



## SUBJECT DATASHEET

<b>Semester:</b>	2009/10/1
<b>Subject:</b>	Air Pollution Control Laboratory Practice
<b>Code:</b>	VEMLKVM432L
<b>Responsible department:</b>	Department of Environmental Engineering
<b>Responsible department code:</b>	MKKV
<b>Responsible lecturer:</b>	Tamás Fülöp

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### Educational objectives:

To strengthen practical knowledge of students in the application of air pollution control processes.

### Detailed content of the subject:

1. Laboratory practices connected to the lecture and seminar materials, investigation of adsorption catalytic processes by using structural methods.
2. Investigation of active sites, acid sites on catalytic surface.
3. Tracking catalytic processes with GC-MS technique.
4. Investigation of exhaust gas cleaning system of motor vehicles.
5. Reduction of nitrogen oxide emission

### Requirements:

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

### Required and suggested references:

- Sipos Zoltán: Ipari levegőtisztaság védelem. Műszaki Könyvkiadó, Budapest. 1987.  
Woperáné, Serédi Ágnes: SO<sub>x</sub> és NO<sub>x</sub> emisszió csökkentése. Debrecen. 1991.  
Kenneth E. Noll, Vassilios Gounar: Adsorption Technology, Lewis Publishers, Chelsea, 1992.  
Godish Thad: Air Pollution, Lewis Publishers, Chelsea, 1991.  
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