

Poster Presentation

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Upgrading Existing Diffractometers with State-of-the-art Microfocus Sources

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Modern microfocus X-ray sources define the state-of-the-art for a broad spectrum of applications in home laboratories, such as protein and small molecule crystallography, and small-angle scattering. These sources are combined with multilayer optics to image the source spot onto the sample. The optics provides a parallel or focused monochromatic X-ray beam, magnified to a suitable size. Low power sealed microfocus sources, such as Incoatec's μ S represent an attractive alternative to rotating anodes, with a significant reduction in cost and maintenance. Power loads of a few kW/mm² in anode spot sizes below 50 μ m deliver a compact brilliant beam. For example, the μ SHighBrilliance delivers up to 1010 photons/s/mm² in a spot size in the 100 μ m range. It is available for Cu, Mo, Ag, Cr and Co anodes. Since the launch in 2006 more than 400 μ S are now in operation worldwide for a large variety of applications in biology, chemistry, physics and material science. Are you tired of getting spare parts for an ancient rotating anode or is your detector performance only limited by your beam delivery system? We will demonstrate how to bring former high end diffractometers back to a superb performance for cutting edge science after an upgrade with an μ S source. Incoatec ensures full software and safety integration, and an installation hand in hand with the local service, providing a constant service support from your partners on site. In addition to all Bruker or Nonius systems, Incoatec also offers integrations into a wide range of instruments from Rigaku, Marresearch or STOE, also with Dectris or Huber components.

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