

Your Erasmus stay at ECPM: **1** or 2 semesters

Developing talents to promote a creative
and responsible chemistry in an
international context

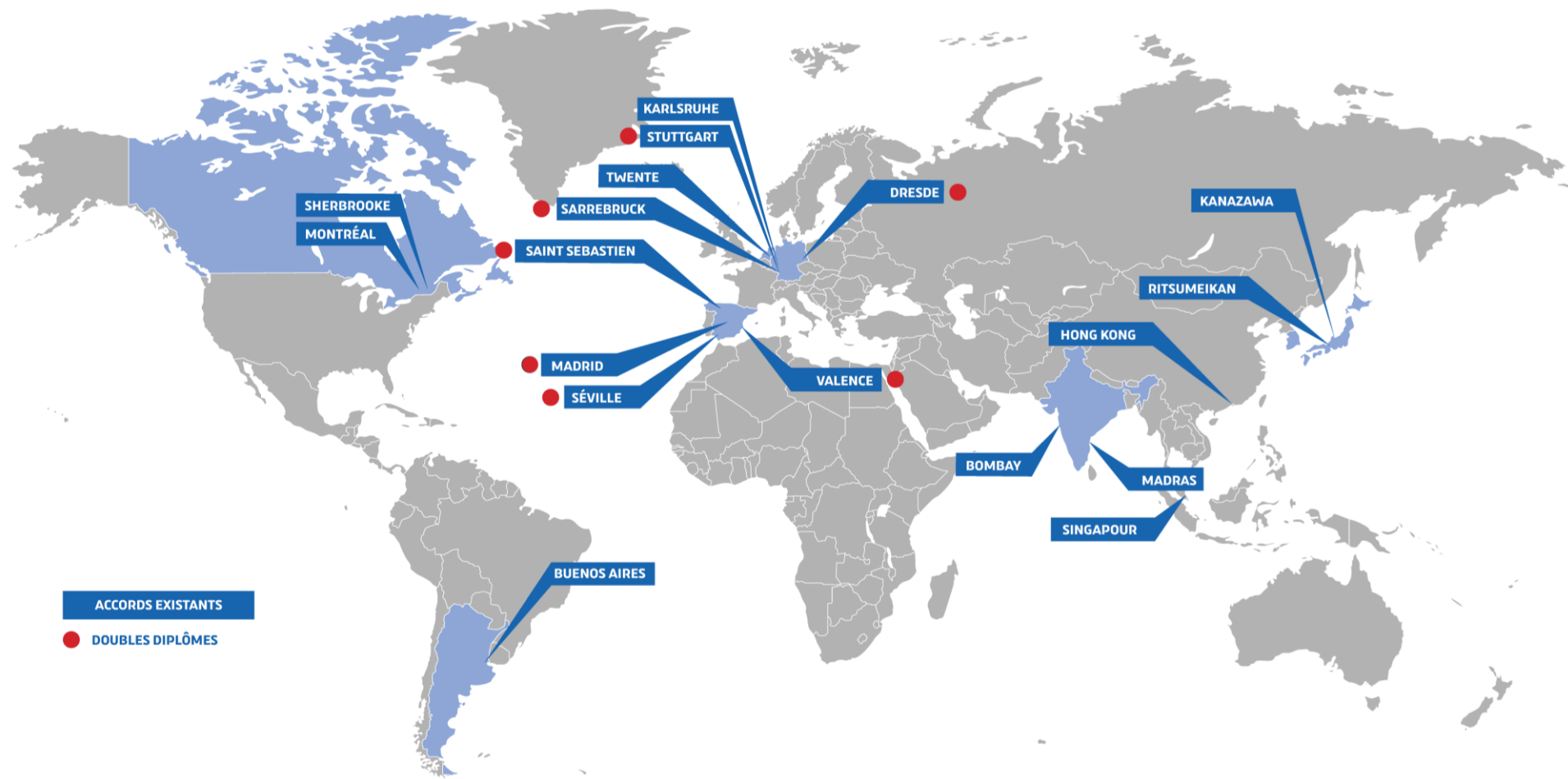


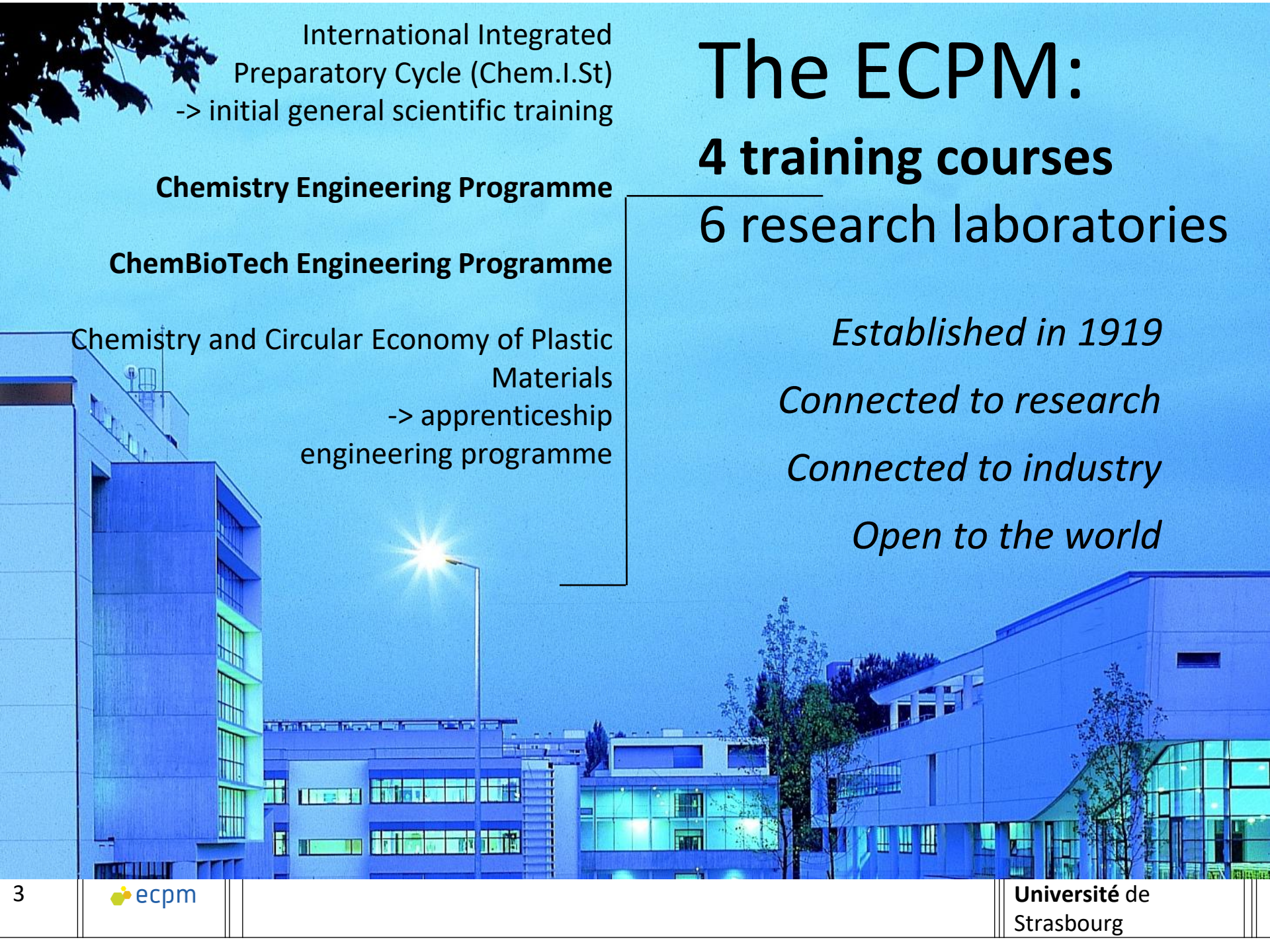
École européenne d'ingénieurs
en **chimie, polymères et matériaux**

Université de Strasbourg



ECPM, open to the world





International Integrated
Preparatory Cycle (Chem.I.St)
-> initial general scientific training

Chemistry Engineering Programme

ChemBioTech Engineering Programme

Chemistry and Circular Economy of Plastic
Materials
-> apprenticeship
engineering programme

The ECPM:

4 training courses

6 research laboratories

Established in 1919

Connected to research

Connected to industry

Open to the world

Your Erasmus stay at ECPM: 1 or 2 semesters

Sept-Jan →

S9: COURSES

to be chosen

amongst our specialisations

- Molecular chemistry
- Analytical sciences
- Polymers engineering
- Functional materials and nanosciences

(-Chemistry & Artificial intelligence)

(-Chemistry & Biotechnology)

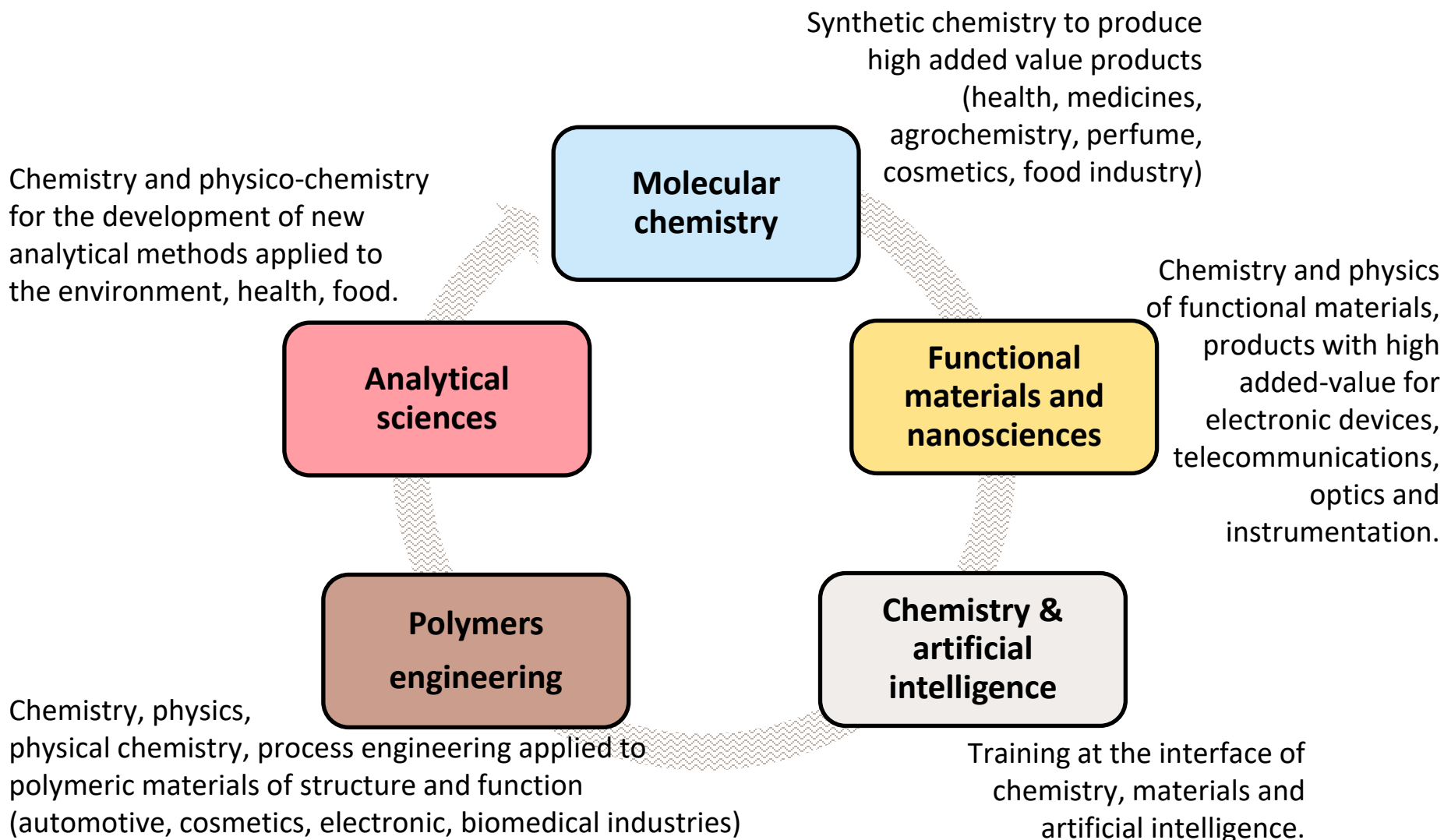
Feb-July →

S10: INTERNSHIP

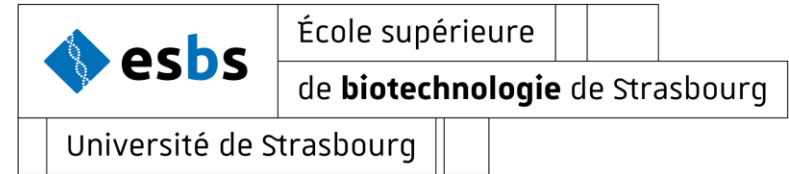
in an ECPM-laboratory

The S10 internship is paid
(if > 8 weeks) ~600 €/month

Chemistry engineering programme: 5 specialisations



ChemBioTech engineering programme



- Started in 2014-2015
- In collaboration with ESBS
(Ecole Supérieure de Biotechnologie de Strasbourg)
- At the interface of chemistry and biotechnology
- Similar organization as the chemistry engineering program, but with no choice of specialization

**Chemistry &
biotechnology**

Interface between chemistry and biotechnology in production, research, innovation and development in the health and environment sectors.

Organisation of S9

- Scientific courses (21 ECTS, fully in English)

Molecular chemistry

Processes for sustainable development (5 ECTS),
Synthetic efficiency through strategic design (5 ECTS),
Chemistry for health (5 ECTS),
Advanced molecular and supramolecular chemistry (6 ECTS)

Analytical sciences

Processes for sustainable development (5 ECTS),
Characterization methods (8 ECTS), Data analysis (2 ECTS),
Analytical Sciences & Environment (3 ECTS),
Analytical Sciences & Health (3 ECTS)

Polymers engineering

Synthesis and design of functional polymer materials (6 ECTS),
From modelling to multiphasic polymer systems (5 ECTS),
Formulation and polymer processing (5 ECTS),
Polymers and environment (5 ECTS)

Functional materials and nanosciences

Materials for health (6 ECTS),
Materials for energy (5 ECTS),
Materials for environment (5 ECTS),
Materials for electronics (5 ECTS)

Organisation of S9

- Languages (4 ECTS): English and French/Spanish
 - Human, social and economic sciences (5 ECTS, in French)
-> can be replaced by a short research internship of 4 weeks (4 or 5 ECTS) or 8 weeks (9 ECTS)
-

Chemistry & biotechnology

- Scientific courses (20 ECTS, mostly in English):
 - Red ChemBioTech (12 ECTS): Structures for customized drugs, Retrosynthesis for pharma and agro Molecules, Chemical protein synthesis, Toxicology, Human & molecular genetics
 - Green ChemBioTech (8 ECTS): Ecotoxicology, Biomass valorization, Bioremediation, Bioplastics, Recycling for biofuels
- Short research internship (7 weeks, 7 ECTS)
- Human, social and economic sciences (3 ECTS, in French)
-> can be replaced by a bibliographical project (3 ECTS)

Department of analytical
sciences (DSA)

Department of inorganic
materials chemistry (DCMI)

Laboratory of molecular
innovation & applications
(LIMA)

Institute for chemistry and
processes for energy, the
environment and health
(ICPEES)

Institut Charles Sadron
-> polymer chemistry

Biomaterials & Bioengineering

The ECPM:

4 training courses

6 research laboratories

*5 associated to CNRS
and 1 to INSERM*

*~280 researchers
~150 PhD students*

Department of analytical sciences (of the Institut Pluridisciplinaire Hubert Curien) | | <https://iphc.cnrs.fr/en/research/>

4 research teams

- Develop new methodologies of separation and analysis for the complete characterization of the structures of molecules
- Study the specific interactions brought into play by ions, molecules and biomolecules in supramolecular complexes.

Department of inorganic materials chemistry (of the Institute of Physics and Chemistry of Materials of Strasbourg) | |

<https://www.ipcms.fr/en/home/>

3 research teams

- Prepare inorganic materials and hybrid materials for applications in the fields of magnetism, optics, biomedicine and photovoltaics.
- Produce inorganic layers combined with organic molecules, grafted nano-oxides, thin-layer oxides or oxides intertwined with polymers.

Laboratory of molecular innovation & applications | |

<https://lima.unistra.fr/en/>

11 research teams

- Develop innovative methods dedicated to molecular synthesis (chirality, glycochemistry, fluorine chemistry, radical chemistry) to validate new therapeutic strategies

Institute for chemistry and processes for energy, the environment and health | | <http://icpees.unistra.fr/en/welcome-to-icpees/>

8 research teams, 3 departments

- Catalysis and materials: electrochemistry and energy conversion ; photocatalysis and photoconversion ; energy & fuels; nanomaterials, catalysis & interfaces
- Molecular chemistry & analytics: organic chemistry for materials, biology and optics ; physical-chemistry of the atmosphere
- Polymer engineering: functional polymers & nanofabrication ; biobased and or biodegradable polymers

Institut Charles Sadron (polymer materials and self-assembled systems) | |

<http://www.ics-cnrs.unistra.fr/index-switchlang-en.html>

7 research teams

- Self assembled systems
- Soft matter and interfaces
- Functional macromolecular materials
- Functional aspects of polymer sciences

Unité INSERM 1121 > Biomaterials & bioengineering (INSERM=National Institute of Health and Medical Research) | |

<https://us.biomaterials-bioengineering.com/>

5 research teams

- Personalised & intelligent biomaterials
- Nanobiomaterials: Theranostic biological nanoparticles
- New implants

The ECPM –
University of
Strasbourg

welcomes
international
students

International University House & ECPM international office

- Assistance on administrative issues
 - Accommodation: room/apartment for each incoming international student
 - French courses
 - Integration programs for exchange students at ECPM and at university level
 - Welcome day
 - Cultural activities
- ... <https://www.unistra.fr/etudiant-chercheur-etrangeurs/the-international-university-house> <http://ecpm.unistra.fr/en/international/studying-at-the-ecpm/>

As a student of the University of Strasbourg, you may benefit from

- University Health Service
- Food & drink (lunch/diner: 3.30 €)
- Culture (free entry to museums, discount cinema tickets preferential rates for cultural events and festivals)
- Sports (60 different activities)
- Learning resources (computing services, libraries ...)
- ...



City of Strasbourg

HJJJh

- 500.000 inhabitants
- Border with Germany
- At the heart of Europe
 - 1h45 -> Paris
 - 2h30 -> Francfort
 - 1h15 -> Basel

Strasbourg, an easy living city

A pioneer city in terms of respect of the environnement

The city of bicycles, trams and pedestrians



© J. Dorkel



© Tschapp



LA PETITE FRANCE

© Philippe de Rexel



CITY CENTRE

©Jean Valera



EU-PARLIAMENT

© Sébastien Bozon | AFP



MAGNOLIA TREES

© Martin Savail / Pokaa



VOSGES MOUNTAINS AND VINEYARDS

© Vincent Schneider



SKIING IN THE VOSGES MOUNTAINS

©Webcam gerardmer-ski

Thank you for your attention!

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