# Rigaku Introduces New Dual-Wavelength Rotating Anode X-Ray Diffractometer

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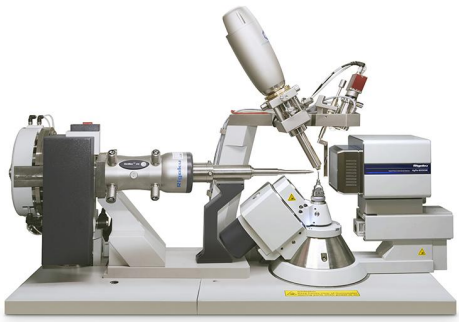
## *Rigaku Oxford Diffraction debuts new XtaLAB Synergy-DW VHF dual-wavelength rotating anode single crystal X-ray diffractometer with HPC X-ray detector*

**May 13, 2020 – The Woodlands, TX.** Rigaku Oxford Diffraction is pleased to report the release of a new dual-wavelength single crystal system, the Rigaku XtaLAB Synergy-DW VHF dual-wavelength high-flux, rotating anode X-ray diffractometer. The new instrument was first announced in the April edition of Crystallography Times, the electronic newsletter published by Rigaku focusing on single crystal X-ray diffraction.

The XtaLAB Synergy-DW VHF design is an extension of a revolutionary idea introduced in 2004 with the Oxford Diffraction Gemini diffractometer, with two independent X-ray sources. The groundbreaking design enabled crystallographers to easily switch between copper (Cu) and molybdenum (Mo) wavelengths, greatly expanding the experimental flexibility available for analyzing single crystal samples. The new system retains the flexibility of the dual-wavelength capability but also adds the exceptional flux enhancement of a reliable, rotating anode X-ray source.



Rigaku XtaLAB Synergy-DW VHF dual-wavelength rotating anode X-ray diffractometer with HPC X-ray detector

The new system's high-speed kappa goniometer, high-flux rotating anode X-ray source, fast, low-noise X-ray detector, and optimized instrument control software allow for faster, more precise data collection. The ability to investigate small samples is further improved by the increased flux from the rotating anode X-ray source as well as the extreme low noise of the Rigaku HyPix X-ray detectors.

The XtaLAB Synergy-DW VHF diffractometer provides 50% more flux at the sample position over the previous DW model due to newly designed confocal optics. The ability to configure it with two different wavelengths means that with a Cu/Mo anode the XtaLAB Synergy-DW VHF instrument can be shared between structural biology and chemical crystallography groups. The system is positioned to be a no-compromise solution, to allow the sharing of resources when needed, for both protein and small molecule crystallographers.

More information about single crystal diffraction solutions from Rigaku is available at www.rigaku.com/smc.

**About Rigaku Oxford Diffraction (ROD)**

ROD was formed as the global single crystal business unit of Rigaku Corporation after the acquisition of the former Oxford Diffraction organization from Agilent Technologies in 2015. ROD is a leader in the field of single crystal analysis, both in the field of chemical crystallography as well as well as macromolecular crystallography. Formed in 1951, Rigaku Corporation is a leading analytical instrumentation company based out of Tokyo, Japan.

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