

The New μ S 3.0 - Bright. Brighter. Unique.

Geesthacht, December 7th 2015

During this year's Asian Crystallography Association Meeting AsCA in Kolkata, India, Incoatec launched the new generation of the Incoatec Microfocus Source μ S - the μ S 3.0. This outstanding X-ray source for crystallography is first available exclusively in the new 2nd generation Bruker D8 VENTURE and D8 QUEST. It delivers a minimum of 30% more intensity, far more than the best microfocus sealed tube solutions to date.

Since its launch in 2006, the Incoatec Microfocus Source μ S has been regarded as the superior X-ray source for single crystal diffractometry in the home-lab. More than 600 sources sold within less than 10 years are proof for outstanding performance and reliability with best value for money. The μ S changed the rules of the game completely. With the launch of the μ S^{High Brilliance} in 2011, the photon flux was increased by at least another 30%. A technological limit seemed to have been achieved.

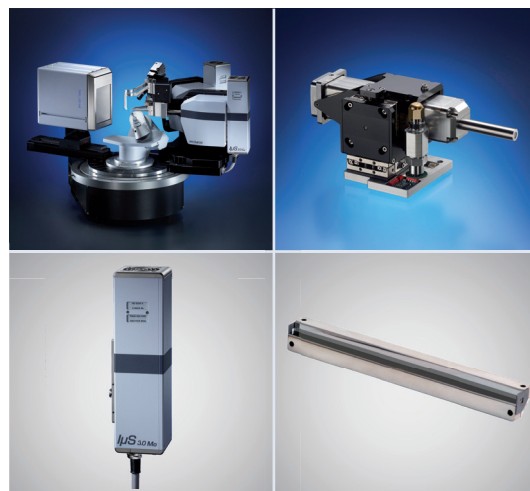
Now the story continues. Incoatec is proud to announce the 3rd generation of the μ S - the μ S 3.0 - with a further increase in intensity of 30% and more, and available for Cu, Mo and Ag radiation! The benchmark has been set even higher by designing a new tube - the Incoatec X-ray Tube *IXT*. This tube gives incoatec the exclusive opportunity to offer the μ S with specifications which are not achievable with other sealed tubes on the market.

Moreover, μ S 3.0 is not only a tube story. The mechanics, electronics and beam path have also been optimized. For example: the whole tolerance chain has been reduced making adjustment easier; the mechanical separation of tube and optics enables easy alignment; tube and optics changes can be carried out without realigning the whole instrument; a vacuum pump is no longer needed because of the new He filled and sealed optics housing; to name only a few advantages.



μ S 3.0 in a nutshell

- new X-ray tube *IXT* designed by incoatec for 30 % more photon flux density
- *IXT* - the first microfocus tube optimized for single crystal X-ray diffraction
- new generator and new beam path concept
- no instrument realignment necessary after change of tube or optics
- swappable optics (Quick-lock) with a He filled housing
- flux density for
 - Cu: > $2.4 \cdot 10^{10}$ ph/s·mm² in a spot of 100 μ m
 - Mo: > $2.5 \cdot 10^9$ ph/s·mm² in a spot of 110 μ m
 - Ag: > $1.2 \cdot 10^9$ ph/s·mm² in a spot of 80 μ m
- first available in the new Bruker AXS "D8 Generation 2"
- stand-alone version to be launched late summer '16



Based on the new *IXT* technology and the established Montel optics, the μ S 3.0 is focused on delivering the best performance with ultimate reliability and user-friendliness. Get the experience of the μ S 3.0 – but beware, your data could be collected too fast to have time for a different task or a short nap in between!