- Course title: **Inorganic Chemistry I**.
- Course code: 5273
- Type of course: compulsory
- Level of course: fundamental
- Year of study: 2
- Semester: 1
- Number of credits allocated: 4.5
- Names of lecturers: José Vicente Cuevas and Javier García
- Objective of the course: to systematize the study of the elements in the periodic table and their compounds; to explain the properties of the elements of the s and p blocks and those from the 12 group, as well as their most important compounds; to describe the main methods of obtaining and preparing the elements, the most important reactions, their usefulness and applications; to establish the relationships between the structure, properties and reactivity of elements and compounds studied.
- Prerequisites: It is recommended that students should have attended General Chemistry I before following this course.
- Course contents: an introduction to Inorganic Chemistry; hydrogen; Group 1: the alkali metals; Group 2: the alkaline earth metals; Group 12: zinc, cadmium and mercury; Group 13: boron, aluminum, gallium, indium, thallium; Group 14: carbon, silicon, germanium, tin, lead; Group 15: nitrogen, phosphorus, arsenic, antimony, bismuth; Group 16: oxygen, sulfur, selenium, tellurium, polonium; Group 17: the halogens; Group 18: the noble gases.
- Recommended reading:
    - Atkins, P.; Overton, T.; Rourke, J.; Weller, M.; Armstrong, F. "Inorganic Chemistry" 4th Ed. Oxford University Press: New York, 2006.
    - Cotton, F. Albert; Wilkinson, Geoffrey; Murillo, Carlos A. "Advanced Inorganic Chemistry". 6th Ed., Ed. Wiley, 1999.
    - Greenwood, N. N.; Earnshaw, A. "Chemistry of the Elements" 2nd Ed. Butterworth-Heinemann: Oxford, 1997.
    - Holleman, A. F.; Wiberg, E. "Inorganic Chemistry" Academic Press, 2001.
    - Housecroft, Catherine E. and Sharpe Alan G. "Inorganic chemistry" 3rd Ed. Pearson Education Limited, 2008.
    - Rayner-Canham, G.; Overton, T. "Descriptive Inorganic Chemistry" 4th Ed. Freeman and Company: New York, 2006.
- Teaching methods:
    - Lectures: teachers explain the contents of the lessons.
    - Seminars: students and teacher discuss the problems and other points raised in class.
- Assessment methods:
    - Continuous evaluation of theoretical work: 20%
    - Group and individual analysis, presentation and debate of questions and problems: 20%
    - Written work and exams: 60%
- Language of instruction: Spanish and/or English