Level: bachelor
Course title: Atmospheric Chemistry
Status: elective
ECTS: 6

Requirements: none Learning objectives

Acquiring the modern knowledge about the most important chemical reactions in the atmosphere, primary and secondary pollutants of the atmosphere and the consequences of the pollution.

Learning outcomes

The student should develop:

General capabilities: basic knowledge in this field, following the literature, analysis of various solutions and the choice of the most adequate solution, application in practice and other subjects. **Subject-specific capabilities:** basic knowledge of atmospheric chemistry applicable in higher courses.

Syllabus

Theoretical instruction

Environmental pollution, sources and control. The influence of the pollution on people and vegetation. The cycles of water evaporation. Anthropogenic pollution sources. Nitrogen, Sulfur, Carbon and their compounds in the atmosphere. Nitrogen cycle. Sulfur cycle. Carbon cycle. Photochemical reactions in the atmosphere. Oxidation processes in photochemical smog. Ozone layer, degradation of ozone layer in the stratosphere.

Practical Training:

Obtaining, characteristics and reactions of carbon(IV)-oxide, oxygen, sulfur, nitrogen and their compounds.

Weekly teaching load				Other:
Lectures:	Exercises:	Other forms of	Student research:	
3	1	teaching: 1		