UNIVERSITY OF PANNONIA

COURSE DATASHEET

Semester:	2015/16/2
Course:	Structure elucidation methods lab practice
Code:	VEMKAV3334A
Responsible department:	Department of Analytical Chemistry
Department code:	MKKA
Responsible instructor:	Krisztián Horváth

Course objectives:

Understanding of the fundamentals of the materials structure elucidation methods in the laboratory practice.

Course content:

1. Gas chromatography (GC), High Performance Liquid Chromatography (HPLC) 2. Ion-chromatography (IC), Capillary Electrophoresis (CE) 3.Infra-red spectroscopy (IR) 4. Raman-spectroscopy 5. UV-Visible Spectrophotometry 6. Inductive coupled plasma emission spectrometry (ICP-AES). 7. Atom Absorption spectrometry (AAS) 8. Radioanalytical methods I. 9. Radioanalytical methods II. 10. NMR spectrometry 11. Mass spectrometry(MS) 12. Thermal analysis (TG, DTG, DTA) 13.Electroanalysis: Amperometrie, Potentiometry, Conductometry. 14. Digital signal processing using MATLAB.

Requirements, evaluation and grading:

The accomplishment of the allocated measurements.

Required and recommended readings:

Dr. Kristóf János: Kémiai analízis II. (Nagyműszeres analízis), Veszprémi Egyetemi Kiadó, Veszprém, 2000.