Description

- LUMOS II by Bruker is a state-of-the-art FT-IR microscope.
- **Combines** optical microscopy with chemical identification.
- **Offers chemical imaging capabilities** for precise analysis.
- Enables **visualization of component distribution** on a microscopic scale
- FT-IR imaging in ATR, transmission and reflection mode



A metal spring in an housing shows signs of unusual wear and was examined by FT-IR microscopy.

Specifications

Detector system

TE-MCT (thermoelectrically cooled HgCdTe detector) and FPA (nitrogen cooled)

ATR mode

Integrated motorized ATR crystal for direct sample measurements without complex preparation with integrated pressure sensor

Camera

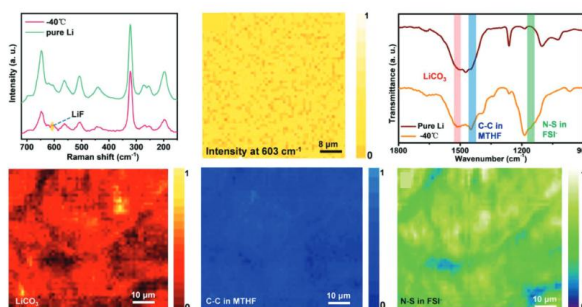
High-resolution camera for clear sample visualization and video assisted measurements

Automation

Fully motorized control of focus with a positioning accuracy of 0.1 μm , objectives, mainly controlled by the OPUS software.

Spectral range: 4000–600 cm^{-1}

Further information



Raman and FTIR spectra of metal anodes before and after 10 cycles. FTIR mapping of LiCO_3 , C-C bonding and N-S bonding of after 10 cycles.

Publications

[1] L. Cheng et al, *Adv. Funct. Mater.* **2023**, 33, 2212349.