

Abstract Submitted  
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**Restoration of a Scanning Electron Microscope for Undergraduate Research**<sup>1</sup> JOSEPH ANDLER, DENNIS KUHL, Marietta College — We report on the rehabilitation of an ETEC Autoscan Scanning Electron Microscope for use in undergraduate research. The production, measurement, and control of high vacuum and electron beams are discussed. General troubleshooting techniques for specific equipment such as pneumatic valves, mechanical and diffusion pumps, and thermocouple and ion gauges are investigated.

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