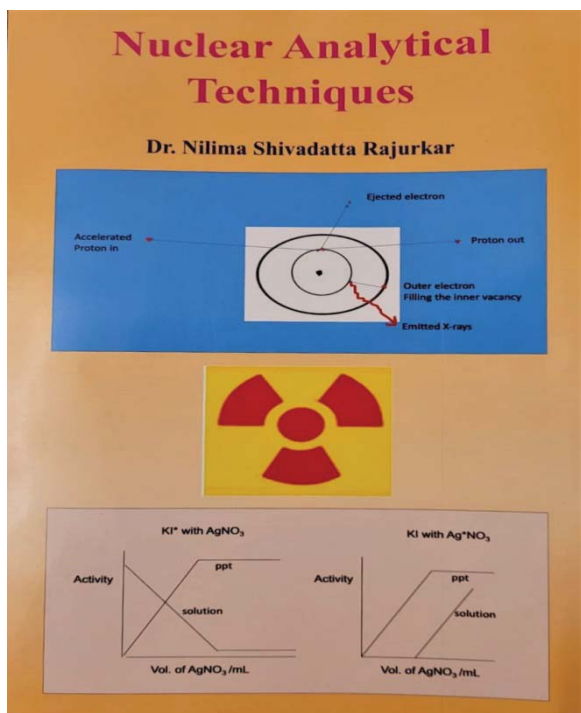


A Booklet on Nuclear Analytical Techniques, Author: Dr. Nilima Shivadatta Rajurkar

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Nuclear analytical techniques (NAT) due to their multielement capability for the analysis of a variety of samples with a very low detection limits at nanogram to picogram levels (with almost no blank) for number of elements (depending upon the neutron flux) and sensitivities superior for some elements and comparable with many non-nuclear analytical techniques like F-AAS, hydride generation AAS, GF-AAS, ICP-OES and ICP-MS find vital role in trace elemental determinations. The techniques, being non-destructive and free from matrix interferences, have a

tremendous potential to be used for a variety of samples, like art antiques, coins, forensic, archaeological specimens, semiconductors, environmental, lunar, etc.

In view of the characteristic features of NATs, a ready-made booklet consisting of various sub-branches of the technique with wider scope and immense utility in the analysis of variety of samples, authored by Dr Nilima S. Rajurkar has been published.

The booklet is quite handy and crisp which covers Neutron Activation Analysis (NAA), Particle Induced X-Ray Emission (PIXE), Isotope Dilution Analysis (IDA) and Radiometric Titrations (RT). It gives detailed information about the techniques in a simple, easily understandable language. The topics are discussed on various aspects of the techniques, namely, advantages, disadvantages, applications, limitations etc. with solved problems to have clear understanding of the concepts for each of the technique.

I am very confident that the booklet will be highly useful to the researchers as a ready-reckoner reference material, especially for upcoming students studying NAT.

The booklet is a recent publication (12.10.2022) by ISAS, Pune Chapter and is a low priced one with a meagre price of Rs 50/- , easily affordable and may be purchased from:

Dr. Nilima S. Rajurkar,

Chairperson, Pune Chapter.

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