**CrysAlisPro 43: Synergy in X-ray and electron diffraction**

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After the reduced conference activity due to the Corona pandemic, it is a pleasure to share progress on the new version of CrysAlisPro (CAP43).

The new version of CrysAlisPro (CAP43) is released to the public at the time of the IUCR conference.

CrysAlisPro is Rigaku’s data collection and reduction platform for X-ray and electron diffraction allowing crystal structure elucidation from millimeter down to nano sized crystals using a uniform workflow for both radiation types.

CAP43 contains support of the first commercial electron diffractometer *XtaLAB Synergy-ED*. Electron diffraction made easy. Based on the CAP software platform for X-rays a user-friendly workflow for nano crystal data collection and reduction using electrons is offered.

The robotic platform *RoboCAP* now also comprises beside the *Synergy-Flow* the *SynergyCustom Actor2* robotic systems. Efficient support of room and low temperature experiments with SM (including sponges) and PX samples (also using the new automatic goniometer head IGH2) are implemented.

*Synergy* in X-ray and electron diffraction is exemplified in the extensive use of image processing for shape recognition, sample X-ray and ED grain centering. *Automated multi sample experiments* are implemented in the RoboCAP queue for X-rays and the new microED/3D ED queue.

The data reduction platform is enhanced by new *Esperanto* import tool, more multi-core and multi-process features for faster processing, a new frame selector for frame skipping and a new data set merging feature.

CAP43 contains the new *AutoChem*Neo 6 expanding the capabilities working with electron diffraction data (both kinematical and dynamical). This is also true for the data reduction output for electron diffraction data to Jana2020.

The poster will highlight these and other aspects of the new CAP43.