



SUBJECT DATASHEET

Semester:	2010/11/1
Subject:	Waste Water Treatment Laboratory Practice
Code:	VEMKKVT133S
Responsible department:	Department of Environmental Engineering
Responsible department code:	MKKV
Responsible lecturer:	dr. Árpád Kárpáti

Educational objectives:

Giving possibilities to control in practice the efficiencies of the different treatment methods and new directions of research. Examination of new treatment methods and processes.

Detailed content of the subject:

1. Control of the influence of the chemical precipitation of suspended parts from municipal sewage in preliminary step for the denitrification capacity of the Activated Sludge treatment. (Pilot plant control.) 2. Oil separation from the water and reuse of the oil phase. 3. Use of chemical oxidation for transformation of hardly biodegradable organic contaminants (clay processing effluent). 4. Respirometric measurements for estimation of biodegradability of the contaminants. 5. Studies with activated sludge -adsorption capacity for removal of recalcitrant contaminants. 6. Measuring the biodegradation and ammonium oxidation in two sludge AS system. 7. Study of post denitrification with different organic substrates; and simultaneous denitrification with biofilm. 8. Measuring denitrification in continuous flow and SBR system.

Requirements:

Knowledge of the theoretic basis of the measurements moreover the details of the laboratory work.

Required and suggested references:

Kiadott laboratóriumi mérésleírások.