Brief history and current status of activation analysis in Korea are described. About 120 papers have been published since the first paper was reported in 1960. They are sorted out into 5 consecutive periods according to the publication year, and typical feature of each period is described.

Introduction

In Korea, the history of activation analysis begins with the first research nuclear reactor, a TRIGA Mark II reactor, installed at the Korea Atomic Energy Research Institute (KAERI) in 1962. Thereafter, a TRIGA Mark III reactor was installed also at KAERI in 1971. Previously, KAERI, which was renamed as Korea Advanced Energy Research Institute (KAERI), was the sole organization in Korea specializing in research on activation analysis. Currently, such research is being carried out by several organizations, including Korea Institute of Energy and Resources (KIER), KAERI, National Institute of Scientific Investigation, Hanyang University and Sokang University. Presently, the research activity in KIER is considered to be the most active among them.

About 120 research papers have appeared, since the first paper "Effect of Diluents on Thorium Extraction with Tributylphosphate" was published by K. S. Park in 1960. They can be sorted out into five consecutive periods according to their year of publication, as shown in Fig. 1. The number of the papers published in each period increases with the lapse of time, except in the 4th period.

The 1st period (1962-1966) was the initiation stage of activation analysis in Korea. Gold determinations\(^2\), radiochemical separation of uranium fission fragments\(^3\), and the determination of one or two elements in monazite\(^4\) were carried out.
During the 2nd period (1967-1971), which was the establishing stage of activation analysis in Korea, attempts were made to apply the method to several fields, including the radiochemical analysis for Pb, U and Th in mineral ores\(^5\)\(^6\), and the radiotracer study of noble metals\(^7\). Palladium, platinum and rhodium in industrial concentrates such as lead foam and raw lead were also determined by neutron activation analysis\(^8\). Palladium and platinum were determined after separating from the matrix by spontaneous