CH-610

Inorganic chemistry "Fundamentals and properties"

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Cursus	Sem.	Type
Chemistry and Chemical Engineering		Obl.

Language of teaching	English
Credits	2
Session	
Exam	Oral presentation
Workload	60h
Hours	**30**
Courses	15
Exercises	15
Number of positions	

Frequency

Every 3 years

Remark

Next time: Fall semester 2019

Summary

To present and discuss important recent contributions in the field of inorganic chemistry with an emphasis on fundamental aspects and properties.Literature seminars based on selected publications,emanating from the last 12 months, preceded by introduction and followed by a group discussion.

Content

The topics covered in this course will include recent advances in the field of:
1. Bioinorganic chemistry (e.g. structure/function correlations and reaction mechanisms.
2. Organometallic systems (e.g. non-linear optical properties and novel electronic and magnetic properties).
3. Supramolecular coordination chemistry (e.g. new functional materials by self-assembly, the adaptive behavior of dynamic systems).
4. Inorganic/organometallic polymers.
5. Theoretical methods (e.g. the development of new methods and their application to inorganic/organometallic systems).
The specific content will be chosen by the instructors and will be renewed every year. The ethics of publishing will also be discussed.

Note

Next session Spring semester 2020

Keywords

Inorganic, Organometallic, Materials, Catalysis, Spectroscopy, Theory.

Learning Prerequisites

Important concepts to start the course

Masters level knowledge of inorganic/organometallic chemistry.