

Level: Specialist academic studies of chemistry				
Course title: Molecular spectroscopy (advanced course) (SH-615)				
Status: Elective				
ECTS: 5				
Requirements: none				
Learning objectives Acquiring in-depth theoretical and practical knowledge of particular topics of molecular spectroscopy, depending on the subject of the specialist thesis.				
Learning outcomes Student should be able to apply the acquired broad knowledge of the relevant topics of molecular spectroscopy in order to improve PhD thesis and further chemical education.				
Syllabus <i>Theoretical instruction</i> Rotational spectra of molecules. Spectroscopy in the microwave and far infrared radiation range. Oscillatory and oscillatory-rotational spectra of molecules. Spectra in the IR region. Raman spectroscopy. The electronic spectra of molecules. Spectra in the visible and UV range. NMR spectroscopy. ESR spectroscopy.				
Weekly teaching load				Other:
Lectures: 2	Exercises: /	Other forms of teaching: 2	Student research: /	