Level: PhD

Course title: Selected Chapters of General and Inorganic Chemistry (DSH-601)

Status: elective

ECTS: 15

Requirements: None

Learning objectives

Thorough introduction to the selected chapters of general and inorganic chemistry.

Learning outcomes

Acquiring the necessary expertise needed for further study and resolution of the complex chemical problems.

Syllabus

Theoretical instruction

The structure of matter. The structure of the atom. Periodic system. Chemical bond. Stereochemistry of inorganic compounds. Crystallochemistry of the inorganic compounds. Chemical reactions. Chemical kinetics. The reaction mechanisms. Chemical equilibrium. Chemistry of acids and bases. Chemistry of aqueous and non-aqueous solutions. Chemistry of transition elements. Complex compounds. Inorganic rings, cages and clusters. The basics of Bioinorganic Chemistry. Biometals and bioligands.

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