

Module: Organometallic Chemistry			
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 have deepened their knowledge of organometallic chemistry and are familiar with the bond characteristics of the different classes of complexes with metal-carbon bonds. They can apply this knowledge to unknown organometallic compounds and analyze the bond characteristics. They can solve problem sets from the topic areas covered independently or in groups.			
Content: Ways of synthesizing main group organyls in the groups 1, 2, 12, 13 and 14; cyclopentadienyl compounds of main group elements; bonds in transition metal compounds; metal carbonyls; metal carbonyl clusters; ligands related to CO; complexes with σ -donor ligands; carbene (alkylidene) complexes, carbyne complexes, olefin complexes, alkyne complexes, allyl and enyl complexes, cyclopentadienyl complexes, arene complexes, seven and eight-membered rings as ligands; lanthanoid compounds			
Teaching and learning units	Attendance (Semester hours per week = SH)	Forms of active participation	Study time (hours)
Lecture	3	-	Attendance L 45 Preparation and follow-up L 45 Attendance T 15
Tutorial	1	Solving problem sets, contributing to discussions	Preparation and follow-up T 15 Examination preparation, examination 30
Language of instruction		German or English	
Compulsory regular attendance		Attendance recommended	
Study time, total hours		150 hours	5 CP
Duration of module		1 semester	
Module offered		Every summer semester	
Application		Master's program in Chemistry	