

	TRACE-PM 8.6 Scanning Electron Microscope	
	<i>Document #: 7383</i>	<i>Page 1 of 1</i>
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	<i>Document Manager: Cheryl Lozen</i>	<i>Approved By: Jeffrey Nye</i>

8.6 Scanning Electron Microscope

The MSP FSD Scanning Electron Microscope (SEM) is located in the Trace Evidence Unit of the Lansing Laboratory. It is connected to the EDAX Phoenix EDS System which is utilized to examine inorganic elements of samples.

A Scanning Electron Microscope (SEM) is a type of electron microscope that images a sample by scanning it with a high-energy beam of electrons in a raster scan pattern. The electrons interact with the atoms that make up the sample producing signals that contain information about the sample's surface topography, composition, and other properties.

The SEM may be utilized for highly magnified visualization of any type of material that is appropriate to put inside the chamber. Examples include lamp filaments, fiber/fabric damage etc.