

## A CONSORTIUM OF 5 UNIVERSITIES

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JAGIELLONIAN UNIVERSITY  
IN KRAKOW

## The Erasmus Mundus Master's Course

« Advanced spectroscopy in chemistry » is a two-year (120 credits) programme within 5 European universities, providing students with a cross cultural education and expertise in state of the art spectroscopic techniques in a broad range of modern chemistry applications.

[www.master-asc.org](http://www.master-asc.org)



# ERASMUS MUNDUS MASTER ADVANCED SPECTROSCOPY IN CHEMISTRY



Funded by the  
Erasmus+ Programme  
of the European Union

BEYOND BORDERS, BEYOND EXPECTATIONS  
[www.master-asc.org](http://www.master-asc.org)

For more information:



## TARGETED STUDENTS

Candidates answering the following criteria :

- Holding a BSc in chemistry, or equivalent education in the field of chemistry, biochemistry, physical chemistry or physics.
- Relevant theoretical knowledge in chemistry or related professional experience.
- Good English skills (minimum score for Toefl paper test 550; IELTS: 6.5; CEF Europass: B2).
- Strong interest in spectroscopic techniques and their wide range of applications
- Motivation to study in a multicultural environment in at least two European universities



## OBJECTIVES

The ASC master course is a programme of excellence which has been awarded the **Erasmus Mundus label** twice since 2008. The five European universities of the ASC network offer state of the art equipment and expertise covering applications of spectroscopic techniques to chemistry in a broad sense (from material sciences, environmental sciences, biomedical/health sciences etc.). Mobility within this network prepares students to become experts and develop international skills towards doctoral studies, and/or professional industrial careers in chemical analysis and characterization of the structure of materials in the fields of molecular synthesis, biology, nanotechnologies, modeling, pharmacy, green chemistry, materials, and sustainable energies.



[www.master-asc.org](http://www.master-asc.org)

## CONTENTS

**Three semesters (30 credits each) of integrated courses**

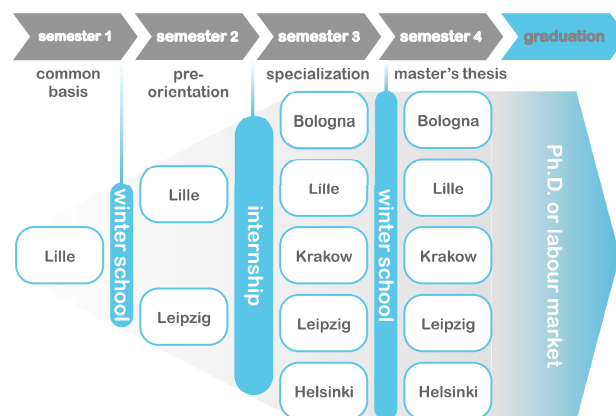
**The first semester** provides all students with a common platform in advanced spectroscopic methods, including magnetic resonance, mass spectrometry, optical spectroscopy and diffraction techniques. **In the second and third semesters**, more specialized instruction is provided with applications in molecular synthesis, material sciences, biology, nanotechnologies, modeling, “green chemistry”, new energy sources. 10 credits are devoted to transferable skills (internship, bibliographical research, project management, norms and regulations in chemistry).

**One semester for the Master thesis** (30 credits) in a research Laboratory

The ASC network offers a broad range of opportunities for internships in research laboratories within the ASC institutions, and associated partners (industry, large research facilities or research institutions). The master thesis can be based on a collaborative project between two institutions.

**A winter school**

A winter school is organized each year in a different location on a chosen topic to deepen one specific field of spectroscopy. This joint social event gathers students, members of the ASC institutions as well as industrial and research associated partners, and ASC alumni.



## PROSPECTS

ASC graduates

- Are experts in chemical analysis, structural characterization, characterization of fast reactions, molecular imaging;
- Are well prepared for R & D careers in industry or research institutes.
- 80 % of them continue onto funded Ph.D. programs.
- Develop high skills in project management, intercultural communication, and are at least bilingual.

## TYPE OF DEGREE

Master of Science with thesis diploma in “Advanced Spectroscopy in Chemistry” accredited in each partner university.

ASC graduates are awarded multiple diplomas from each partner university where they have successfully attended at least one semester (30 credits).

## ASC SCHOLARSHIPS

In order to give the Erasmus Mundus Master's Course a strong external projection, a scholarship scheme for graduate students (a total of 14 000 euros for the two years of the programme) is available for highly qualified candidates.

## APPLICATION

Apply online before March 3rd, 2019: [www.master-asc.org](http://www.master-asc.org)

Contact:

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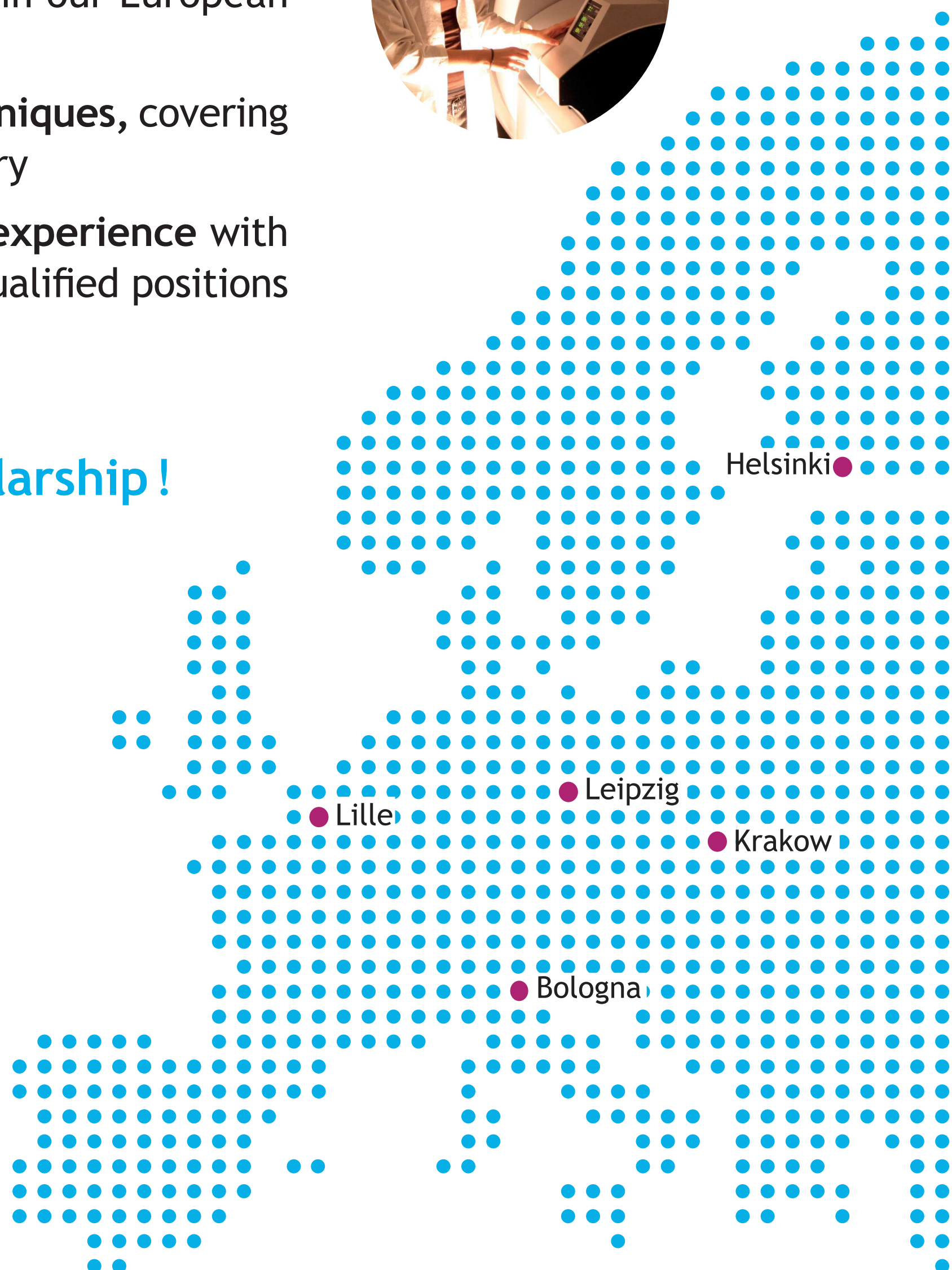


BEYOND BORDERS, BEYOND EXPECTATIONS

# EUROPEAN MASTER ADVANCED SPECTROSCOPY IN CHEMISTRY



- Enjoy a two-year Master program within our European network of 5 partner universities
- Get acquainted with Spectroscopic techniques, covering state-of-the-art applications in chemistry
- Profit from this transcultural learning experience with openings to PhD careers and/or highly qualified positions in industry all over the world
- Get a joint or multiple Master's degree
- **Apply now for a European scholarship!**  
Up to 7 000€ / year  
Deadline: March 3rd, 2019

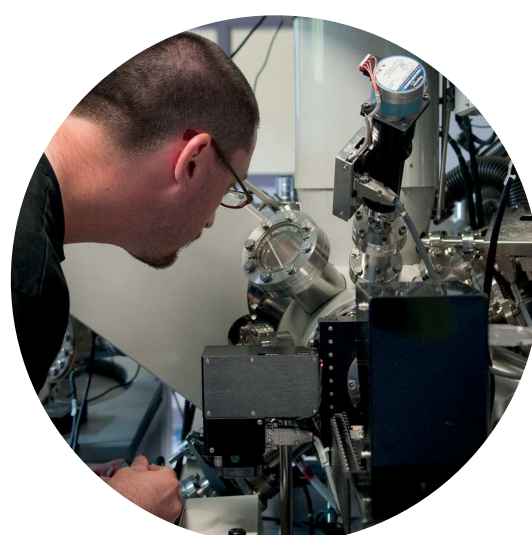


#### Admission criteria :

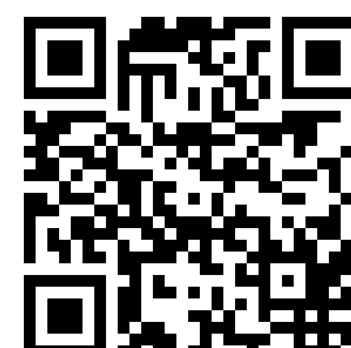
- Eurobachelor in Chemistry or equivalent
- Excellent academic records in Chemistry, Bio-Chemistry or Physics
- Adequate mastery of English language

#### Contact :

master-asc@univ-lille1.fr



For more  
information :



[www.master-asc.org](http://www.master-asc.org)