

COURSE TITLE:

ATMOSPHERIC CHEMISTRY

COURSE DESCRIPTION:

Major objectives: to understand and apply the knowledge presented in the course in solving various problems in the atmospheric environment, and to help students to integrate the environmental approaches into other branches of natural science.

Topics covered: health effects of air pollution, formation of aerosol particles, atmospheric nucleation, cloud condensation nuclei, water vapor in the air, indoor air quality, mass size distribution of aerosol particles, number size distribution of aerosol particles, carbonaceous aerosol, climate change and the air pollution, footprint of atmospheric pollutants.

LITERATURE:

Manahan, S.E.: Environmental Chemistry, 8th ed., CRC Press Lewis, BocaRaton, 2005.

Warneck, P.: Chemistry of the Natural Atmosphere, 2nd ed., Elsevier, 1999.

Seinfeld, J.H., Pandis, S.N.: Atmospheric Chemistry and Physics, Wiley, 1998.

Kulkarni, P., Baron, P.A., Willeke, K.: Aerosol Measurement: Principles, Techniques, and Applications, Wiley, 2011.

Warneck, P., Williams, J.: The Atmospheric Chemist's Companion, Springer, 2012.

The slides presented in the lessons can be downloaded from the website announced in the first lesson.

TEACHER:

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professor