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Talos L120C: Next generation TEM for 2D imaging, (cryo-) tomography and CLEM

Organized by Biological Electron Microscopy Core Facility Presented by Alevtyna Yakushevska, PhD, TFS

When: 15 August, 12:00–14:00 (including demo on the tool) Where: University of California, Davis Tupper Hall Room

2133

The Talos L120C is FEI's latest industry-leading development. It offers a completely updated design that incorporates well-proven, advanced technologies from FEI's high-end Titan Krios and Themis S/TEM to improve performance and usability in laboratories.

The Talos L120C is specifically designed for productivity and performance across a variety of applications such 2D/3D imaging at ambient and cryogenic temperature as well as correlative microscopy. It is well suited for material or/and life science samples.

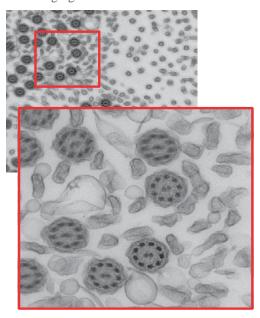
This microscope also is the instrument of choice for single particle analysis sample screening with optimal connectivity towards the 200kV and 300kV automated microscopes such as Talos Arctica and Titan Krios, which are designed for high-resolution single particle imaging.



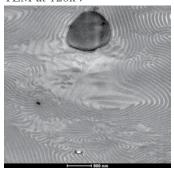
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The design of the Talos L120C allows users with varied skill levels to obtain superior quality results with only limited effort. Applied researchers can focus on scientific questions rather than how the microscope works because of the instruments sophisticated, rapid automation and enhanced imaging workflows. This microscope offers a complete digital control over multiple microscope components including the electron gun, optical elements, vacuum system, and stage. Additionally, the user interface allows for smart presets to save multiple operational conditions across many different applications. Furthermore, it's automated hardware, completely redesigned ergonomics and the new digital searchand-view SmartCam[™] camera allow remote operation.

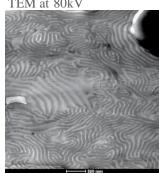
2-D Imaging



TEM at 120kV



TEM at 80kV

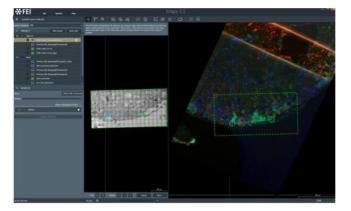


Sample is a Polystyrene-b-Poly(methyl methacrylate) block copolymer. Sample courtesy of Kevin Jack and Idriss Blakey, The University of Queensland

Find out more at **thermofisher.com/furl**

Tomography





The modular MAPS software platform allows for automated and unattended large area acquisition at multiple scales and provides a single software solution for image and data transfer between multiple imaging platforms such as light microscopes, SEM/SDB and TEM. Users can quickly and easily correlate data from multiple imaging platforms—ready for input into the optional Amira® software for advanced visualization and analysis.

In this presentation we will talk about the technological progress made in the last decade and the results achieved. We will specifically zoom into the new technologies of 120 kV microscope and present possible applications and results achieved on this tool.

