



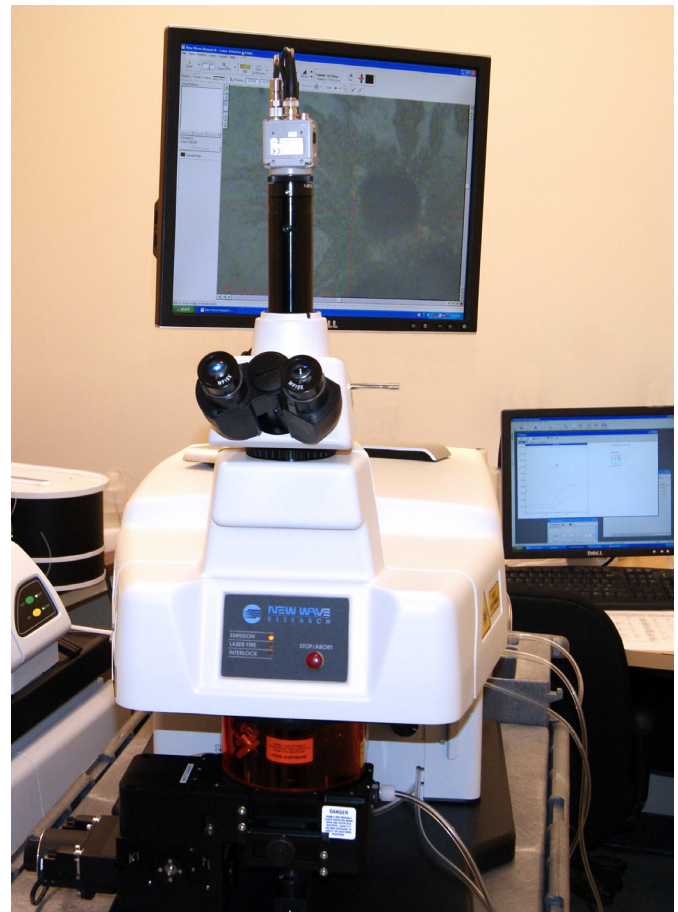
Advanced Microanalysis Centre™ LA-ICP-MS

Laser Ablation Inductively Coupled Plasma Mass Spectrometry (LA-ICP-MS)

The laser ablation mass spectrometer (LA-ICP-MS) system at the Saskatchewan Research Council's (SRC) Advanced Microanalysis Centre™ enables high-precision, in situ trace-element analysis for the mining industry. The most common use of LA-ICP-MS is measuring trace-element concentrations in solid materials, but contained liquids and semi-solids can also be ablated.

Services, Features and Equipment

- 213nm Nd:YAG laser ablation system coupled to Nu Instruments high resolution ICP mass spectrometer.
- Laser beam can be collimated to 4 to 120 μm in diameter and can be rastered over the sample surface in any user-defined pattern.
- In situ U-Pb radiometric dating of zircon and uranium ores.
- Measuring trace-element concentrations in mantle-derived garnets to determine their equilibration temperature (trace nickel content) and history of interaction with mantle fluids and melts; helps determine the potential for diamond formation and preservation.



The LA-ICP-MS at the Advanced Microanalysis Centre™ is available on a fee-for-service basis.