Environmental Organic Geochemistry – Syllabus

Lecturer: Dr. Alexey Kamyshny

Topics:

- Introduction to organic chemistry
- Introduction to chemical thermodynamics and kinetics
- Properties of pure substances: phase transfer, diffusion, sorption, acid-base chemistry
- Thermodynamics and kinetics of chemical transformations of organic pollutants: hydrolysis, redox transformations and photochemistry
- Biological transformations of organic pollutants
- Sampling and analysis of organic pollutants

Reference book:

• R.P. Schwarzenbach, P.M.Gschwend, D.M. Imboden. Environmental Organic Geochemistry.

Course structure:

- 2 hours of lecture per week
- 2 hours of seminar per week

Requirements:

• Attendance (lectures and seminars) – 80%

Grades:

- Homework 20% of the final grade, will be uploaded on Moodle.
- Mid-term examination (בורן מגן) 0-20% of the final grade
- Final examination 60-80% of the final grade