CH-221

Chemistry of elements s and p

Severin Kay

Cursus	Sem.	Type
Chemistry and chemical engineering	BA3	Obl.
HES - CGC	H	Obl.

Language of teaching	English
Credits	2
Session	Winter
Semester	Fall
Exam	Written
Workload	60h
Weeks	14
Hours	**2 weekly**
Courses	2 weekly
Number of positions	

Summary

Introduction to the chemistry of the s & p elements of the periodic table.

Content

The course will be a "walk" through the periodic table with focus on the main group elements. This includes a brief history of the respective element, a description of the most important compounds (*syntheses, structures, physical properties and reactivities*) and a discussion of trends within the different groups.

Learning Outcomes

By the end of the course, the student must be able to:

- Recall general trends in the periodic table of elements.
- Recall methods for the synthesis of the s & p block elements.
- Recall the structures, the properties, applications, and the chemical reactivity of the s & p block elements.
- Differentiate the different allotropes of the s & p block elements.
- Derive the structure of compounds of the s & p block elements.
- Derive equations for reactions of compounds of the s & p block elements.
- Recall relevant oxidation states for the s & p block elements.

Assessment methods

Written exam

Resources

Ressources en bibliothèque

- Inorganic Chemistry / Shriver
- Anorganische Chemie / Riedel
- Nature's Building Blocks / Emsley
- Elements of the p Block / Shriver

Websites

- http://scgc.epfl.ch/telechargement_cours_chimie