CASE STUDY

MICROBIOLOGY AND HYDROBIOLOGY IN WATER TECHNOLOGY

Microorganisms are an important part of natural aquatic environments as well as water and wastewater treatment processes. In this practical programme we will explore how microscopic and microbiological methods can be used to assess water quality and technological processes.

We will observe selected microorganisms and biological structures under the microscope, learn the basics of their identification and discuss what their presence can indicate about environmental or technological conditions. The practical section also introduces basic cultivation methods and demonstrates how microbiological analyses can be applied in water treatment technology.

The aim is to connect direct laboratory observations with real applications in drinking water and wastewater treatment and to show how microorganisms can serve both as an important part of treatment processes and as indicators of water quality and process performance.