
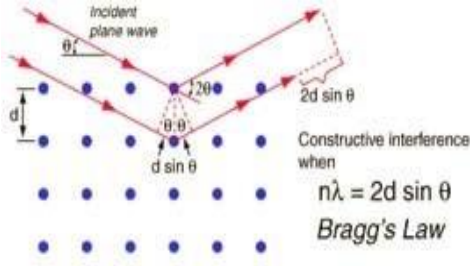
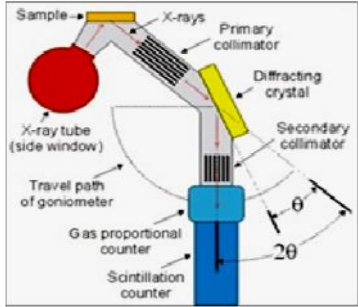


Name of Machine	X-Ray Fluorescence (XRF)		
Make	PANalytical, Netherland	Model	Axios^{MAX}
	 <p style="text-align: center;">Constructive interference when $n\lambda = 2d \sin \theta$ Bragg's Law</p>		
Specification			
<p>The salient features/Specifications of the system are as follows:</p> <ol style="list-style-type: none"> 1. Wavelength dispersive (WD-XRF) Machine (power: - 3KW,60kV-160mA) is used for detecting the elements. 2. It is a non-destructive analysis technique for the Major oxides and Trace elements present in the sample covering elements from Boron to Uranium. 3. Analysis can be done on pressed powder pellets made from fine powder. 			
Working principle:			
<p>A wavelength dispersive detection system physically separates the X-rays according to their wavelengths, the x-rays are directed to a crystal, which diffracts (according to Bragg's Law) the X-rays in different directions according to their wavelengths (energies).</p>			
Application			
<ul style="list-style-type: none"> • Quantification of the elements in Hard rocks and sediment/Soil of geological past • Quantification of Metals & alloys in synthetic material, • Geological samples, • Filter samples. • Environmental Applications 			
User Instruction			
<ol style="list-style-type: none"> 1. For Major oxides and trace elements, samples should be provided in powder (-200 mesh) form otherwise grinding charges will also be applicable as per the rate list. 2. Sample weight should not be less than 20gm for analysis. 3. Data generated will be provided on CD (Compact Disc) or DVD (Digital Versatile Disc). 4. Students/Research scholars will prepare pellets for analysis on their own. 			
Contact Person			
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