



Laboratories of Physics and Chemistry involved in the project « Laboratory of Excellence Chemical and Physical Properties of the Atmosphere » (CaPPA)



• Laboratoire d'Optique Atmosphérique
UMR 8518 CNRS - Université de Lille
Villeneuve d'Ascq : www-loa.univ-lille1.fr



• Laboratoire de PhysicoChimie des Processus de Combustion et de l'Atmosphère
UMR 8522 CNRS - Université de Lille
Villeneuve d'Ascq : pc2a.univ-lille.fr



• Laboratoire de Physique des Lasers, Atomes et Molécules
UMR 8523 CNRS - Université de Lille
Villeneuve d'Ascq : www.phlam.univ-lille1.fr



• Laboratoire de Physico-Chimie de l'Atmosphère
EA 4493 CNRS- Université du littoral Côte d'Opale
Dunkerque : lpca.univ-littoral.fr



• Sciences de l'Atmosphère et Génie de l'Environnement
IMT Lille Douai - Higher School of Engineering and Research Center
Douai : sage.imt-lille-douai.fr/



• Laboratoire de Spectrochimie Infrarouge et Raman
UMR 8516 CNRS - Université de Lille
Villeneuve d'Ascq : lasir.univ-lille1.fr



THIS MSC 2ND YEAR IS SUPPORTED BY THE PROJECT labex-cappa.fr

FURTHER INFORMATION

- master-physique.univ-lille1.fr
- master-pac.univ-lille1.fr/
- www.labex-cappa.fr/master-atmospheric-environment

For further information, please contact the person in charge of the coordination of the MSc 2nd year "Atmospheric Environment" :

• Master of Science in Physics

Prof. P. Dubuisson : philippe.dubuisson@univ-lille.fr
Prof. T. Huet : therese.huet@univ-lille.fr

• Master of Science in Chemistry

Prof. D. Petitprez : denis.petitprez@univ-lille.fr

PRATICAL INFORMATION

The commuter-friendly university campus is located in Villeneuve d'Ascq, only 10 kilometers away from Lille center.

Lille, european capital of culture in 2004, succeeded in preserving its cultural dynamism combined with an affordable way of life.

3 european capitals : Paris, London, Bruxelles are ideally reached by train in 1 hour.

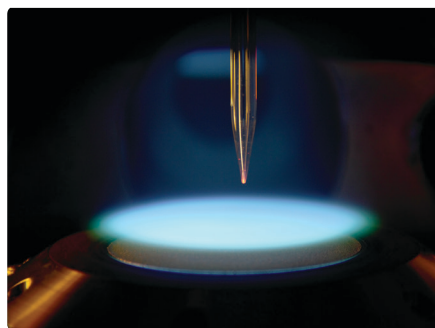
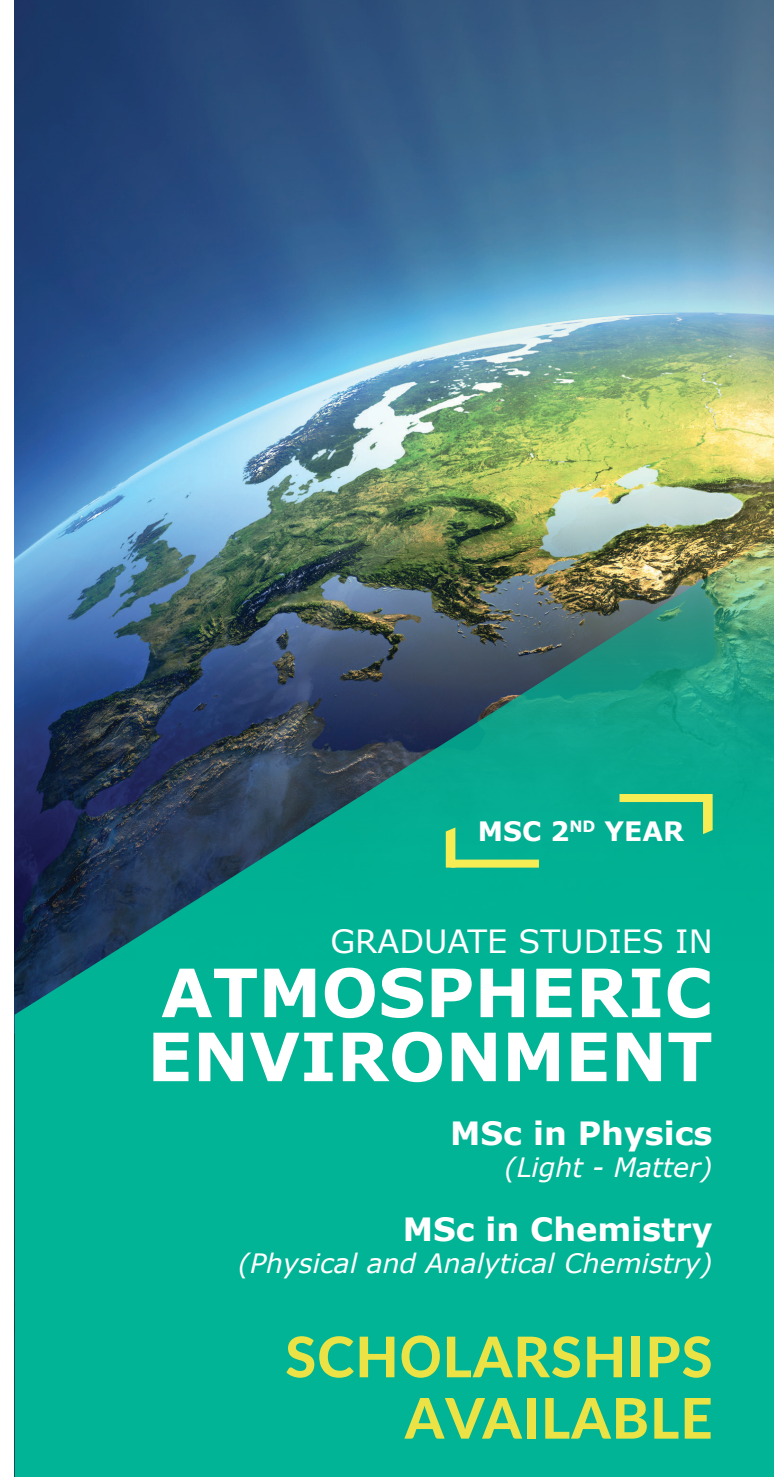


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MSC 2ND YEAR

GRADUATE STUDIES IN ATMOSPHERIC ENVIRONMENT

MSc in Physics
(Light - Matter)

MSc in Chemistry
(Physical and Analytical Chemistry)

SCHOLARSHIPS
AVAILABLE

PRESENTATION & OBJECTIVES

A 1-year program graduating a Master of Science in physics or chemistry of the atmosphere, at the highest level.

- Training is dedicated to students in physics and/or chemistry wishing to follow a specialization in atmospheric sciences to get a strong background in theory and practical work.
- A visit to every laboratory involved in the Labex CaPPA is organized, helping students to identify the research topic they want to specialize in.

The international Master 2 « Atmospheric Environment » is supported by the french Laboratory of Excellence CaPPA which involves large complementary research projects gathering together partner teams with strong scientific qualifications. It leads top-level research activities thanks to the diversity of researchers' disciplines and its promising research topics.

INTERNATIONAL ENVIRONMENT

All courses are delivered in English

First semester : lectures and practical work.

Second semester : focuses on a full-time laboratory research project. A large selection of research projects will be offered to students.

JOB OPPORTUNITIES

- PhD thesis in a research laboratory
- Engineer in air quality, in atmospheric measurements, in remote sensing

prerequisite : MSc 1st year obtained

ORGANIZATION

Physics
2 courses

AE1 - PHY
Electronic structure and vibration-rotation spectroscopy

AE2 - PHY
Radiative transfer in the atmosphere

Chemistry
2 courses

AE1 - CHEM
Advanced analysis methods of atmospheric compounds

AE2 - CHEM
Reactivity in homogeneous and heterogenous phases

Chemical Physics
3 courses

AE3 Physics and chemistry of the atmosphere

AE4 Advanced spectroscopic techniques for environmental analysis

AE5 Observation systems for atmospheric monitoring

AE6 - Advanced English / French

Full-time research project

in a laboratory involved in the labex CaPPA

**MSc DEGREE
IN PHYSICS**

**MSc DEGREE
IN CHEMISTRY**

Each semester corresponds to 30 ECTS.
ECTS: European Credit Transfer and Accumulation System



APPLICATION

This program is open to students in chemistry and/or physics with a validated first-year of Master in Physics, Chemical Physics or Chemistry.

The application forms are available on the website on December 1st and must be returned by March 15th.

Each candidate will receive an answer by the end of March.

- MSc in Chemistry : master-pac.univ-lille1.fr/
- MSc in Physics : master-physique.univ-lille1.fr
- Supporting programme Labex CaPPA : labex-cappa.fr/master-atmospheric-environment

INTERNATIONAL STUDENTS

All students should check if their country has a Campusfrance agency :

- Yes : create as soon as possible and mandatory before April 15th (deadline changes depending on countries). Once international students are selected to follow the master, they will have to go through the Campusfrance procedure. Campusfrance is also in charge of visa issuing. www.campusfrance.org
- No : follow the University of Lille validation process. Documents will be sent by the University of Lille.

SCHOLARSHIPS

For students having the highest academic records :

- Each selected candidate will receive 7 000 € further information on the application form