UE 3.6C– Supramolecular Chemistry – 3 ECTS

Instructors' names:
B. Colasson (coordinator), O. Reinaud, B. Schöllhorn, Invited lecturers

Pedagogical objectives:
This class will give the students more insights into modern supramolecular chemistry. Courses on selected aspects of supramolecular chemistry by invited professors, experts in their fields.
For each lecture, the invited professor gives a review and a research article to read, together with a questionnaire relative to the research article. The students have to send their written answers to the professor 3 day before the lecture.
During the class, each professor gives first a 2h lecture on a specific topic related to supramolecular chemistry. This general presentation is followed by an analysis of the research article and discussion with students.

Course pre-requisites:
Basic concepts in supramolecular chemistry
M1 level.

Program:
The notions in molecular recognition are developed (recognition within polytopic receptors, recognition in biology, halogen bond) and coupled with the control of the reactivity within supramolecular systems. Also, new properties stemming from the supramolecular aspect of the objects are presented (e.g. MOFs, POMs, photochromism...). Depending on the invited professors, this program can be modified each year.

Acquired skills:
Knowledge of important areas of research using the principles of supramolecular chemistry for developing functions aimed at applications.
Be able to extract the major information out of a review article on a new topic
Be able to do a critical reading on a research article related to a new topic and getting the important facts and perspectives

Evaluation:
Final exam (100%)