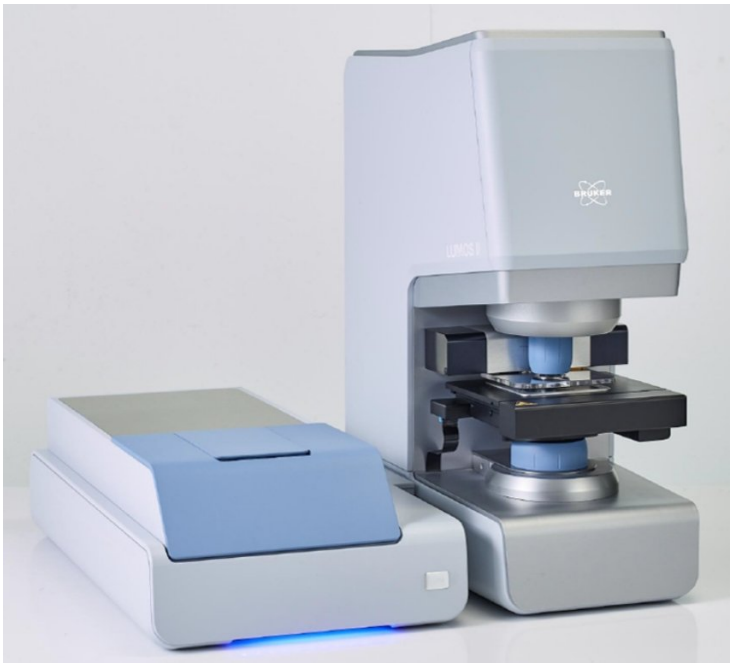
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Bruker launches infrared imaging microscope for pharma and life science research

09 January 2025 | News

Groundbreaking LUMOS II ILIM QCL-based IR microscope sets new standards in speed and resolution



US-based Bruker Corporation has announced the launch of the LUMOS II ILIM, a quantum cascade laser (QCL) based infrared (IR) imaging microscope. The new LUMOS II ILIM redefines performance standards, enabling pharma and life science researchers to capture ultrafast IR images of expansive areas with enhanced spatial resolution.

The LUMOS II ILIM features a patented coherence reduction method for infrared laser imaging essentially free from artifacts in both transmission and reflection mode. With a very large field of view and complete automation, it allows for the rapid determination of chemical complexity in biological tissues.

Using artificial intelligence (AI)-powered data evaluation, LUMOS II ILIM workflows allow for discoveries in life science, pharma and disease research. Integration with Bruker's MALDI Imaging methods enable multimodal imaging to characterize tissues with enhanced analytical depth. The LUMOS II ILIM can also be used for rapid pharmaceutical tablet inspection and particle identification, including automated sampling. Users can harness a Python interface to adapt the LUMOS II ILIM to specific requirements and custom workflows.