

MiniSIMS alpha

Complete Entry Level SIMS

System on the Desktop

- Monolayer Surface Information
- Detection of all the Elements
- Identification of Organic Species
- High Sensitivity Analysis
- Fast Chemical Imaging
- Thin film Depth Profiling
- Benchtop and Mobile
- Cost Effective and User Friendly



Product Note

P200

www.saiman.co.uk

MiniSIMS alpha - award winning entry to Surface Chemical Analysis with SIMS (Secondary Ion Mass Spectrometry)

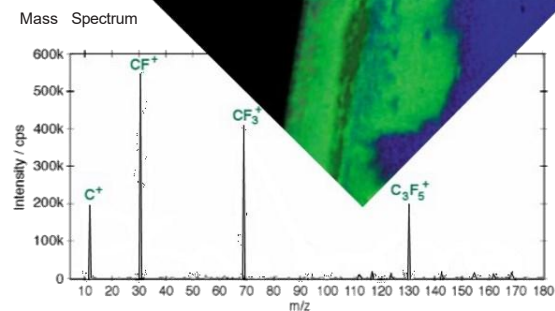
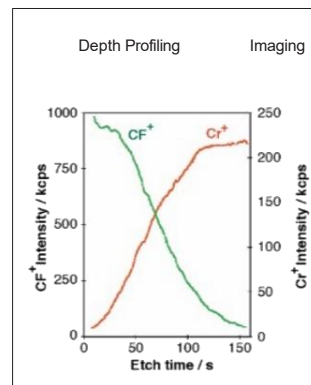
SAI's innovative design of the MiniSIMS has won numerous awards both in Europe and the US (R&D100). Requiring minimal lab space and services, the benchtop instrument is capable in all 3 SIMS modes, namely Static SIMS, Imaging SIMS and Dynamic (Profiling) SIMS, all for an entry level price, which combined with high throughput means costs per sample can be reduced by up to 90% relative to conventional UHV equipment.

Why SIMS ?

Unlike many spatially resolved elemental techniques (acquiring information from individual atoms), SIMS is not restricted to inorganic analysis and equally capable of mapping distributions of organic species. The sampling depth of SIMS is also significantly less than most other surface techniques which, combined with superior sensitivity, allows much more detailed information from thin layers and interfaces to be obtained with relatively high speed.

Why MiniSIMS alpha ?

The quadrupole analyser of the alpha series is a scanning device which is suited to the imaging and profiling of a low number of known masses. This makes it ideal for routine monitoring and QA / QC type applications.



MASS SPEC

SIMS

MALDI MS

AMBIENT MS

BESPOKE SERVICES

MiniSIMS alpha



Specifications

Specification	Performance
Mass Resolution	Nominal unit [m/dm>95 @ 95m/z (10% valley)]
Mass Range	3-300 m/z
Mass Accuracy	< 0.4 Dalton
Imaging Beam , [FOV]	Ga ⁺ , <10µm (5keV) , [up to 4.5mm x 4.5 mm]
Sensitivity	>5x10 ³ cps/nA (⁹⁸ Mo + ⁹⁸ MoO)
Vacuum, [time to operation for standard sample stage]	<1x10 ⁻⁶ mbar base [pump down < 5 minutes, dry N ₂]
Footprint [Weight, Dimensions]	<0.5m ² , [approx. 60 kg (excluding computer), w900 x d530(+60mm cable entry) x h490mm]
Power	<1 kVA (excluding computer), single phase
Samples (standard stage)	<12mm diameter, (<10mm insulating)
Data System	PC, Windows, Single Monitor
<i>Optional equipment</i>	
Motorized (Large Sample Stage)	4 inch (100mm) X ,Y , (dry N ₂ pump down, < 10 minutes)
Static SIMS Library	>900 entries

Product Note

P 200

www.saiman.co.uk



RELATED PRODUCTS

MiniSIMS– ToF P201
 MidiSIMS– ToF HR P202



EXAMPLE APPLICATIONS

- SURFACE COATINGS
- ELECTRONIC COMPONENTS
- SENSORS
- TRIBOLOGY
- CATALYSIS
- ADHESIVES
- THIN FILMS
- BIOMATERIALS
- CORROSION
- EDUCATION
- STORAGE DEVICES



LOCAL REPRESENTATION

Distributed in Europe by



T: +31 681 03 83 06
 E: sales@albasci.com
 W: www.albasci.com

MASS SPEC

SIMS

MALDI MS

AMBIENT MS

BESPOKE SERVICES