

UNIVERSITY OF PANNONIA

COURSE DATASHEET

Semester:	2016/17/1
Course:	Radiation Measurement Laboratory Practice
Code:	VEMKRKM433S
Responsible department:	Institute of Radiochemistry and Radioecology
Department code:	MKRK
Responsible instructor:	Zoltán Sas

Course objectives:

Geting experience in huclear measuring.

Course content:

Using nuclear measurement devices. Radiological examination, qualification of building sites. Radiological examination, qualification of building materials. Radiological examination, qualification of TENORM materials. Examining radioactive waste waters. Surface contamination examinations. Decontaminating contaminated surfaces. Radiological examination, qualification of drinking waters. Radiological examination of food by gamma-spectrometry. Alpha-spectrometry examination of plant samples. Adsorption examination of plants with trace indication. Examination of radon permeability. Measuring radon daughter element concentration. Examination of dosimeters, measuring environmental dose rate.

Requirements, evaluation and grading:

All the proper practices are to be executed by the students admitted the subject either on regular or on extra dates offered. To test the preparedness of the students they have to provide an entrance digger and the results of it contribute to the classification mark of the practice. The results of the determinations provided in the laboratories, including some intermediate data to control the endpoints, are to be presented in a protocol. The protocols are collected at the end of the practice and classified the conductor. The average of the marks of the protocols is reported as the endpoint of the practice.

Required and recommended readings:

Radiokémiai laboratóriumi gyakorlatok, A VE Radiokémia Tanszék jegyzete, VE Kiadó, 1996. Radioökológiai laboratóriumi gyakorlatok. A VE Radiokémia Tanszék kézirata, 1998. Kanyár B., Németh Z.: Anyagszerkezeti vizsgálatok radioaktív sugárzással, A VE Radiokémia Tanszék jegyzete, VE Kiadó, 1999.