

## **Automatic Sample Changer for Routine Neutron Activation Analysis**

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One of the great difficulties in using the NAA method is in regards to the time that the operator spends exchanging the samples after each measurement. It becomes a big problem in routine analyses when various chemical elements are determined and then each sample must be measured at different decay times. The application of the automatic sample exchanger reduces the time analysis by several hours and reduces the tedious manual operation. Then, the effective use of NAA depends on the availability of a suitable automatic sample changer. There are some systems that are sold commercially, however many laboratories can't acquire them because they are costly. This paper presents a simple sample exchanger which consists of two distinct sections, the sample storage and the counting station. The transport between the two positions is accomplished through pneumatic tubes. All of the accomplished operations are controlled by means of the spectrum analysis software commands. The automatic sample exchanger is being used for routine measurement at IPEN-CEN/SP and has had an enormous impact on the operation and the organization of the laboratory.

<b>Theme</b>	Development of automatic NAA sample changer
<b>Proposed Session</b>	New facilities and novel methodologies
<b>Preferred Presentation</b>	Poster
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