

Brandon University Micro-Analytical Facility

Services and User Fee Schedules 2023

➤ Lab Manager:

Ayat Baig, MSc

baiga@brandonu.ca

(204) 901-1610 (m)

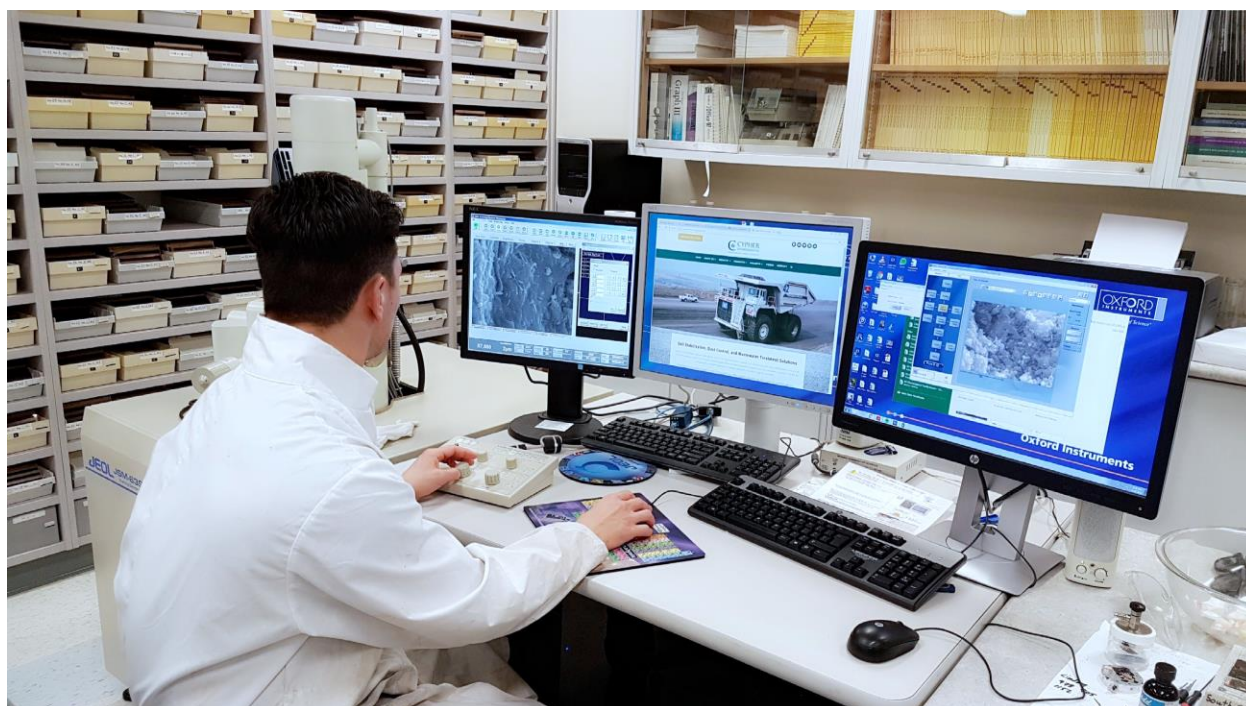
(204) 727-7499 (o)

➤ Lab Steering Committee:

H. Mumin, PhD, A. Somarin, PhD, P. Alexander PhD

Scanning Electron Microscope:

The Brandon University Micro-Analytical Facility offers services for the JSM-6390LV/GS Scanning Electron Microscope (SEM) equipped with Oxford Instruments ULTIM MAX 100 EDS detector as well as the latest high quality analytical and imaging software, including Aztec Feature. Services



are available to academic units, government, and the private sector. The two main functions of the SEM are imaging and determining material compositions.

➤ **SEM USER FEE SCHEDULE:**

Research (Recognized Scientific Research Grants) \$40 /hr

Industry (technician or industry user) \$80 /hr

*All prices subject to change

**Scheduling for the SEM can be made by contacting the lab manager

***Please note that pricing of SEM time is based on a minimum of 3 hours per session; all jobs that do not meet this minimum will be priced at \$80/hr

X-ray Diffractometer:

The Brandon University Micro Analytical Facility is equipped with a Rigaku MiniFlex 6G X-ray diffractometer, for material, pharmaceutical, and qualitative and quantitative rock and mineral analysis. It can be alternated between a copper or a cobalt cathode tube for wider range of sample types and is equipped with a monochromator for superior peak/background and noise reduction. Rietveld refinement and direct derivation quantitative phase analysis methods available.

➤ **XRD USER FEE SCHEDULE:**

Research (Recognized Scientific Research Grants) \$60 / sample

Industry (Rietveld Refinement included!) \$100/ sample

NOTE: Specialized pricing may be available if bulk analyses are required.

Petrographic Reporting and Rock Characterization:

Analyzing thin sections using transmitted and reflected optical microscopy. This will result in qualitative descriptions of texture, minerals present, alteration, metamorphism and estimated modal percentages of each mineral. Commonly combined with scanning electron microscopy (SEM) and X-Ray diffraction (XRD) to increase confidence and provide quantitative results.

➤ PETROGRAPHIC REPORTING:

Petrographic reports from thin section - \$400/sample

Petrographic report along with SEM and XRD analysis - \$550/sample

Lapidary and Sample Preparatory Services:

➤ LAPIDARY FEE SCHEDULE:

Polished Thin section (27 x 46mm - 30 microns) - \$50.00

Regular Thin Section (27 x 46mm - 30 microns) - \$40.00



Polished Thick Section (27 x 46mm - 200+ microns) - \$35.00

Polished grain mount (32mm and 38mm diameter) - \$35.00

Double-polished wafers for fluid inclusions - \$50.00

Coarse crushing (per 1-2kg sample) - \$6.00

Sieving to various size fractions - \$5.00/sample

Homogenization (250g aliquot for grain mounts) - \$10.00

Cutting from hand sample (>10cm) - \$ 0.75/sq in

Display Polishing (minimum \$8.00 per sample) - \$1.00/sq in

Impregnation - \$5.00/sample

Conductive carbon coat INCLUDED --

Gold sputter - \$10/sample