

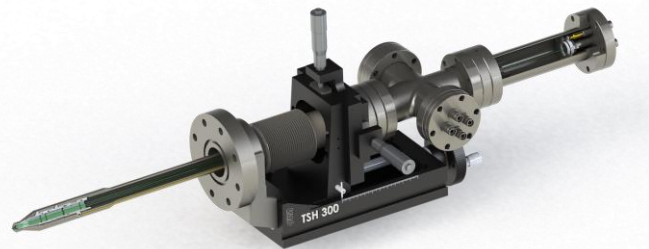
TECHNOLOGY

The TSH 300 is a Secondary Ion Mass Spectrometer designed for dedicated use in Helium/ Neon Ion Microscopes (HIM). It combines the outstanding imaging capabilities of a HIM with the ability to determine elemental compositions on the nm scale. It measures mass spectra in a specified location with nm precision or acquires elemental maps with variable field of view.

Implementation of SIMS is based on pulsing the primary ion beam and thus ensures minimum sample damage during measurement.

Key-Features

Mass range	1 ... 300 u
Mass resolution	> 50:1
Lateral resolution	< 50 nm
Field of view	up to 100 µm
Mapping resolution	512 x 512
Acquisition times	01 ... 10 min. (spectra) 10 ... 30 min. (maps)



Ion Helium Spectrometer

APPLICATION AREAS

The application areas for the TSH300 include all areas of materials science and material testing.

The add-on can also be used for element analysis in micro- and nanoelectronics as well as for finding tracer elements in labeled samples in micro- and nanobiological samples.

BENEFITS

- High precision: Enables element identification on a nanometer scale
- Wide range of applications: Suitable for nanoelectronics, microbiology, materials research and geosciences
- Minimal sample influence: Reduces ion-induced influences on the sample
- Depth profile analysis: Provides the ability to create depth profiles to look “below” the sample surface
- Integrated software: Enables automated data acquisition and fast analysis

WHAT WE OFFER

- Delivery and installation including commissioning
- Software for automated data acquisition
- Training in handling this unique technique

CONTACT

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