

Title of the course: Radioanalytical Chemistry Lab

Credits: 4

Coordinator: Süvegh, Károly

Department: Department of Analytical Chemistry

Prerequisites: admission to Chemistry MSc, basic knowledge in nuclear chemistry (for those having an ELTE Chemistry BSc: Basics of Nuclear Chemistry, KA2MG1; for others: equivalent knowledge)

Topics covered by the course:

The course is a laboratory practice covering the following topics: work with open radioactive sources; tracer techniques; isotope separation; X-ray fluorescence (XRF), gamma-spectroscopy; neutron activation analysis; prompt-gamma spectroscopy; study of material structure with nuclear methods; dosimetry, radiation protection; environmental samples; environment protection.

Literature:

Compulsory:

Syllabus for the measurements (provided by the course, also in electronic form)

Kiss István, Vértes Attila: Magkémia I., Tankönyvkiadó, Budapest, 1975

Fodorné Csányi Piroska, Vértes Attila: Magkémiai gyakorlatok, *Tankönyvkiadó*, Budapest, 1990

Suggested:

Nagy Sándor: Nukleáris mérések statisztikája (Valószínűség-számítási összefoglaló alkalmazásokkal).

Books given in the Syllabus