Level: master IHO504

Course title: Dynamic Stereochemistry

Status: elective

ECTS: 6

Requirements: none

Learning objectives

Advanced research stereochemical aspects of organic reactions. Solving complex practical problems in dynamic stereochemistry.

Learning outcomes

Acquired knowledge will allow students to extend their knowledge of dynamic stereochemistry.

Syllabus

Theoretical instruction

The influence of intramolecular chemical group relations on the course of reaction. Prochiral organic reactions. Stereochemistry of enzymic reactions at prochiral centres. Stereochemistry of the synthesis of heterocyclic compounds. The stereochemical aspects of organic reactions catalyzed by transition metal complexes. Stereochemical effects of the formation of metal complexes in organic chemistry. Stereochemistry of polymer synthesis. Stereochemistry of cycloaddition reactions. Stereochemical aspects of pericyclic reactions. Stereochemistry of multi-component domino reactions. Stereochemical aspects of click chemistry. Topological and Supramolecular Stereochemistry. Chirality and stereochemical analysis in nanotechnology.

Practical instruction

Synthetic Application of the studied reactions.

Weekly teaching load				Other:
Lectures: 2	Exercises: 2	Other forms of teaching:	Student research:	