Rigaku Innovative Technologies (RIT) introduces its 6th generation of microfocus X-ray source, the MicroMax-003F. Using a high brilliance microfocusing tube with a power loading from 30W to 70W for the optimization of different sample size and divergence requirements, RIT has created a compact source requiring low power and achieving rotating-anode level results. This source draws on over 32 years’ experience of commercial multilayer optics manufacturing to achieve the most closely coupled optic resulting in the highest brilliance and flexibility of any source designed for XRD or small-spot XRF. With a modular design concept, MicroMax-003F can be readily configured for the solutions for SAXS, Crystallography, XRR, High-Pressure, small spot XRF or other specialized applications such as flood-field use such as 2d-detector testing.

Many different optic designs are possible, which includes single corner graded multilayer optics often referred to as CMF or Montel optics, 4 corner graded multilayer optics to achieve even higher brilliance, precision Johansson monochromator, and specialty multilayer-crystal hybrid optics to achieve either a larger area or more narrow bandpass. This poster will show results from these key applications utilizing an optic for each of these configurations.