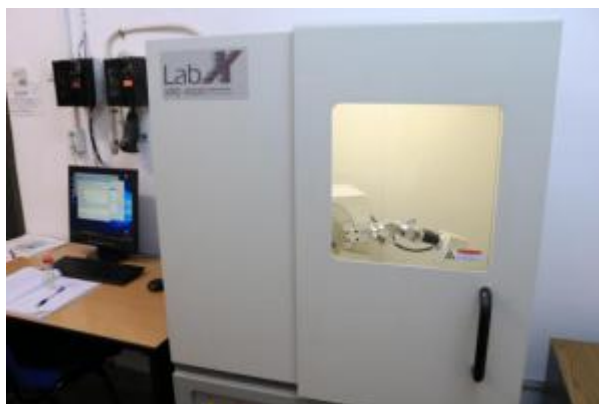


# Shimadzu XRD –6000 X-ray diffractometer

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XRD

**Availability:** by email appointment between 9:30 - 17:30 for a pre-evaluation of the complexity of the tests and estimate of working time.

**Conditions of use:** exclusively by the responsible specialized staff, mentioned

## Characteristics:

1. X-ray generator with maximum power of 3kW
2. X-ray tubes – two X-ray tubes with Cu anode at 2.0 kW and at 2.7 kW and one X-ray tube with Cr anode at 2.7 kW
  - focus 1×10 mm (2.0 kW), 2×12 mm (2.7 kW)
  - voltage setting between 20-60 kV (1kV step)
  - current setting between 2.0-80 mA (1mA step)
3. Vertical type goniometer
  - minimum step  $2\theta$ : 0.002°,
  - scanning range: 6°-163°,
  - scanning speed: 0.1-50°/min, Ni filter for Cu tube,
  - graphite monochromator  $2d=6.708 \text{ \AA}$
4. Detection and control unit
5. Software that includes:
  - full control of the XRD system, the X-ray tube, the goniometer,...etc.
  - file converter in ASCII, TXT format
  - processing of diffractograms
  - the JCPDS database
  - crystallinity determination