

## **HIGH-BRILLIANCE LOW-MAINTANACE MICROFOCUS SOURCES FOR DIFFRACTOMETRY**

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Modern microfocus X-ray sources define the state-of-the-art for a number of applications such as protein crystallography and small-angle scattering in the home lab. These sources have small anode spots of 50  $\mu\text{m}$  or less. They are usually combined with two dimensional multilayer mirrors as beam-shaping devices that image the source spot onto the sample position, magnified to a suitable size, and deliver a parallel or focused monochromatic beam.

The Incoatec microfocus source I $\mu$ S incorporates an optimized combination of an extremely bright and very durable stationary air-cooled microfocus source and the newest type of two-dimensional beam shaping multilayer optics. The source is available with copper, molybdenum, chrome and silver radiation, the optics can be focusing or collimating.

The I $\mu$ S is usable for single crystal diffraction, small angle x-ray scattering, materials characterization, powder diffraction, and other applications as well. We will show new applications of the I $\mu$ S equipped with different two-dimensional beam shaping multilayer optics.

The applications and results presented here are showing the versatility of the I $\mu$ S. The source can be used for all kinds of experiments and can easily be integrated in all setups.

INFORMATION PAGE for the abstract  
“THE VERSATILITY OF THE INCOATEC MICROFOCUS SOURCE IN X-RAY  
DIFFRACTOMETRY”

The abstract is submitted for the DXC-conference.

You have the permission to post the abstract on the DXC web page and on affiliated sites.

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I would like to present a talk in the session “New Developments in XRD & XRF Instrumentation” by Tim Fawcett.

Publication in the DXC proceedings is planned.