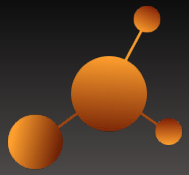


Neo Control Suite

New version now available

What is New in Neo Version V1.1

Extended instrument support

- New Auxiliary analogue signal acquisition
- New Support for dual-anode X-ray monochromator MECS-DA
- New New magnification and lens modes

Experiment automation enhancements

- New Advanced automation sequence diagnostics
- New Mantis Titanium 10 control software integration
- New Acquisition task transformation support
- New Instrument stand-by task

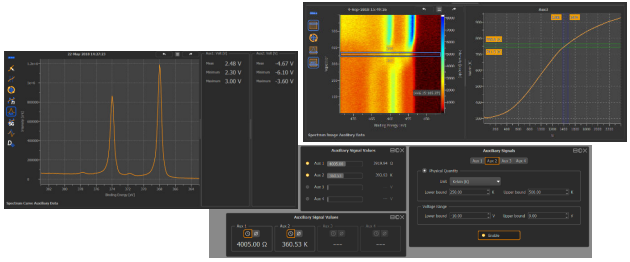
Enhanced experiment control

- New Binding energy scale calibration
- New Indications for excessive count rates
- New Additional rate meter energy axis
- New X-ray excitation source operation control time estimations and progress indications
- New Improved periodic table tool

Results management extensions

- New NeoSTUDIO application for accessing results libraries
- New Extended VAMAS file and CasaXPS export

… and much more

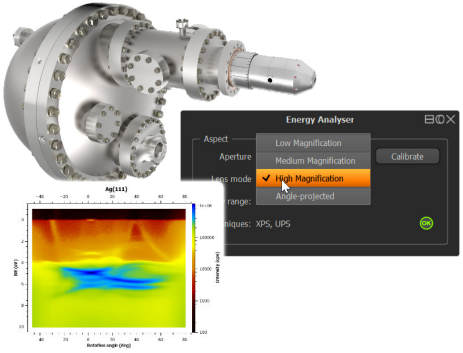


Auxiliary Analogue Signal Acquisition

Run any electron spectroscopy experiment and acquire up to four arbitrary analogue signals simultaneously. Neo will automatically associate the signal data with the spectrum or spectrum images resulting from the experiment and clearly present it as values or curves. And of course, auxiliary analogue signal data becomes a part of your Neo results library.

Support for the MECS-DA X-ray Source

The new MECS-DA monochromated X-ray source supplements SIGMA's set of excitation sources. The new device offers similar characteristics than the MECS monochromated X-ray source but supports two different monochromatic photoelectron energies that can be used alternatively during XPS experiments.

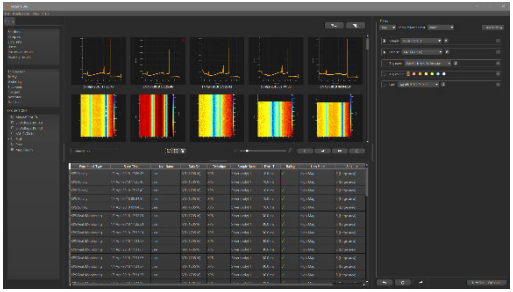


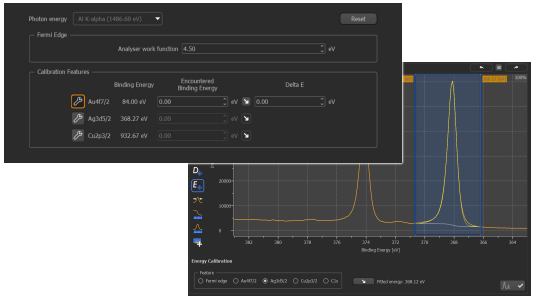
New Magnification and Lens Modes

Use the new Aspect energy analyser lens mode "Angle-projected" to define the analyser's angular acceptance when running experiments such as angle-resolved XPS, XPD or angle-resolved UPS. In addition, Neo now also supports the analyser magnification modes "Medium" and "Low" besides "High".

Accessing Your Results Library with NeoSTUDIO

The brandnew NeoSTUDIO application lets you access the contents of your results library without launching Neo. Using NeoSTUDIO, you can easily view, manage, analyse, annotate and export your experimental results if, for example, Neo is temporarily unavailable.



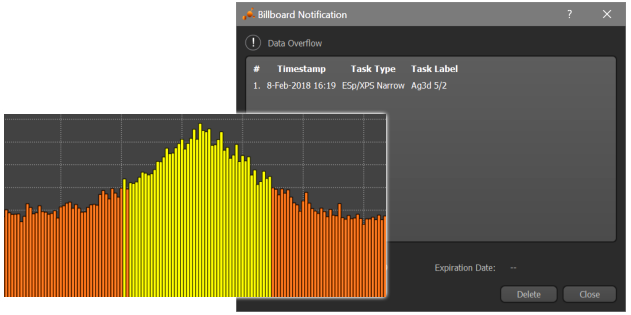


Energy Scale Calibration

A new calibration mechanism supports fine-tuning the binding energy scale to be assumed by the Neo control suite. Use the built-in data analysis tool “Energy Scale Calibration” to determine differences between expected and actual peak locations, or specify such differences utilising a dedicated adjustments pane.

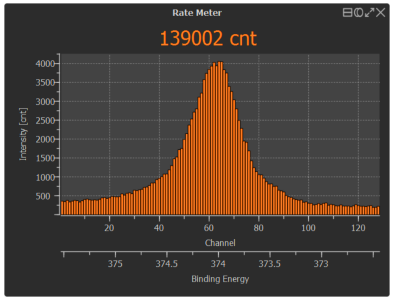
Indications for Excessive Count Rates

New user interface mechanisms help protecting your Aspect energy analyser’s particle detector against “wear-out” effects caused by excessive count rates.

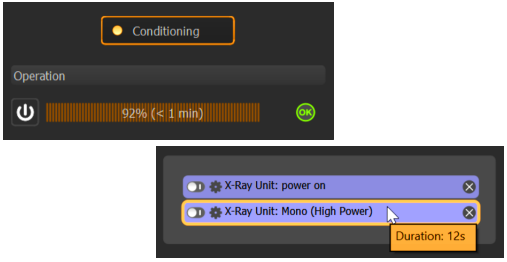


Rate Meter Energy Axis

The rate meter data display will now present an additional abscissa axis for convenient identification of the current kinetic or binding energy.



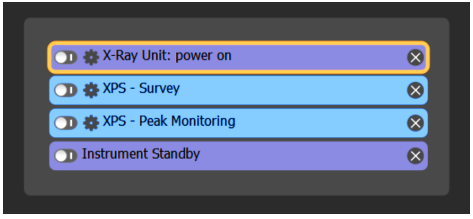
Time Estimation & Progress Indication for X-ray Operations



Neo can now estimate the time required for completing various operations related to controlling X-ray sources, such as ramping up or changing the excitation power, completing conditioning and degassing operations, and similar. Also, new indicators will inform you about the progress and/or the time remaining to complete lengthy operations.

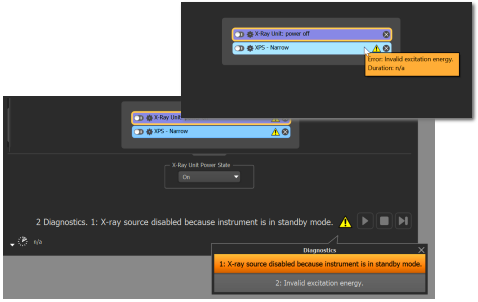
Instrument Standby Sequence Task

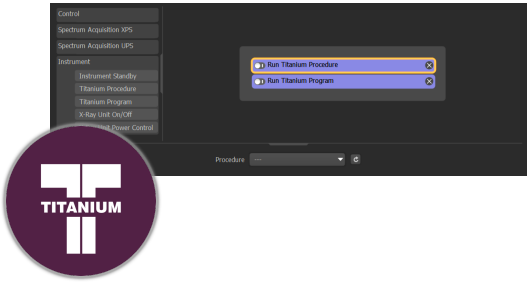
Use the new automation sequence task *Instrument Standby* to put your instrument into standby mode after an extensive, lengthy automation sequence (probably executing unattended) has completed.



Advanced Automation Sequence Diagnostics

Neo will now comprehensively summarise the complete set of issues encountered while checking the configuration of an automation sequence in a navigable list. In addition, individual sequence tasks will indicate problems preventing the execution of an automation sequence using new graphical labels, heads-up notes and information tooltips.





Mantis Titanium 10 Integration

Use the *Mantis Titanium 10* control system software integration to run device automation processes from within a Neo automation sequence. Two new Neo sequence tasks support the execution of arbitrary preprogrammed Titanium procedures and programs for controlling UHV instrument devices and components such as pumps, valves, heaters, and other equipment.

Acquisition Task Transformation

You can now direct Neo to transform a data acquisition sequence task of a specific type into other types. Transforming an acquisition sequence task is particularly helpful if you want to run a specific (existing) experiment using a different acquisition operation without being forced to set up the respective parameters manually.