Level: Master

Course title: INDUSTRIAL WASTE GASES EMISSION CONTROL

Status: elective

ECTS: 5

Requirements: none

Learning objectives

Expand knowledge and prepare students for quality control of air and process waste gases in different branches of industry.

Learning outcomes

After completing the course, students should be able to independently apply the necessary knowledge about the air quality criteria to the problem of industrial pollution; independently plan monitoring and quality control of industrial waste gases and critically evaluate results; select the required equipment for the control of industrial waste gases.

Syllabus

Theoretical instruction

Study of the following topics: Identifying problems. Selection of sampling and testing methods. Measuring the flow of waste gases. Determination of particulate matter content and concentrations of gaseous pollutants. Systems control for odour in industry. Fans. Control of emissions of polluting particulate matter and gaseous pollutants. The main criteria for the selection of appropriate technological solutions. Equipment selection and quality required. Installation and performance testing of equipment for air quality control. Factors in equipment evaluation. Purification of industrial waste gas and waste water problems: thermal power, metallurgy, chemical and pharmaceutical industries.

Practical instruction

Practical instruction follows the theoretical instruction.

Weekly teaching load				Other:
Lectures: 2	Exercises: 2	Other forms of teaching:	Student research:	