## Level: master

**Course title:** Molecular spectroscopy

Status: elective

**ECTS**: 8

### Requirements: none

# Learning objectives

The goal of the course is acquiring profound theoretical and practical knowledge of particular topics of molecular spectroscopy, depending on the subject of a master thesis.

# Learning outcomes

Students should be able to apply the acquired broad knowledge of the relevant topics of molecular spectroscopy to improve their master thesis and the overall future chemical education.

### Syllabus

Theoretical instruction

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:	Exercises:	Other forms of	Student research:	
3	3	teaching: 1		