

UNIVERSITY OF PANNONIA

COURSE DATASHEET

2013/14/1
Fundamentals of Air Pollution Control Laboratory Practice
VEMKKVB132L
Department of Environmental Engineering
MKKV
Dr. Tatiana Yuzhakova

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