MEO Engineering Company

MEO Engineering is a small-scale provider of high-technology solutions, supporting users of Focused Ion Beam, Scanning Electron Microscopy, and scientific instrumentation since 2004.

Our unique expertise in engineering custom solutions for electron microscopy, ion, and proton beam instrumentation enabled development and availability of:

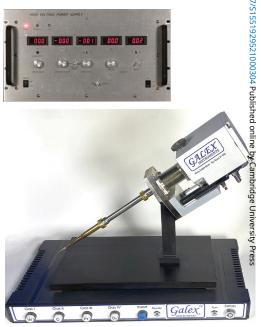
- GALEX Instrument® Gas Injection System (GIS) delivering beam-induced deposition and Gas-Assisted Etching (GAE) precursors in Focused Ion Beam and Scanning Electron Microscope instruments
- GALEX Instruments® FIB/SEM Lift-out manipulator with rotational capability under development
- GALEX Instruments® FIB/SEM sample temperature control stage
- HTT™ Ultrahigh-temperature vacuum furnaces with rapidly-heating graphite-only hot zone
- PBS&T® FIB/SEM service consumables: Apertures, Extractors, Suppressors, and Precursors
- High voltage power supplies for FIB, SEM, TEM, and Electron Beam Lithography: new and repair, up to 200kV
- Ion and Electron Beam column rebuilding and service, in-shop and on-site
- · Design and construction of aftermarket upgrades, accessories, and developing processes and applications for Focused Ion Beam Circuit Edit and FIB/SEM instrumentation
- Training on FIB and SEM principles, operation, maintenance, and extended lifecycle support

Examples of bespoke solutions tailored to customer's requirements:

- Aftermarket instrumentation upgrades: FIB etching end-pointing, custom MCP detectors,
- FIB gas-assisted etching and deposition processes for making high aspect ratio probe points
- Parallel probing multiple deeply buried nodes of semiconductor devices in security applications
- Water-Rx™ royalty-free water-based method of de-processing copper layers in FIB Circuit
- Suite of aftermarket hardware upgrades adapting industrial Scanning Electron Microscopes to CD metrology and process control in manufacturing of SiC power semiconductors
- Facilitating customers transitioning to self-support their extensive parks of FIB and SEM instruments by providing maintenance training, troubleshooting assistance, and service consumables

MEO Engineering addresses the unique instrumentation and support requirements of customers with Focused Ion Beam and Scanning Electron Microscopy equipment from nearly 20 countries across North America, Europe, and Asia. We are proud to extend our support to all users: FIB or SEM of any OEM









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