Level: PhD

**Course title:** Electrochemical Kinetics (DSH-702)

Status: Elective ECTS: 15

Requirements: None

## Learning objectives

To enable the student interested in electrochemical research to acquire the necessary profound theoretical and practical knowledge from this field of chemistry.

## **Learning outcomes**

On completion of this course, the student should be able to independently analyze and explain the acquired data of electrode processes obtained experimentally and thus perform the necessary characterization of redox properties of reactants or electrode materials.

## **Syllabus**

Theoretical instruction

Structure of phase-boundary. Heterogeneous catalysis of reactions in solution. Redox reactions on metal surfaces. Reactions on metal-oxides. Reactions on carbonaceous electrodes. Electrochemistry of semiconductors. Modern electrochemical methods. Microelectrodes.

Written project on a particular theme by choice of the student.

Weekly teaching load				Other:
Lectures:	Exercises:	Other forms of	Student research:	
5		teaching:	5	