

## Catalyse de surface

 Composante  
École Nationale  
Supérieure des  
Ingénieurs en  
Arts Chimiques



Volume horaire  
31,33h

### En bref

- **Code:** LS1ZC2AP
- **Ouvert aux étudiants en échange:** Oui

## Présentation

### Objectifs

1. Understand how solid catalysts work in a chemical reaction - *Knowledge*
2. Understand how modulate their reactivity - *Knowledge*
3. Describe various synthetic methods - *Comprehension*
4. Analyse data from characterization - *Analysis*
5. Compare and contrast data - *Synthesis*
6. Suggest ways to improve catalyst - *Evaluation*

### Syllabus

- **Part I. Reactivity**
  - Reactivity descriptors (*d*-band center theory)
  - The active sites of catalysts and how to regulate their performances?
  - Catalyst deactivation
  - Guidelines for catalyst testing
- **Part II. Catalyst preparation and characterization**
- **Part III. Challenges in developing new catalytic materials and technologies for a cleaner and sustainable future**

### Informations complémentaires

CM + TD