



X-Ray Powder Diffraction (XRPD)

X-ray diffraction is a technique used to identify the mineralogical composition of crystalline solids. The sample, reduced to a powder, is struck by an X-ray beam, and depending on interference between the radiation and the crystalline structure, allows identification of the mineralogical composition. The technique is the basis for the characterization of natural and artificial stone materials; often used in combination with optical mineralogy, it provides indications about provenance, raw materials, heating temperatures, degradation products.