Faculty of Chemistry and Chemical Technology

- Established in 1994; before part of the Faculty of Natural Science and Technology
- Approx. 1500 students enroll per academic year
- More than 5200 graduates since 1923
UL FKKT is committed to basic, applied and development research, trying to achieve excellence and the highest quality standards in the areas of chemistry, biochemistry, chemical engineering, and occupational safety.

- Chair of Analytical Chemistry
- Chair of Inorganic Chemistry
- Chair of Biochemistry
- Chair of Physical Chemistry
- Chair of Organic Chemistry
- Chair of Chemical Process, Environmental and Biochemical Engineering
- Chair of Materials and Polymer Engineering
- Chair of Occupational, Process and Fire Safety
Chemistry is all around us

The better we know chemistry, the better we know our world.
Why study at UL FKKT?

• Development of practical skills necessary for individual and team work in the laboratory,

• Excellent knowledge in the fields of chemistry, biochemistry, chemical engineering, technical safety and chemical technology,

• Skills in computational analyses and process modelling,

• Development of general skills important in various fields of work (problem solving, writing, presenting, etc.)
Study programmes

Professional level

1st Cycle Programmes

2nd Cycle Programmes

Doctoral Programme

University level
Study programmes – 1\textsuperscript{st} cycle

FIRST CYCLE STUDY PROGRAMMES

- UNIVERSITY STUDY PROGRAMMES
  - CHEMISTRY
  - BIOCHEMISTRY
  - CHEMICAL ENGINEERING
- TECHNICAL SAFETY
- CHEMICAL TECHNOLOGY

PROFESSIONAL STUDY PROGRAMME
Chemistry is a central natural science that studies matter; its composition, structure, properties, and material changes so as to understand and use them.

Biochemistry represents a link between chemistry and biology: it explains life processes at molecular level, researches the structure and activity of biological molecules, and represents the basis for understanding life.
Chemical Engineering is a fundamental technical discipline which enables the rational implementation of chemical and biochemical processes on a larger scale for the production of useful substances, their recycling or less detrimental decomposition.

Technical Safety is becoming one of the basic elements of quality and reliability in production processes, while risk assessment and monitoring are an essential part of every modern production facility.
University 1\textsuperscript{st} cycle programmes at UL FKKT

- 3 years - 180 ECTS
- 1\textsuperscript{st} year
  - General natural sciences courses (mathematics, physics, general chemistry)
  - Basic specialist courses
- 2\textsuperscript{nd} and 3\textsuperscript{rd} years – specialist programme-specific courses
- 3\textsuperscript{rd} year – bachelor thesis – experimental work (15 ECTS)
- Altogether about 10 % elective courses
Chemical Technology represents a link between natural and mathematical sciences and engineering sciences. One of the characteristics of this programme is that it focuses on practical work of students in a wide range of positions in the industry, research institutions, administrative bodies, and elsewhere.

- 3 years - 180 ECTS
- More emphasis on practical courses
- Practical training
- Experimental diploma work (15 ECTS)
- Students can continue with 2nd cycle education with additional exams
Study programmes – 2nd cycle

SECOND CYCLE STUDY PROGRAMMES

CHEMISTRY
BIOCHEMISTRY
CHEMICAL ENGINEERING
TECHNICAL SAFETY
CHEMICAL EDUCATION

Erasmus Mundus Joint Master Degree Programme „Materials for Energy Storage and Conversion +“ (MESC+)
Double Degree Programme „Chemoinformatics“ with University of Strasbourg
Study programmes – 2\textsuperscript{nd} cycle

- 2 years - 120 ECTS
- About 40\% (50 ECTS) dedicated to individual research work (masters' thesis)
- About 20\% elective courses

- Chemical education can be studied in parallel with another programme
Study programmes – 3rd cycle

DOCTORAL STUDY PROGRAMMES

FKKT

INTERDISCIPLINARY PROGRAMMES

CHEMICAL SCIENCES

BIOMEDICINE
  Biochemistry & Molecular Biology

ENVIRONMENTAL PROTECTION

BIOSCIENCES

MATERIALS SCIENCE AND ENGINEERING

Univerza v Ljubljani
Fakulteta za kemijo in kemijsko tehnologijo

Erasmus Mundus Joint Master Degree Programme “Materials for Energy Storage and Conversion” (MESC+) with University of Strasbourg
Study programmes – 3rd cycle

- 4 years - 240 ECTS
- Obtain the PhD title
- Focused heavily on individual research work
- Tuition fees apply for all students (16,500 EUR/4 years for Chemical Sciences)
- Students need an eligible supervisor before enrolment
- Does not include employment (scholarships possible)
- Students need to publish a first author scientific paper to submit the PhD thesis
Research work at UL FKKT

- **Basic research** (advancing the state-of-the-art in natural sciences and technology)
- **Applied research** (solving specific problems in collaboration with industrial partners)
- 30+ ongoing international and national research projects
- 60+ industrial projects in 2021
- 200+ scientific papers in 2021
- 14 patents approved in last 5 years (+4 pending approval)
- 50,000 citations in the last 10 years
- State-of-the-art research equipment
  - Chairs
  - Centre for Research Infrastructure
Employment possibilities after graduation

• Professions from the fields of chemistry and material sciences are projected to be among the top 5 most sought-after professions in the next 5 – 10 years.

• Large industry – chemical, pharmaceutical, etc.,
• Small scale companies, e.g. biotechnology, etc.,
• Academic career (universities, research institutes),
• Healthcare (diagnostic laboratories, etc.),
• Agencies (environmental, safety, forensics, etc.),
• Specialists in marketing and technical support,
• etc.
Student life at UL FKKT

**Student council**
- Link between students and faculty members,
- Represent students in faculty bodies,
- Information on student rights and obligations,
- Tutoring,
- Projects: „Brucovanje“, „Tehnologijada“, Charity days

**Student organisation**
- Collaboration with ŠS FKKT
- Extra-curricular activities in the fields of culture, publishing, education, sports, tourism and international collaboration.
Tutoring at UL FKKT

- Systematic guidance of students throughout their time at the faculty,
- Teacher tutors guide students in career choices,
- Student tutors guide younger students in everyday matters of student life
  - Introductory tutoring,
  - Advanced tutoring,
- Student tutors for foreign students,
- Student tutors for Erasmus exchange students.

Tutoring website available at:
Other activities at UL FKKT

- Summer school of chemical sciences,
- Cutting Edge Conference,
- Chemical Science Days,
- Informativa employment fair,
- Welcome reception for 1st year students,
- Science festival,
- Zotka’s talents competition,
- Researchers’ Night,
- University indoor soccer championship.
CUTTING EDGE
INTERNATIONAL SCIENTIFIC CONFERENCE

POSTER SESSION
LECTURES
Questions welcome!

More information available on the faculty’s website https://www.fkkt.uni-lj.si.

Also via e-mail at referat@fkkt.uni-lj.si

and via Keystone.