

Level: PhD				
Course title: Kinetic Methods of Chemical Analysis (DSH-715)				
Status: Elective				
ECTS: 15				
Requirements: None				
Learning objectives Directing students to analytical chemistry research and introducing them to actual principles and application of kinetic methods to chemical analysis.				
Learning outcomes On completion of this course, the student should be able to determine in various (complex) materials, theoretically and practically, the concentration of an analyte using kinetic methods.				
Syllabus <i>Theoretical instruction</i> Kinetic aspects of analytical application of chemical reactions. Kinetics of chemical reactions. Indicator reactions in chemical analysis (non-catalytic and catalytic reactions, homogeneous and heterogeneous reactions). Methods of measurement of indicator component concentration. Analysis of kinetic data. Analytical application of non-catalytic and catalytic reactions. Sensitivity, selectivity, and detection limit of catalytic methods of analysis. <i>Practical instruction or written essay on a subject by choice.</i>				
Weekly teaching load				Other:
Lectures: 5	Exercises:	Other forms of teaching:	Student research: 5	