

Thermo Fisher Scientific launches Krios 5 Cryo-Transmission Electron Microscope

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Boosting productivity and performance with enhanced automation



Thermo Fisher Scientific, the world leader in serving science, has introduced the Thermo Scientific Krios 5 Cryo-Transmission Electron Microscope (TEM). This next-generation, atomic-resolution platform leverages enhanced optics and AI-enabled automation to study molecular structures and interactions at a throughput and fidelity that was previously unattainable.

In the rapidly evolving field of structural biology, single particle analysis (SPA) and cryo-electron tomography (cryo-ET) are powerful techniques that allow scientists to better understand the intricacies of biology, providing atomic-level insights that reveal how viruses, proteins and cells work.

The Krios 5 Cryo-TEM optimises productivity and performance to enhance these techniques. With a throughput improvement of up to 25% compared to previously released models, the Krios 5 enables 3D visualisation of proteins, as well as their interactions and dynamics within the biological cell. Other Krios 5 advantages include AI-powered experimental set-up and upgraded data acquisition. For the cryo-ET workflow, the innovative vacuum capsule transfer helps prevent contamination of samples.

Collectively, these enhancements build on Thermo Fisher's cryo-EM legacy with a new generation of Krios that will enable researchers to pioneer new treatments and advance drug discovery.