

<b>Level:</b> Specialist academic studies of chemistry				
<b>Course title:</b> Molecular spectroscopy (advanced course) (SH-615)				
<b>Status:</b> Elective				
<b>ECTS:</b> 5				
<b>Requirements:</b> none				
<b>Learning objectives</b> Acquiring profound theoretical and practical knowledge of particular topics of molecular spectroscopy, depending on a subject of a specialist thesis.				
<b>Learning outcomes</b> Students should be able to apply the acquired broad knowledge of the relevant topics of molecular spectroscopy to improve performance of their potential PhD thesis and further education in chemistry.				
<b>Syllabus</b> <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.				
<b>Weekly teaching load</b>				Other:
Lectures: 2	Exercises: /	Other forms of teaching: 2	Student research: /	