

## XRF/ XRD Applications:

- **XRF/XRD analytical equipment:**

Comprehensive range of equipment including Terra. The Terra is the first truly portable combination XRF/XRD system designed specifically for rock and mineral analysis field work.

- **Rental of hand held XRF equipment**

We rent the Innov-X portable XRF analyser. Typical applications include:

- Exploration
- Metal and Alloy sorting and identification
- Environmental analysis
- Identification of toxins in treated timber
- Consumer Safety, RoHS/WEEE compliance and verification
- Lead paint identification
- Identification of Gold (and precious metals) in jewellery
- Archaeometry and on-site elemental analysis

- **Siroquant software**

Siroquant was developed by Sietronics in conjunction with the CSIRO, it is a unique software package used for the quantification of crystalline compounds. Importantly, Siroquant does not require specialist crystallographic knowledge to obtain reliable mineral/phase analysis. Siroquant is currently being used by many industrial, scientific and academic organisations around the world. The system is equally useful for industrial and research applications. A comprehensive database contains over 1800 common minerals and compounds.

- **XRF supplies**

We supply a range of ancillary equipment and supplies including grinders and mills, presses, die sets, XRF sample cups, thin films, fusion machines and accessories.

- **Certified reference materials**

CRMs from a variety of sources including MBH, also available AA and ICP standards from QCD

- **XRD laboratory service**

Sietronics is proud to offer an X-ray Diffraction service for the identification of minerals and chemical compounds in rock ores, slurries, sediments, filters, etc. Our analytical laboratory handles thousands of samples which have been sent in from all over Australia and the world.

XRD has a wide range of applications in environmental, mining and pharmaceutical fields. Positive identification of minerals and compounds in these and many other fields are very important. X-ray Diffraction aids in:

- Mine Site cleanups- by identifying and monitoring acid sulphates, sulfides, etc.
- Abandoned Industrial Sites- identify compounds used in manufacturing and secondary materials and by-products that have been left behind.
- Wood Treatment Plants- Determination of valence state (species) of sulphates and other compounds originating from copper, chrome and arsenic treated timbers
- Water Treatment, Power Plants and Sewage Plants- identify crystalline deposits which form and build up in pipes and sieve ponds
- Dust Deposits- Identification and possible tracking of sources
- Exploration and drilling programs
- Cements- analysis of clinkers and free lime
- Analysis of silicon carbides

- **Radiation Monitors**

Easy to use and reliable information on alpha, beta, gamma and x-ray radiation. Suitable for research, industrial and educational applications

- **Miscellaneous equipment**

Balances, Ultrasonic baths, water baths, ovens, hotplates, stirrers and more.

### CANBERRA HEAD OFFICE

Unit 3/22 Walder St Belconnen ACT 2617  
PO Box 3066, Belconnen ACT 2616  
☎ (02) 6251 6611 📠 (02) 6251 6659  
✉ [spl@sietronics.com.au](mailto:spl@sietronics.com.au)

### BRISBANE OFFICE

101, Hyde Road, Yeronga, QLD, 4104  
☎ (07) 3848 1955 📠 (02) 6251 6659  
✉ [washington.sanchez@sietronics.com.au](mailto:washington.sanchez@sietronics.com.au)

### PERTH OFFICE

67 Howe Street, Osborne Park, WA 6017  
☎ (08) 9455 5781 📠 (08) 9455 5651  
✉ [brian.dempsey@sietronics.com.au](mailto:brian.dempsey@sietronics.com.au)