Level: PhD

Course title: Mechanisms of Organic Reactions (DSH-608)

Status: Elective

ECTS: 15

Requirements: None

Learning objectives

Concentrated knowledge in organic reactions, mechanisms and reactivity of organic molecules.

Learning outcomes

Acquired knowledge about organic reactions, mechanisms, as well as reactivity of organic molecules, their structures and track reaction conditions.

Syllabus

Theoretical instructions

Teaching comprises the selected organic reactions and their mechanisms. Aliphatic nucleophilic substitution at an allilyc, vinyl and at a trigonal carbon. The participation of neighbouring group by π and σ bonds. The influence of nature nucleophilic reagent and groups which could be substituted. Aliphatic electrophilic substitution; monomolecular (SE1), bimolecular (SE2 and SEi). Aromatic electrophilic substitution. Aromatic nucleophilic substitution. Addition reactions: electrophilic addition reactions, nucleophilic addition reactions at carbon-oxygen bond. Elimination reactions. Reactions of rearrangements. Pyrolytic eliminations. Molecular rearrangements: aniontropic and cationtropic rearrangements. Valention isomerizations.

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