

## **Determination of the content of major and trace elements in sedimentary rocks based on instrumental neutron activation analysis**

*Tuesday, 16 April 2019 17:00 (2 hours)*

Recently, neutron methods play an active role in investigating diverse aspects of geochemistry, related mainly to the determination of the content of various elements in rocks. Knowledge of the elemental composition of rocks lets simple information about their origin. For this target at the Joint Institute for Nuclear Research (JINR) in Dubna, studies have been conducted to determine the distribution of major and trace elements in geological material collected in the south-east end of the Greater Caucasus. Quantitative determination of the content of elements in the studied rocks, was performed with helping instrumental neutron activation analysis utilize the research reactor IBR-2 in the Frank Laboratory of Neutron Physics.

The obtained experimental results were interpreted in the Upper Continental Crust (UC), Mid-ocean Ridge Basalts (MORB) and North American Shale Composite (NASC) model systems. This allowed getting a multitude of information about the origin of the investigated samples, as well as about the the geological environment were the sampes were collected.

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