

Our equipment.

Our extensive list of equipment which can be used by our skilled technicians includes:

- **SCANNING ELECTRON MICROSCOPY (SEM)**

Used for the examination and analysis of micro- and nanoparticle imaging characterization of solid objects.

- **BENCH TOP NMR**

An analytical tool which helps chemists and other scientists analyse a sample's molecular structure without destroying the sample.

- **AUGMENT REALITY EQUIPMENT**

For real-time use of information in the form of text, graphics, audio and other virtual enhancements integrated with real-world objects.

- **VIRTUAL REALITY EQUIPMENT**

For creating a computer-generated environment with scenes and objects that appear to be real, making the user feel they are immersed in their surroundings.

- **3D HANDHELD SCANNER**

Contributing to the preservation of history, by collecting delicate objects and fossils in 3D digital form.

- **LASER MARKING SYSTEM**

A permanent process that uses a beam of concentrated light to create a lasting mark on a surface.

- **SLM METAL PRINTER**

A 3D printing technique, which utilises high power-density laser to fully melt and fuse metallic powders to produce near net-shape parts with near full density.

- **WILSON VH1150 HARDNESS TESTER**

Evaluates material's properties, such as strength, ductility and wear resistance, and so helps you determine whether a material or material treatment is suitable for the purpose you require.

- **INSTRON TENSION AND COMPRESSION TESTING**

Applies tensile force or compression to a material and measures the specimen's response to the stress.

- **FIBRE LASER CUTTING MACHINE**

A metal cutting machines which offer unparalleled speed and accuracy.

- **INJECTION MOULDING MACHINE**

In the process of injection moulding, a thermoplastic polymer is heated above its melting point. This melt is mechanically injected, or pressed, into a mould that mimics the ultimate shape of the product that will be produced.

- **ICP-OES**

An analytical technique that is used to identify the atomic composition of a sample.

- **GC MS**

An instrumental technique, comprising a gas chromatograph (GC) coupled to a mass spectrometer (MS), by which complex mixtures of chemicals may be separated, identified and quantified.

- **LC MS**

An analytical technique used for separation, identification, and quantification of both unknown and known compounds as well as to elucidate the structure and chemical properties of different molecules.

- **DISCRETE ANALYSER**

An automated chemical analyser in which the instrument performs tests on samples that are kept in discrete cuvettes.

- **CONFOCAL MICROSCOPE**

A technique that uses lasers and fluorescence to create a three-dimensional image of a sample.

- **FLOW CYTOMETER**

Used to detect and analyse the chemical and physical characteristics of cells or particles

- **fNIRS BRAINS SCANNING SYSTEM**

A non-invasive brain imaging technique that measures blood oxygenation changes.

- **EYE TRACKER – EYE LINK 1000**

Helps observe and measure eye movements, pupil dilation, point of gaze, and blinking to see where subjects of a study focus their visual attention.