

(Scanning) Transmission Electron Microscopy Services

With the Covalent Platform

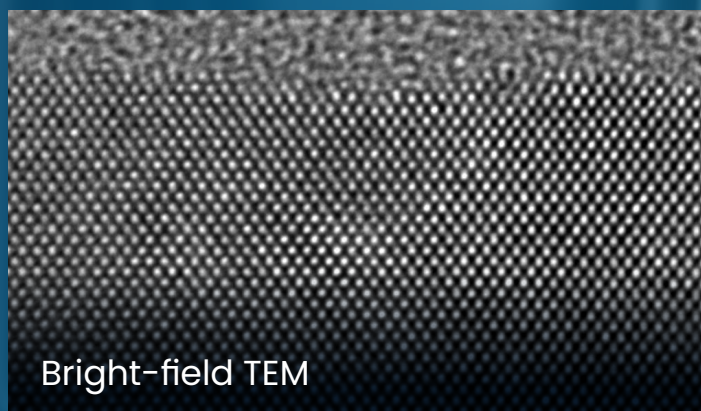
Covalent's team of experts can help clients achieve the most out of their Transmission Electron Microscopy (TEM) analysis by lending expert guidance that addresses your critical design and analysis objectives. With cutting-edge instruments, you can access fast, reliable data; and Covalent strives to deliver more than just great images. Our experts will partner with you to help provide critical data and interpretation of your TEM and EDS results.

The Solutions We Offer



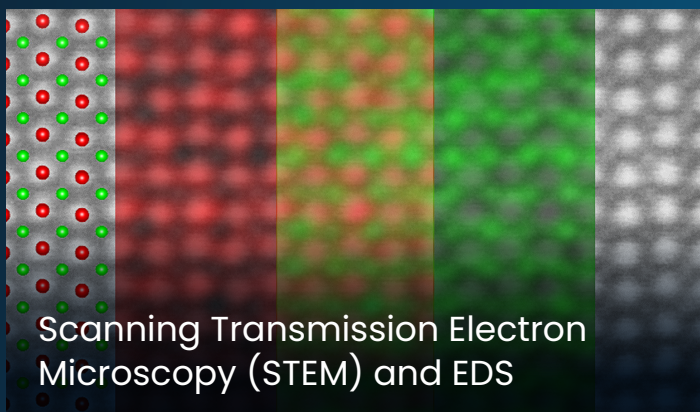
Lamella Preparation

Expert TEM lamella sample preparation is available with S/TEM analysis or as a stand-alone service



Bright-field TEM

Visualize nanostructure with atomic-scale resolution. Ideal for precise measurements and visualization of nano devices and nanomaterials



Scanning Transmission Electron Microscopy (STEM) and EDS

Analyze element distribution and composition with high-angle annular dark field (HAADF) imaging and quantitative energy dispersive spectroscopy (EDS)



Electron Diffraction

Identify crystal orientations and d-spacing using Diffraction and Selected Area Electron Diffraction (SAED).

Cutting-Edge S/TEM Instruments



Talos F200X G2 Transmission Electron Microscope

- Outfitted with a 4K Gatan OneView Camera and Quad-SuperX EDS detectors arrayed for simultaneous element detection



2 Thermo Scientific Helios 5 DualBeam FIB-SEM Instruments

- Helios 5 UX and Helios 5 UC
- Enable high-precision lamella preparation

Covalent's S/TEM Analysis Group

Covalent's analysis team has extensive experience in utilizing S/TEM characterization to help clients understand their samples at an atomic level. Utilizing the latest generation of DualBeam and TEM instruments, Covalent generates top-quality data with rapid turnaround times. This enables data-driven decision making that keeps pace with your project or business. By partnering with clients to understand their unique analysis needs, Covalent ensures that the right techniques are used to expose the greatest insight.

Get a quote at covalentmetrology.com