

NIT Srinagar to Commission First X-Ray Diffraction (XRD) in Valley

A powerful technique to characterize bulk and nanomaterials (materials having nano-dimensions) by X-ray Diffraction was not available in Kashmir. Thousands of students including faculty of various institutions across the valley used to suffer and have to send the sample to various parts of the country and beyond. Keeping in view its versatility and importance, a proposal was sent to Ministry of Science and Technology, New Delhi by Dr. M A Shah, of Physics Department, NIT Srinagar which was approved by the scientific committee. Besides other sophisticated equipments dr. shah has been able to install Scanning Electron Microscopy, by World Bank funding.

X-ray diffraction (XRD) is a very important experimental technique that is used to address all issues related to the structure of solids, including geometry, identification of unknown materials, orientation of crystals, defects, stresses etc. Determination of unknown solids is critical to study in earth, environmental, materials and in food sciences. It is a versatile tool for engineering and medical students also.