Module: Modern Methods of Structure Determination

University/department/institute: Freie Universität Berlin/Department of Biology, Chemistry and Pharmacy/Institute of Chemistry and Biochemistry

## Responsible for the module: module lecturers

## Admission requirements: none

**Qualification aims**: The students are familiar with modern methods of structure determination such as e.g. X-ray diffraction or spectroscopic methods. They can apply their knowledge to characterize unfamiliar samples and can independently examine a structure issue using the appropriate methods. They also solve these problems jointly in the tutorial groups and can question their methods critically and defend them in discussion. They can present a selected structure issue and its solution correctly and appropriately to a particular audience.

**Content**: Specialized knowledge of structure analysis methods; diffraction methods, ESR, UV/Vis, IR, Raman spectroscopy; selected examples for the application of these methods to particular structure issues

Teaching and learning units	Attendance (Semester hours per week = SH)	Forms of active participation	Study time (hours)	
Lecture	2	-	Attendance L Preparation and follow-up L Attendance T Preparation and follow-up T Examination preparation, examination	30 30 30
Tutorial	2	Solving problem sets, contributing to discussions		30 30
Language of instruction		German or English		
Compulsory regular attendance		Lecture: attendance recommended; tutorial: yes		
Study time, total hours		150 hours		5 CP
Duration of module		One semester		
Module offered		Every winter semester		
Application		Master's program in Chemistry		