Biodegradation of organic compounds 001-2-5012 Two h weekly lectures (2 credits)

Learning outcome

The course aims to equip the student with tools to comprehend synthetic organic compounds' biotransformation processes' importance and complexity.

During the course, the following topics will be covered:

- 1. Sources of synthetic organic compounds polluting soil and water.
- 2. Microbial versatility in attacking synthetic organic compounds.
- 3. Research methods used in studying biodegradation processes in the lab and the field.
- 4. Biodegradation of oil and gasoline components.
- 5. Microbial metabolism of halo-organic compounds.
- 6. Biodegradation processes of agrochemicals.
- 7. Microbial metabolism of energetic material-explosives.
- 8. A review of the biological methods employed for clean up of soil and water polluted with synthetic organic compounds.

Course structure

The course consists of frontal lectures, biweekly reading assignments, and a final takehome assignment (research proposal writing).

Text: Will be provided during lectures.