

Level: master				
Course title: Physical methods in inorganic chemistry				
Status: elective				
ECTS: 6				
Requirements: -				
Learning objectives Improvement of knowledge about applications of physical methods for characterization of inorganic compounds. Qualifying students to choose the adequate physical method for determining the physical and structural properties of the analyzed compound. Combination of physical and physicochemical methods for fully characterization of inorganic compounds.				
Learning outcomes After completing this course, student is able to: <ul style="list-style-type: none"> - Apply X-ray diffraction data for determining the crystal structure - Apply spectroscopic techniques for structural characterization of inorganic compounds - Apply magnetic and conductometric measurements - Apply thermoanalytical techniques - Interpret the results obtained by mentioned techniques 				
Syllabus <i>Theoretical instruction</i> Basic principles and possible applications of physical methods for characterization of inorganic compounds. Spectroscopic (FTIR, UV-Vis) and magnetic methods (magnetic susceptibility, NMR), conductometry, thermoanalytical techniques and X-ray diffraction. <i>Practical instruction</i> Synthesis and characterization of complex compounds.				
Weekly teaching load				Other:
Lectures: 3	Exercises: 2	Other forms of teaching:	Student research:	