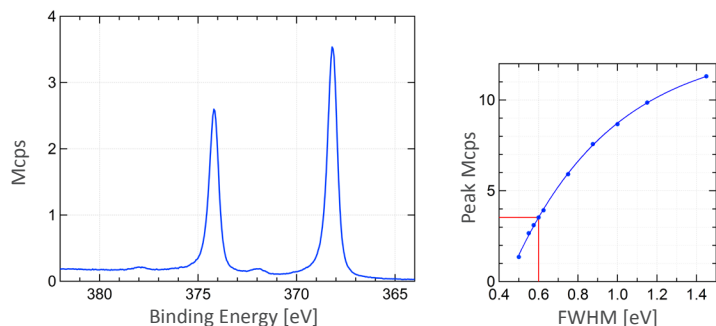


# ASPECT

## Analyser Performance

### Technical/Feature Note

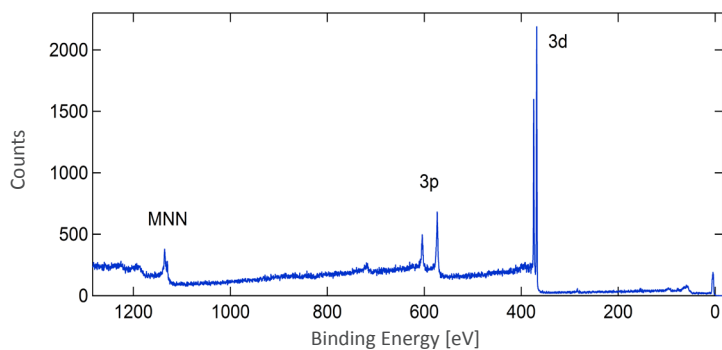
3.5 Mcps at Ag 3d<sub>5/2</sub>,  $\Delta E_{FWHM} < 0.6$  eV



Setup geometry: Spectrometer and X-ray source at magic angle to each other.

A count rate of > 3.5 Mcps at the Ag 3d<sub>5/2</sub> peak with a resolution of 0.6 eV was achieved (figure left).

### Fast Survey Spectra



High spectrometer sensitivity and fast electronics enable the acquisition of full scale survey spectra within seconds.

This way, a survey spectrum of Ag with a resolution of 1.5 eV (FWHM) at the 3d<sub>5/2</sub> peak can be acquired within 2 seconds (figure left).

### New Instrumental Mode: Multi Peak Monitoring

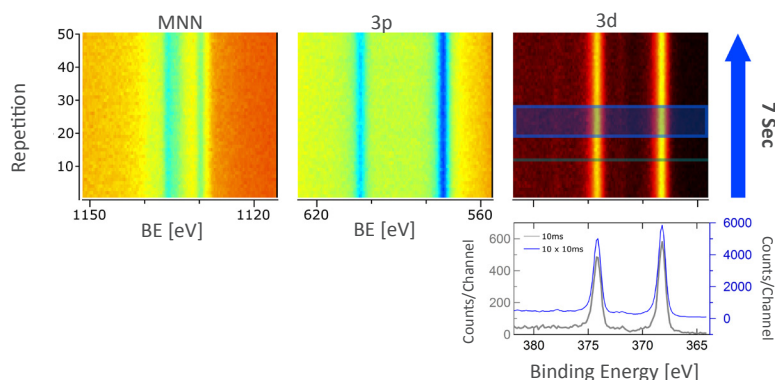


Figure above: Colour-coded intensity representation of the Ag Auger, 3p and 3d peaks, each acquired successively with 50 repetitions of every cycle within 7 seconds in total. The spectra can be extracted from this representation over a user-defined duration, in this example over 10 ms and 100 ms respectively.

The new instrumental mode Multi Peak Monitoring allows observing the temporal evolution of several spectral features in rapid succession at the milli-second time scale.

The colour-coded intensity presentation of XPS peaks emphasises any changes at the sample surface, be it for on-the-fly process control or high quality data of a pre-defined process for presentations and publications. For further analysis, the spectral data can always be extracted from this representation.

This novel experimental and analytical tool opens up a whole range of new applications in surface science.

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**SIGMA** Surface Science  
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