

# Renishaw inVia™ confocal Raman microscope

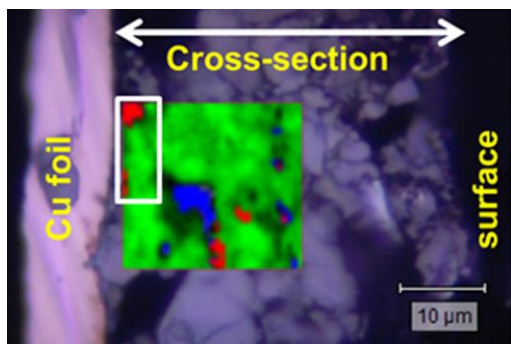


## Specifications

- Measurement range: 200 to 4000  $\text{cm}^{-1}$ .
- Laser supported: from 229 nm to 1064 nm, currently equipped: 785 nm, 532 nm.
- Three objectives installed: 5x, 20x, 50x.
- High spectral resolution, up to 0.5  $\text{cm}^{-1}$ .
- Automated Operation: Features motorized mapping for high-throughput Raman imaging.
- Compatible with various sample types: Can analyze solids, liquids, and gases.

## Description

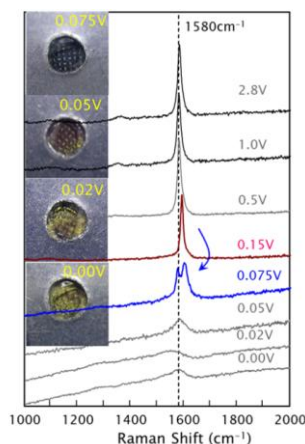
- inVia™ confocal Raman microscope is a **high-performance research-grade instrument**.
- Designed for **detailed chemical analysis and imaging**.
- **Combines** a research-grade microscope with a high-performance Raman spectrometer.
- Enables users to **obtain rich, detailed chemical images**.
- Provides **specific data from discrete points**.
- **Emphasizes simplicity in operation** while maintaining reliability.
- Delivers **reliable results even for challenging experiments**.



Raman mapping and imaging enables the study of the distribution of materials on electrode surfaces, or across cross-sections. The resulting data can be quantified, giving metrics such as fraction estimates and particle statistics.

## Further information

- **In-Situ Analysis:** Optional in-situ Raman cells for real-time monitoring under controlled conditions.



Operando studies of an anode. The graphite G-band Raman peak also changes, indicating intercalation and then a peak-splitting reflecting the intercalation penetrating to interior layers, rather than just the boundary layers.

## Publications

- [1] A. Sanin et al *Adv. Energy Mater.* **2025**, 15, 2404961.
- [2] Renishaw Application Note AN191(EN)-01-B
- [3] Renishaw Application Note AN193(EN)-01-A