



## *INTRODUCTION & OBJECTIVES*

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One sample (SB05) was submitted for K-Ar test on Feldspar concentrate.

## *K-AR METHOD*

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### ***K-Ar methodology:***

Aliquot of the sample was weighted into Al container, loaded into sample system of extraction unit, degassed at ~100°C during 2 days to remove the surface gases. Argon is extracted from the sample in double vacuum furnace at 1700°C. The determination of radiogenic argon content was carried out three times on MI-1201 IG mass-spectrometer by isotope dilution method with <sup>38</sup>Ar as spike, which is introduced to the sample system prior to each extraction.

The extracted gases were cleaned up in two step purification system. Then pure Ar is introduced into custom built magnetic sector mass spectrometer (Reinolds type).

It shall be noted that the test was done three times per sample to ensure the consistency of the result. Two globally accepted standards (P-207 Muscovite and 1/65 "Asia" rhyolite matrix) were measured for <sup>38</sup>Ar spike calibration.

For age calculations the international values of constants were used as follow:  
 $\lambda_K=0.581*10^{-10}y^{-1}$ ,  $\lambda_{\beta}=4.962*10^{-10}y^{-1}$ ,  $^{40}K=0.01167$  (at.%).