

#### ION BEAM ANALYSIS (IBA)

#### DESCRIPTION

**Ion beam analysis (IBA)** provides an excellent way to probe atomic compositions and concentrations in various materials in order to analytically analyze them. It can detect almost all types of atoms within the analyzed material and can even provide depth profiles. It is excellent in analyzing a wide range of samples, from unknown materials like asteroids, precious materials like diamonds to advanced materials like superlattices developed in nano-electronics.

#### **APPLICATION DOMAINS**

Material engineering, nano-electronics, ecology, medicine, forensics, rare materials.

#### MAIN ADVANTAGES

**IBA** techniques are very exact and highly reliable. Samples doesn't need any special treatment in advanced (chemical of physical), it is directly analyzed as it is, it is a fast analysis (minutes) and it's completely non-invasive. It is excellent for fragile or very expensive samples.

## CONTACT

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# POTENTIAL CUSTOMERS OR COMMERCIAL APPLICATIONS

Institutes of companies that develop and manufacture advanced materials or nanoelectronics, chemical engineering, healthcare, ecological watchdogs, forensics inspectors, historians.

### **KEYWORDS**

Ion beam analysis, IBA, RBS, RBS-C, PIXE, PIGE, NRA, thin films, atomic analysis, material analysis, forensics, medicine.