

Powder X-Ray Diffractometer

Powder X-Ray Diffractometer which is commonly known as PXRD was recently installed in the Postgraduate Institute of Science, University of Peradeniya. This instrument is a high end instrument with latest development in PXRD instrumentation. X-ray diffraction is a process in which X-rays fall on a crystalline material are reflected by the atoms, which are arranged in ordered arrays, if certain geometrical conditions are met. Since, the resulting X-ray diffraction pattern is a characteristic feature of the material, this technique is used as a high precision material identification method. The Bruker D8 Advanced Eco Powder X-ray Diffraction system can be used for nearly all X-ray diffraction applications, such as qualitative and quantitative phase analysis, stress and texture measurements, particle size analysis, GIXRD and structure determination



Bruker D8 Advanced Eco X-ray Diffraction system

PXRD Analysis Rates

User category	Method	Cost per sample (Rs)
Undergraduate (University of Peradeniya)	Diffractogram only	750.00
	With analysis	1,250.00
MSc/MPhil/PhD – PGIS registered students	Diffractogram only	750.00
	With analysis	1,250.00
Other Universities/Research Institutes/ Other Government Institute	Diffractogram only	1,500.00
	With analysis	3,000.00
Commercial sample (Industrial sector)	Diffractogram only	3,000.00
	With analysis	6,000.00

To avail PXR D facility, kindly follow the following instructions:

- Please submit properly labeled samples in powder form along with the payment and the form to the PXR D laboratory.
- Please make sure to bring a CD to store the output of the PXR D.
- For University of Peradeniya Scholars-
 - Payments can be made to the schroff counter at the Postgraduate Institute of Science.
 - Payment can also be made via cheque written to the “Director, Postgraduate Institute of Science” with ‘**PXR D Facility**’ written on the reverse.
- For outsiders wishing to avail PXR D facilities-
 - Payment can be made via cheques written to “Director, Postgraduate Institute of Science” of with ‘**PXR D Facility**’ written on the reverse.

Note:

Kindly ensure that the payment is made and the payment slip is produced at the laboratory, prior to obtaining access to the PXR D.