



## Advanced Microanalysis Centre™ Scanning Electron Microscope (SEM)

The scanning electron microscope (SEM) at the Saskatchewan Research Council's (SRC) Advanced Microanalysis Centre™ creates high magnification images by passing a beam of high-energy electrons over the surface of an investigated material. This technology is widely used as an important tool for imaging material surfaces, as well as for identifying chemical signatures.

## Services, Features and Equipment

- Variable pressure Hitachi S3000-N SEM with an energy dispersive spectrometer (EDS) allows both microscopy and qualitative microanalysis to be carried out quickly and efficiently.
- Capable of using secondary and back-scattered electrons for imaging; secondary electrons provide the most detail of an imaged object's surface, whereas back-scattered electrons can be used to image ifferences in the average chemical composition.
- Ability to rapidly switch between high vacuum and variable pressure modes; operates at relatively low vacuum conditions making it suitable for imaging biological or similar materials that are unstable under high vacuum conditions.
- Common minerals and alloys can be rapidly identified by their unique chemical composition using EDS, without the need for special coatings or preparation.

Au coating is available upon request. Clients can access the SEM at the Advanced Microanalysis Centre™ on a fee-for-service basis.



## CONTACT

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