Université de Lille

Atmosphere, Clouds and Climate Science (ACCESS)

Master Chimie physique et analytique

Durée
2 ans

Composante
Faculté des sciences et technologies

Langue(s) d'enseignement
Anglais

Présentation

The **Master of Science in Physical and Analytical Chemistry (PAC)** aims at preparing students to become experts in physical chemistry with strong skills in theoretical and practical Spectroscopy. This program is intended for students eager to develop an international culture and looking for a worldwide mobility. The master PAC is a program of excellence fully taught in English, providing students with the necessary tools, knowledge and skills towards doctoral studies, and/or professional industrial careers in chemical analysis. Students will develop a highly specialized know-how and a rare practical experience supported by state-of-the-art technologies. Students are introduced to the fields of specialization: **Advanced spectroscopy in chemistry (ASC)** applied to the various fields of chemistry (solid state chemistry, catalysis, sustainable chemistry, nanomaterials, biomaterials...) **Atmosphere, Clouds and Climate Science (ACCESS)**, applied to chemistry of the atmosphere.
For details on the ACCESS Master:
http://www.Labex-cappa.fr/master-atmosphericenvironment

Savoir-faire et compétences

Graduates will: acquire competences which make them fit for employment as professional chemists in chemical and related industries or as entrepreneurs; be able to apply modern and advanced spectroscopy techniques within the framework of the most recent European requirements; be able to use the modern theoretical and experimental applications of spectroscopy; reach a standard of knowledge and competence which will give them access to third cycle course units or degree programs (Ph.D.)

Les + de la formation

A guarantee of quality: accredited master's degree. ACCESS specialization is linked to Labex CaPPA (Laboratory of Excellence Chemical and Physical Properties of the Atmosphere). Training for becoming experts in far reaching experimental techniques in Spectroscopy. Developing skills not only towards doctoral studies, but also towards professional activities in industry. The high level of equipment available is unique.

Organisation

Organisation

The master's programme is organised into different knowledge and skills blocks (BCC):
BCC - Apply fundamentals of spectroscopy
BCC - Use numerical tools in chemistry and spectroscopy
BCC – Communicate effectively with scientific tools
BCC - Apply spectroscopy to practical problems
BCC - Analyze processes in atmospheric sciences
BCC - Integrate into professional environments BCC - Analyze processes in atmospheric sciences

Informations non contractuelles.
Dernière mise à jour le 15 janvier 2026

Université de Lille

Stages

Stage : Obligatoire

2 stages obligatoires : 1 au S2 et 1 au S4.

Admission

Conditions d'admission

For European students an no EEF students: Application: Submit your application by following this link: https://monmaster.gouv.fr
For EEF students: Etudes en France : https://www.campusfrance.org/fr/candidature-procedure-etudes-en-france

Et après

Poursuite d'études

After completing this master's degree, the student can continue his studies with a PhD.

Insertion professionnelle

The **master Physical and analytical chemistry** is mainly research-oriented. A large majority of alumni engage in a Ph.D. program, with the aim of joining a research laboratory in their field of expertise or the Research and Development department of a private company. Never the less, our graduate students also have the proper background and practical skills at Master's level to reach positions of responsibility (production, management, R&D) in international analytical enterprises, fine chemicals industries or in environmental sciences.

Pour en savoir plus sur l'insertion professionnelle des diplômés de l'Université de Lille, consultez les répertoires d'emplois publiés par l'ODiF (Observatoire de la Direction de la Formation)

Les fiches emploi/métier du Répertoire Opérationnel des Métiers et des Emplois (ROME) permettent de mieux connaître les métiers et les compétences qui y sont associées.

Infos pratiques

Autres contacts

Contact administratif et pédagogique :
FST-master-cpa-access@univ-lille.fr

Lieu(x)

Villeneuve d'Ascq

Campus

Campus Cité scientifique

En savoir plus

Faculté des Sciences et Technologies - FST
https://sciences-technologies.univ-lille.fr/

Informations non contractuelles.
Dernière mise à jour le 15 janvier 2026