

UNIVERSITY OF PANNONIA

COURSE DATASHEET

Semester:	2012/13/1
Course:	Fundamentals of Air Pollution Control Laboratory Practice
Code:	VEMKKVB132L
Responsible department:	Department of Environmental Engineering
Department code:	MKKV
Responsible instructor:	Dr. Tatiana Yuzhakova
Code: Responsible department: Department code:	VEMKKVB132L Department of Environmental Engineering MKKV

Course objectives:

Students familiarize themselves with air pollution control used equipments, their operation and working parameters, about which they have heard on lecture course. Students earn practical experiences and strengthen the knowledge obtained on lectures.

Course content:

The laboratory practices are scheduled for half of semester, once a week, duration of each practice is four hours. The measurements to be done: Wet dust separation Electrostatic dust separation Tail gas absorption Selective catalytic reduction of NOx Catalytic treatment of tail gas Tail gas adsorption Investigation of adsorbents and catalyst supports morphology Dust filter cleaning

Requirements, evaluation and grading:

Measurement accomplishment, preparation of laboratory practice written documentation, pass of theoretical part of practice

Required and recommended readings:

Sipos Zoltán: Ipari levegőtisztaság védelem. Műszaki Könyvkiadó, Budapest. 1987. Dr. Kovács Béla: Levegőtisztaság-védelem, egyetemi jegyzet, Veszprémi Egyetem, 2004. Woperáné, Serédi Ágnes: SOx és NOx emisszió csökkentése. Debrecen. 1991. Moser M., Pálmai Gy.: A környezetvédelem alapjai. Tankönyvkiadó, Budapest. 1992. Barótfi és tsi.: Környezettechnika, Mezőgazdasági Könyvkiadó. 2000. Ronald M. Heck, Robert J. Farrauto: Catalytic Air Pollution Control, Van Nostrand Reinhold, London, 1995. Seymour Calvert, Herold M. Englund: Handbook of air pollution technology, John Wiley & Sons, New York, 1984