DOCUMENT

Study programme	ABCH-DoE15 - Applied Analytical and Bioanalytical Chemistry
Study	Grade of study - III. - doctoral, study form - external, study type - Single degree study
Document type:	Description of the study programme
The name of the university	University of Ss. Cyril and Methodius in Trnava
The seat of the university	Nám. J. Herdu 2, 91701 Trnava
The name of the faculty	Faculty of Natural Sciences
The seat of the faculty	Nám. J. Herdu 2, 91701 Trnava

Institution body for approving the study programme:

The Board for Internal System of Quality Assurance at UCM

Date of the study programme approval or the study programme modification:

30.11.2018

Date of the latest change in the study programme description:

02.08.2022

1. - Basic information about the study programme

a) - Name of the study program and its number according to the register of study programmes.

Applied analytical and bioanalytical chemistry 107125 (EN)

b) - Degree of higher education and ISCED-F education degree code.

1 S 864

c) - Place(s) of delivery of the study programme.

Trnava

d) - Name and number of the field of study in which higher education is obtained by completing the study programme, or a combination of two fields of study in which higher education is obtained by completing the study programme, ISCED-F codes of the field/fields.

Chemistry - 0531

e) - Type of the study programme: academically oriented, professionally oriented; translation, translation combination study programme (listing the specializations); teaching, teaching combination study programme (listing the specializations); artistic, engineering, doctoral, preparation for regulated profession, joint study programme, interdisciplinary studies.

Academic-oriented learning

Awarded academic degree after the name

PhD.

g) - Form of study.

external

h) - In the case of joint study programmes, cooperating institutions and the range of study obligations the student fulfills at each of the given institutions (§ 54a of the Act on Higher Education Institutions).

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i) - Language or languages in which the study programme is delivered.

1. English language 2. Slovak language

j) - Standard length of the study expressed in academic years.

5 years

k) - Capacity of the study programme (planned number of students), the actual number of applicants and students.

Planned number 3 Actual number of applicants -

2. - Graduate profile and learning objectives

a) - The institution defines the learning objectives of the study programme such as student's abilities at the time of completion of the programme and the main learning outcomes.

The study program encourages:

- principles of scientific work, its ethical and social aspects, scientific problem formulation, presentation, and publication of scientific results, provides the necessary knowledge for the development of scientific and study field, emphasizes the link research
- development - application and evaluation of own contribution to practice.
- creative activity of the graduate in the field of analytical chemistry and chemical analysis.
- The graduate is fluent in an active foreign language (English), can work in a team, forecast developments in their field.
- As part of the study, they deepens the knowledge of analytical and bioanalytical chemistry necessary for the development of analytical methods and procedures, as well as for the development of analytical chemistry instrumentation, learns the principles of scientific work, forms of processing and presentation of results. Gains experimental skills and experience in working with modern devices.
- They will learn to search, process, and interpret information from available sources (scientific databases, professional publications). They can process, publish, and present the obtained results at scientific events.
- Students are also involved in solving scientific projects, which develops and deepens the principles of scientific work, solving complex problems, analytical and synthetic thinking, a sense of teamwork.

Objectives_and_outcomes_of_UCM_PhD._ Applied analytical and bioanalytical chemistry

b) - The institution indicates the professions for which the graduate is prepared at the time of completion and the potential of the study programme from the point of view of graduate's employability.

The graduate of the study program is able to work independently and creatively scientifically in various areas of application of analytical chemistry, as well as in frontier disciplines related to analytical chemistry, with priority given to analytical orientation in biological sciences related to chemistry, such as biochemistry, pharmaceutical and clinical chemistry, laboratory medicine and biotechnology.
The graduate masters scientific approaches and research methodology in selected application areas of analytical chemistry, obtains solutions using separation, electrochemical, spectral, magnetochemical, or other instrumental methods (nuclear, thermal, etc.). He is also able to design, manage and objectively evaluate problem-oriented experiments focused on serious problems of current social practice.
From an analytical point of view, it is usually more deeply specialized in some problem areas, such as analysis of components in multicomponent matrices, trace analysis, analysis of harmful substances in the environment, characterization and prediction of the properties of new materials, etc.
He contributes to obtaining decisions in areas beyond analytical chemistry.
He also works in various other areas of social practice, in quality assurance and management, in environmental monitoring, in pharmaceutical chemistry, in clinical chemistry and laboratory medicine, in food and elsewhere.
He has basic managerial skills, focused on the application of applied analytical chemistry and bioanalytical chemistry in practice, is able to lead a research team, plan team tasks and also has knowledge of relevant environmental, economic, legal and ethical aspects.
Based on the acquired knowledge, the graduate of the study program is also able to teach specialized chemical subjects at the university.
https://kchem.fpv.ucm.sk/#/studium/doktorandske

Occupations from profesia.sk:
researcher,
laboratory diagnostician, product specialist,
chemical production operator, raw material intake worker,
production technician,
quality controller,
research and development specialist, technologist,
sanitation and hygiene specialist.

Specific application in companies:
• PRAGOLAB s.r.o.- sales, service and consulting of laboratory equipment
• Ministry of Economy of the Slovak Republic - consulting activities
• BIOTECH s.r.o.- sale of laboratory equipment
• Zentiva, a.s. Bratislava- production of drugs
• Saneca Pharmaceutical, a.s. Hlohovec - production of drugs
• State Institute for Drug Control Bratislava - drug registration
• ALAGENEX life s.r.o.- sales and distribution of chemical products
• UNI - TECH, s.r.o. Púchov - production of tires
• Faculty of Medicine, UK, Bratislava - scientific research and pedagogical activities
• Eurofins Bel / Novamann s.r.o. Bratislava - laboratory tests in the field of nutritional properties of products
• FPV UCM Trnava - scientific research and pedagogical activities
• PF Jan Evangelista Purkyně University Ústí nad Labem - scientific research and pedagogical activities
• Slovak Academy of Sciences - drug research
• Slovak Medical University in Bratislava - scientific research and pedagogical activities
• UMB in Banská Bystrica - scientific research and pedagogical activities
• Faculty of Pharmacy, UK in Bratislava - scientific research and pedagogical activities
• Institute of Oncology in Bratislava - control activity

c) - Relevant external stakeholders who have provided the statement or a favorable opinion on the compliance of the acquired qualification with the sector-specific requirements for the profession.

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3. - Employability

a) - Evaluation of the study programme graduates employability.

Graduates of the Applied Analytical and Bioanalytical Chemistry are employed throughout Slovakia, such as:
Researchers: Institute of Oncology in Bratislava, Slovak Academy of Sciences, Ministry of Economy of the Slovak Republic, State Institute for Drug Control Bratislava.
Scientific and pedagogical staff at universities: Faculty of Medicine, UK in Bratislava, FPV UCM Trnava, PF Jan Evangelista Purkyně University in Ústí nad Labem, Slovak Medical University in Bratislava, UMB in Banská Bystrica, Faculty of Pharmacy, UK in Bratislava, TU in Trnava.
Specialists in companies: PRAGOLAB s.r.o.- sales, service consulting of laboratory equipment, BIOTECH s.r.o.- sales of laboratory equipment, Zentiva, a.s. Bratislava and Saneca Pharmaceutical, a.s. Hlohovec- production of drugs, ALAGENEX life s.r.o.- sale and distribution of chemical products, UNI - TECH, s.r.o. Púchov- production of tires, Eurofins Bel / Novamann s.r.o. Bratislava - laboratory tests.

b) - If applicable, indicate the successful graduates of the study programme.

Assoc. Prof. RNDr. Cyril Rajnák, PhD., Associate Professor in Analytical Chemistry
RNDr. Filip Varga, PhD., Ministry of Economy of the Slovak Republic
RNDr. Denisa Partelová, PhD., ŠÚKL, Bratislava
Assoc. prof. RNDr. Vladimír Frišták, PhD., Assistant professor TU Trnava

c) - Evaluation of the study programme quality by employers (feedback).

The selected employers of the graduates of the study program commented positively on the designed study program.
VUCHT a.s.
EUROFINS s.r.o.
A1SYNTH s.r.o.
Attachment_04_report_on_the_evaluation_of_SP_by_an_interested_part-time

4. - Structure and content of the study programme

a) - The institution describes the rules for the design of study plans within the study programme.

The process of creating, modifying, and approving study programs is governed exclusively by the standards for the SAAHE SR study program and the university guidelines created based on the standard for the internal quality assurance system.

https://www.ucm.sk/docs/legislativa/2023/2023-36-Smernica_o_vytvarani_a_uprave_studijnych_programov.pdf
https://www.ucm.sk/docs/legislativa/2022/predpisy_-_en/2022-23_vnutorny_system_zabezpecovania_kvality_AJ.pdf

The main topics are fulfilled as follows:
1.-2. year of study: theoretical principles of analytical chemistry and professional English for doctoral students and compulsory elective courses that suitably cover the fields of analytical and bioanalytical chemistry (advanced methods of molecular spectroscopy, separation methods, electroanalytical methods, advances in bioanalytical chemistry, nuclear analytical methods, chemometry and experimental methodology, magnetochemical methods, bioanalytical procedures in clinical laboratories).
Within the study and pedagogical-educational activities, the student completes selected activities for which he/she obtains credits for passing the compulsory subject, passing the compulsory optional subject and own pedagogical activity of doctoral student I-VII, leading the final bachelor's thesis, elaboration of the final thesis (resp. authorship) of created and published teaching material, an independent study of professional literature according to the supervisor's recommendation.
The creative activity is suitably set up and consists of the following parts publication in a scientific journal registered in the Web of Science databases, included in Q1 in JCF IF (1st quarter of the Impact Factor value in the Journal Citation Report), publication in a scientific journal registered in the Web of Science databases included in Q2 in JCF IF (2nd quarter of the Impact Factor value in the Journal Citation Report), publication in a scientific journal registered in the Web of Science databases included in Q3 in JCF IF (3rd quarter of the Impact Factor value in the Journal Citation Report)), publication in a scientific journal registered in the Web of Science databases listed in Q4 in JCF IF (4th quarter of the Impact Factor value in the Journal Citation Report), publication in a scientific journal registered in the Web of Science or Scopus databases with Q1-Q4 in JCF IF, publication in a peer-reviewed proceedings, active participation in a foreign scientific event (article in proceedings), active participation in a domestic scientific event (an article in the proceedings), member of the research team on a foreign scientific project, member of the research team on a domestic scientific project (e.g. APVV, VEGA, KEGA, OPVaI), response to publication output registered in the Web of Science or Scopus databases (must not be autocitation, must be an FNS UCM affiliation), obtaining an internal grant, mastering a new experimental methodology and presenting at a seminar.

b) - The institution compiles the recommended study plans for individual study paths.

Recommended study plan_PhD._ Applied analytical and bioanalytical chemistry
If the study programme is approved, it is available at:
http://fpv.ucm.sk/en/study/study-programs-provided-in-english.html

c) - The study plan generally states:

Attachment_11_Subject information sheets_PhD._ Applied analytical and bioanalytical chemistry

Study and pedagogical-educational activity:
1. Own Pedagogical Activity of Doctoral Student I-VII
2. Supervision of the Final Bachelor's Thesis
3. Elaboration of an Opinion for the Final Work of the Bachelor's Study
4. Co-authorship (or Authorship) of Created and Published Teaching Material
5. Independent Study of Literature according to the Recommendation of the Supervisor I, II

Compulsory subjects:
6. Dissertation Exam
7. Dissertation Defense
8. Professional English for PhD students
9. Theoretical Principles of Analytical Chemistry

Compulsory elective subjects:
10. Advanced Methods of Molecular Spectroscopy
11. Separation Methods
12. Electroanalytical Methods
13. Advances in Bioanalytical Chemistry
14. Nuclear Analytical Methods
15. Chemometry and Experimental Methodology
16. Magnetochemical Methods
17. Bioanalytical Procedures in Clinical Laboratories

Creative activity
18. Publication in a Scientific Journal Registered in the Web of Science Databases Included in Q1 or Q2 in JCF IF (1st or 2nd quarter of the impact factor value in the Journal Citation Report)
19. Publication in a Scientific Journal Registered in the Web of Science Databases Included in Q1-Q4 in JCF IF (1st-4th quarter of the impact factor value in the Journal Citation Report)
20. Other Creative activity

profile subjects are marked in bold

If the study programme is approved, it is available at:
http://fpv.ucm.sk/en/study/study-programs-provided-in-english.html

d) - The institution states the number of credits, the achievement of which is a condition for proper completion of studies and other requirements that the student must meet within the study programme and for its proper completion, including the requirements for state examinations, rules for re-study and rules for the extension, interruption of study.

The composition of the commission for state examinations is in accordance with the Higher Education Act, pursuant to Section 63, Paragraph 3 of Act no. 131/2002 Coll. on Higher Education Institutions, and with the Study Regulations of the University of Ss. Cyril and Methodius, which was approved by the UCM Academic Senate on June 10, 2013. The State Examination Commission has at least 4 members. The Commission shall be able to act if the chairman of the commission and at least two other members are present. University teachers, acting as professors and associate professors and other experts, approved by the relevant scientific council, have the right to take the state exam in doctoral and master's degree programs. At least two members of the commission shall be university teachers in the capacity of associate professor or professor. In addition to university teachers working as associate professors or professors and other practitioners approved by the Scientific Council, assistant professors with a third-degree university degree also have the right to take state examinations in bachelor's degree programs. At least one member of the commission must serve as an associate professor or professor. The chairman of the commission for state examinations is appointed by the dean from among professors and associate professors at universities. The course of the state examination is managed, and the chairman of the commission is responsible for the activities of the commission.

e) - For individual study plans, the institution states the requirements for completing the individual parts of the study programme and the student's progress within the study programme in the given structure:

50 credits for the study part,
35 credits for the pedagogical part,
95 credits for the scientific-research part, 60 credits for the state exam**.**

Recommended study plan_PhD _Applied analytical and bioanalytical chemistry_part-time

f) - The institution describes the rules for verification of learning outcomes, students assessment and the possibilities of appealing against the assessment.

The rules for the verification of educational outcomes and the evaluation of students and the possibilities of corrective procedures against this evaluation are clearly described in the study regulations of the university, which the Faculty of Natural Sciences follows.
Študijný poriadok UCM
https://www.ucm.sk/docs/legislativa/2022/predpisy_-_en/2020-8_Studijny_poriadok_UCM_AJ.pdf

g) - Conditions for recognition of studies or a part of studies.

Students of FNV UCM may apply to the Dean of the Faculty of FNV UCM, with the prior approval of the Head of the Institute of FNS UCM, for recognition of the subjects completed during their previous studies at the same level of study at FNS UCM or at another higher education institution. The conditions and procedure are governed by:
Directive on the recognition of completed subjects
(https://www.ucm.sk/docs/legislativa/2022/predpisy_-_en/2021-17_Smernica_o_uznavani_absolvovanych_predmetov_AJ.pdf)
Directive on the recognition of educational documents at UCM
(https://www.ucm.sk/docs/legislativa/2022/predpisy_-_en/2022-7_Smernica_o_uznavani_dokladov_o_vzdelani_na_UCM_AJ.pdf)

h) - The institution states the topics of final theses of the study programme (or a link to the list).

http://fpv.ucm.sk/en/study/entrance-examinations-for-doctoral-studies-in-2022-2023.html

i) - The institution describes or refers to:

The proposals for the final theses are published by the training institutes through the academic information system (hereinafter referred to as "AIS") during the winter semester, no later than 31 January of the relevant academic year. The listed topics for the applied analytical and bioanalytical chemistry study program are published on the faculty's website
http://fpv.ucm.sk/en/study/entrance-examinations-for-doctoral-studies-in-2022-2023.html
The final thesis must be prepared according to the Rector's Directive on the requisites of final theses, their bibliographic registration, control of originality, storage, and access to the University of Ss. Cyril and Methodius in Trnava
https://www.ucm.sk/docs/legislativa/2022/predpisy_-_en/2021-31_Smernica_o_nalezitostiach_zaverecnych_prac,_ich_bibliografickej_registracii,_uchovavani_a_spristupnovani_na_UCM_AJ.pdf

and by the Study Regulations of the University of Ss. Cyril and Methodius in Trnava, which was developed by § 15, para. 1, letter b of Act 131/2002 Coll. on Higher Education.
https://www.ucm.sk/docs/legislativa/2022/predpisy_-_en/2020-8_Studijny_poriadok_UCM_AJ.pdf

The final thesis is a dissertation thesis. Through the dissertation, the student demonstrates the ability to work creatively in the field of study in which he completed the study program. The dissertation will be prepared by the student under the guidance of the supervisor by the internal regulations of UCM and the relevant faculty. The dissertation is assessed by a pair of opponents. The supervisor and the opponents will prepare a written report on the dissertation. The student has the right to one copy of the supervisor's and opponents' report no later than three days before the dissertation defense. The dissertation is a state exam. The commission for state examinations negotiates the result of the dissertation defense by a closed vote.
In the case of plagiarism, the Plagiarism Directive shall apply:
https://www.ucm.sk/docs/legislativa/2022/predpisy_-_en/2019-9_Smernica_o_plagiatorstve_AJ.pdf

- opportunities and procedures for participation in student mobility,
ANS students who are interested in a stay abroad can take advantage of the wide range of mobilities through the Erasmus + program or they can complete a stay abroad based on international bilateral agreements or take advantage of opportunities under other mobility and scholarship schemes and programs. ANS UCM students apply to their department coordinator in the form of a written application, which contains the contact details of the applicant and a brief justification of the study stay, prospective benefits. The system of allocating places within the ERASMUS + program takes place in the form of a selection procedure at the faculty. The application deadline, the date of the selection procedure and the selection criteria for outgoing students are published on the faculty's website.
http://fpv.ucm.sk/sk/o-nas/medzinarodne-vztahy.html

All information about study stays, the Erasmus + project, student mobility, the pedagogical and non-pedagogical staff is also on a separate page: https://www.ucm.sk/en/erasmus-plus/
The faculty, based on a transparent selection procedure, according to proposals from the institutes of FNS UCM, nominates students for mobility under the valid between departmental bilateral agreements.

- rules for adherence to academic ethics and rules for drawing consequences,
The rules are determined by the UCM Code of Ethics in Trnava. The Code of Ethics is binding for all members of the academic community, pedagogical and non-pedagogical employees of UCM.
https://www.ucm.sk/docs/legislativa/2022/predpisy_-_en/2021-7_Eticky_kodex_studentov_AJ.pdf
https://www.ucm.sk/docs/legislativa/2022/predpisy_-_en/2021-13_Rokovaci_poriadok_Etickej_komisie_AJ.pdf
https://www.ucm.sk/docs/legislativa/2022/predpisy_-_en/2021-14_Smernica_o_vybavovani_staznosti_na_UCM_AJ.pdf

https://www.ucm.sk/docs/legislativa/2022/predpisy_-_en/2021-15_Smernica_o_vybavovani_otazok,_vyjadreni,_nazorov,_ziadosti,_podnetov_a_navrhov_na_UCM_AJ.pdf

- procedures applicable to students with special needs,
The Counselling and Legal Centre for Students from Socially Disadvantaged Backgrounds and Students with Specific Needs is a university-wide special workplace focused on supporting students from socially disadvantaged backgrounds and students with specific needs in terms of the principles of inclusiveness and creating conditions for successful completion of higher education. The mission of this centre is to provide basic legal advisory services to UCM students from socially disadvantaged backgrounds and students with specific needs.
For FNS UCM is the responsible vice-dean for education: RNDr. Adamcová, PhD. (vanda.adamcova@ucm.sk)
For UCM s the responsible person: PhDr. Jana Polakovičová, MBA (jana.polakovicova@ucm.sk)
https://www.ucm.sk/sk/centrum-podpory-studentov-so-specifickymi-potrebami-01/
https://www.ucm.sk/docs/legislativa/2022/predpisy_-_en/2022-2_Smernica_o_podpore_vzdelavania_a_socialneho_zabezpecenia_studentov_UCM,_ktori_su_v_nudzi_AJ.pdf

- procedures for filing complaints and appeals by students.
The submission of suggestions by students is carried out through Black Box - for your opinions, comments and questions and follows the university guidelines
https://www.ucm.sk/docs/legislativa/2022/predpisy_-_en/2021-15_Smernica_o_vybavovani_otazok,_vyjadreni,_nazorov,_ziadosti,_podnetov_a_navrhov_na_UCM_AJ.pdf
The link to enter the Black Box is on the UCM website https://www.ucm.sk/sk/black-box/

5. - Course information sheets of the study programme

In the structure according to Decree no. 614/2002 Coll.

List of information sheets_PhD_Applied analytical and bioanalytical chemistry_part-time
If the study programme is approved, it is available at:
http://fpv.ucm.sk/en/study/study-programs-provided-in-english.html

6. - Current academic year plan and current schedule

(or hyperlink).

http://fpv.ucm.sk/en/study/admission-procedure.html
Student timetables are published in the Academic Information System (AIS).

7. - Persons responsible for the study programme

a) - A person responsible for the delivery, development, and quality of the study programme (indicating the position and contact details).

prof. RNDr. Ján Titiš, PhD.
jan.titis@ucm.sk
https://kchem.fpv.ucm.sk/#/o-katedre/pracovnici-katedry

b) - List of persons responsible for the profile courses of the study programme with the assignment to the course and provided with a link to the central Register of university staff and with contact details (they may also be listed in the study plan).

Prof. RNDr. Ján Titiš, PhD. (jan.titis@ucm.sk)
Publication in a Scientific Journal Registered in the Web of Science Databases Included in Q1 or O2 in JCF IF
Publication in a Scientific Journal Registered in the Web of Science Databases Included in Q1 – O4 in JCF IF
Independent Study of Literature according to the Recommendation of the Supervisor
Advanced Methods of Molecular Spectroscopy

Assoc. prof. Ing. Andrea Purdešová, PhD. (andrea.purdesova@ucm.sk)
Bioanalytical Procedures in Clinical Laboratories

Assoc. Prof. Ing. Jozef Sokol, CSc. (jozef.sokol@ucm.sk)
Theoretical Principles of Analytical Chemistry
Separation Methods
Advances in Bioanalytical Chemistry

Assoc. Prof. RNDr. Cyril Rajnák, PhD. (cyril.rajnak@ucm.sk)
Magnetochemical Methods

Assoc. Prof. RNDr. Miroslav Hornik, PhD. (miroslav.hornik@ucm.sk)
Nuclear Analytical Methods

c) - Reference to the research/art/teacher profiles of persons responsible for the profile courses of the study programme.

Scientific and pedagogical characteristics of persons providing profile subjects are:
https://kchem.fpv.ucm.sk/#/o-katedre/pracovnici-katedry

And also available (up-to-date) in the Academic Information System (AIS). https://ais2.ucm.sk/ais/start.do

d) - List of teachers of the study programme with the assignment to the course and provided with a link to the central Register of university staff and with contact details (may be a part of the study plan).

Prof. RNDr. Ján Titiš, PhD.
- Publication in a Scientific Journal Registered in the Web of Science Databases Included in Q1 or O2 in JCF IF
- Publication in a Scientific Journal Registered in the Web of Science Databases Included in Q1 – O4 in JCF IF
- Independent Study of Literature according to the Recommendation of the Supervisor
- Advanced Methods of Molecular Spectroscopy

Assoc. Prof. Ing. Jozef Sokol, CSc.
- Theoretical Principles of Analytical Chemistry
- Separation Methods
- Advances in Bioanalytical Chemistry

Assoc. Prof. RNDr. Cyril Rajnák, PhD.
- Magnetochemical Methods

Assoc. Prof. RNDr. Miroslav Hornik, PhD.
- Nuclear Analytical Methods

Assoc. Prof. Ing. Andrea Purdešová, PhD.
- Bioanalytical Procedures in Clinical Laboratorie
- Electroanalytical Methods
- Chemometry and Experimental Methodology

e) - List of the supervisors of final theses with the assignment to topics (indicating the contact details).

The structure of the teachers of the academic workplace provides a sufficient guarantee of the adequacy of the number of university teachers for the number of final theses in a given level of university study. All final theses are supervised by teachers who have adequate teaching experience and an appropriate level of education.

The topics of dissertations thesis are:

- New furo [3,2-b] pyrrole derivatives: Synthesis and study of their properties and biological activity
- Preparation and characterization of new single-ion magnets
- Analysis of the content of biologically important secondary metabolites in selected plant species
- Research of complex polymeric structures and materials for sensory applications
- Preparation and analysis of properties of transition metal complexes with the potential of single-molecule magnetism
- Determination of biologically active polyphenolic compounds in cereals by liquid chromatography
- Application of radioanalytical approaches in the evaluation of metal accumulation in plants
- Application of (radio) analytical methods for characterization of metal transport in higher plants
- Application of positron emission tomography in imaging and analysis of metal transport in plant tissues
- Application of HPLC in the study of plant stress responses

http://fpv.ucm.sk/sk/studium/doktorandske-studium.html

Dissertation supervisors:
Prof. Ing. Roman Boča, DrSc.
Prof. Ing. Oľga Križanová, DrSc.
Prof. RNDr. Ján Titiš, PhD.
Assoc. Prof. Mgr. Renata Gašparová, PhD.
Assoc. Prof. RNDr. Miroslav Horník, PhD.
Assoc. Prof. Ing. Tibor Maliar, PhD.
Assoc. Prof. Ing. Andrea Purdešová, PhD.
Assoc. Prof. RNDr. Cyril Rajnák, PhD.
Assoc. Prof. Ing. Jozef Sokol, CSc.
RNDr. Zita Tokárová, PhD.
Mgr. Peter Nemeček, PhD.

f) - Reference to the research/art/teacher profiles of the supervisors of final theses.

Scientific and pedagogical characteristics of persons providing profile subjects are:
https://kchem.fpv.ucm.sk/#/o-katedre/pracovnici-katedry

And also available (up-to-date) in the Academic Information System (AIS). https://ais2.ucm.sk/ais/start.do

g) - Student representatives representing the interests of students of the study programme (name and contact details).

RNDr. Terézia Bridová is a doctoral student in applied analytical and bioanalytical chemistry
Contact: bridova1@ucm.sk
http://fpv.ucm.sk/sk/o-nas/system-kvality-fakulty.html?layout=edit&id=243

h) - Study advisor of the study programme (indicating contact details and information on the access to counseling and on the schedule of consultations).

Ing. Mária Maliarová, PhD.
e-mail: maria.maliarova@ucm.sk
The information on access to counselling is published on the faculty's website

i) - Other supporting staff of the study programme – assigned study officer, career counselor, administration, accommodation department, etc. (with contact details).

Study Department
Ing. Zuzana Obúlaná e-mail: zuzana.obulana@ucm.sk

Career Centre
https://kariera.ucm.sk/

Head of the UCM Student Home:
Mgr. Janka Gajdová email: janka.gajdova@ucm.sk

8. - Spatial, material, and technical provision of the study programme and support

a) - List and characteristics of the study programme classrooms and their technical equipment with the assignment to learning outcomes and courses (laboratories, design and art studios, studios, workshops, interpreting booths, clinics, priest seminaries, science and technology parks, technology incubators, school enterprises, practice centers, training schools, classroom-training facilities, sports halls, swimming pools, sports grounds).

The pedagogical process of the study program is carried out in classrooms in the central buildings of UCM on J. Herda Square, on Hajdóczyho Street and in the UCM building in Špačince (4 km from the University in Trnava), where suitable rooms for lectures and seminars are available. All classrooms are equipped with video projection technology. Laboratories used for teaching laboratory exercises (from general, inorganic, organic, physical, analytical chemistry and biochemistry) are equipped with the basic tools (chemicals, laboratory glassware, scales, small laboratory equipment) needed for each exercise.
http://fpv.ucm.sk/sk/o-nas/fakulta-v-obrazoch.html
The laboratories in which the research activity is carried out have the following equipment:
HPLC Young Lin, ion chromatograph Dionex ICS 50001pcs GC-MS, vacuum manifold SUPELCO, ultrasonic bath GT Sonic, spectrophotometer Cecil CE7200 AQUARIUS, analytical balances METTLER, HPLC set Breeze system WATERS, HPLC set Alliance WATERS, centrifuge MicroStar 12 VWR, spectrophotometer UV- 1600PC VWR, SUPELCO vacuum manifold, BOSH analytical balances, SELECTA ultrasonic bath, pHR pHenomenal pH meter, laboratory digestor, HEI-Vap precision vacuum rotary evaporator, Heidolph WB 2000 vacuum rotary evaporator, BIOBASE melting temperature meter with built-in microscope dual UV lamp with chamber type CAMAG 256/365 nm, built-in laboratory fume hoods, laboratory dryer MEMMERT, pHmeter Seven Compact METTLER TOLEDO, ultrasonic bath VWR, analytical balances OHAUS, microscope Stemi 305 ZEISS, laboratory fume hood, electrochemical analyzer Chem30ST. , potentiostat EcaStat Model 150P, potentiostat / galvanostat PalmSe ns, infrared spectrophotometer Shimadzu IRAffinity-1, CHNS / O elementary analyzer FLASH EA 2000, UV-VIS Spectrophotometer VARIAN CARY 50, table NMR spectrometer Pulsar (Oxford Instruments), Bench-top ESR5000 EPR spectrometer (Bruker), UV-VIS spectrophotometer M350 Camspec, potentiostat EcaStat Model 150P, Cobra3 system, gas chromatograph Perkin Elmer AutoSystem XL, flow electrochemical analyzer Ecaflow Model 150 GLP, spectrophotometer UV VIS GENESYS 10 UV, rotary vacuum evaporator, centrifuge HETTICH UNIVERSAL 32, atomic absorption spectrometer 7000-Shim , AAS Philips PU SP9, UV-VIS spectrophotometer Varian Cary 50, flow electrochemical analyzer Ecaflow Model 150 GLP, equipment for microwave decomposition and sample treatment Anton Paar Multiwave 3000, equipment Millipore Simplicity 185, equipment Watek Diwa 5rica.

http://fpv.ucm.sk/images/studium/Study%20programme%20resources.pdf

b) - Characteristics of the study programme information management (access to study literature according to Course information sheets, access to information databases and other information sources, information technologies, etc.).

Every student of the faculty has secure internet access. ANS UCM students have the opportunity to work in computer laboratories outside the program-organized training according to their own interests and the needs of solving tasks from seminars and exercises. They have computer classrooms with computers connected to the Internet and an internet room with free access with adequate software in the main UCM buildings. Another terminal classroom is in the premises of ANS UCM in Špačince.
Computer classrooms are periodically supplemented with more powerful computers and new computer and chemical software (Dragon 6, IBM SPSS Statistics 19, Analysis, QC Expert 3.1, Statistica 10.2 Base and Statistica 10.2 DataMiner). All teachers as well as internal doctoral students have an assigned computer connected to the Internet. The faculty uses the Academic Information System (AIS2).

c) - Characteristics and extent of distance education applied in the study programme with the assignment to courses. Access, manuals of e-learning portals. Procedures for the transition from contact teaching to distance learning.

Study in accredited study programs in full-time and part-time study is carried out at UCM using the full-time method. The method of distance education is used in times of unfavorable epidemiological situation, or in other situations that seriously limit the implementation of full-time teaching, according to § 108e par. 2 of the University Act, in times of crisis, educational activities carried out by the full-time method can be carried out by the distance method. This form of education is governed by the directive: https://www.ucm.sk/docs/legislativa/2021/8_21_distancna_vyucba.pdf

d) - Institution partners in providing educational activities for the study programme and the characteristics of their participation.

Partners involved in the provision of educational activities of the study programme Applied Analytical and Bioanalytical Chemistry:

1. Slovak Academy of Sciences, Biomedical Center,
2. Institute of Physics, Bratislava;
3. Slovak University of Technology, Institute of Inorganic Chemistry, Bratislava;
4. UPJŠ, Institute of Chemistry, Košice;
5. Leibnitz University, Institute of Inorganic Chemistry, Hannover, Germany;
6. Palacký University, Department of Inorganic Chemistry, Olomouc, Czech Republic;
7. Hamlen rds, Blue; MÚ LF Comenius University Bratislava,
8. Faculty of Medicine, Comenius University Bratislava

Participation consists in significant scientific cooperation, work on joint scientific projects, processing of dissertations and in the implementation of student excursions.

e) - Characteristics of the possibilities for social, sports, cultural, spiritual and social activities.

University of Ss. Cyril and Methodius in Trnava supports the extracurricular activities of its students in the form of financial contributions to ensure sports and cultural events. Every year, in addition to the earmarked contribution from the Ministry of Education, Research and Sports, a part of the funds is allocated within the university budget.
The procedure for submitting and approving applications for contributions to students' sports and cultural events is regulated by the university's internal regulations. Application for a financial contribution (https://www.ucm.sk/sk/aktuality/detail/3473/).
Students can participate in activities:

- Trnafčan Folklore Ensemble,
- UniTTy University Choir,
- THE.ART.RE University Theater,
- Hit UCM Trnava - University Women's Premier League Women's Volleyball Team,
- Student Magazine FF - Parazol,
- Student Magazine Atteliér,
- Student Radio Aetter,
- Faculty Television FMK TV,
- Student Project FMK gaudeo.sk.

f) - Possibilities and conditions for participation of the study programme students in mobilities and internships (indicating contact details), application instructions, rules for recognition of this education.

Opportunities and conditions for student participation in mobility are published on the faculty's website.
https://www.ucm.sk/en/erasmus-plus/

The system of allocating places within the ERASMUS+ programme is carried out by means of a selection procedure at the faculty.
Erasmus+ programme administration guidelines
https://www.ucm.sk/en/erasmus-plus/
https://www.ucm.sk/docs/legislativa/2023/2023-10-Smernica_o_administracii_programu_Erasmus+.pdf

The rules of recognition of this education are governed by the UCM Study Regulations (https://www.ucm.sk/docs/legislativa/2022/predpisy_-_en/2020-8_Studijny_poriadok_UCM_AJ.pdf) and document
Directive on the recognition of completed subjects
https://www.ucm.sk/docs/legislativa/2022/predpisy_-_en/2021-17_Smernica_o_uznavani_absolvovanych_predmetov_AJ.pdf
https://www.ucm.sk/docs/legislativa/2022/predpisy_-_en/2022-7_Smernica_o_uznavani_dokladov_o_vzdelani_na_UCM_AJ.pdf

9. - Required abilities and admission requirements for the study programme applicants

a) - Required abilities and necessary admission requirements.

Requirements for applicants and the method of their selection are specified in §56 to 58 of Act no. 131/2002 Coll. on Higher Education Institutions, they are regulated in more detail by the UCM Study Regulations in Trnava and the UCM Admission Procedure Regulations in Trnava.
https://www.ucm.sk/docs/legislativa/2022/predpisy_-_en/2021-29_Poriadok_prijimacieho_konania_UCM_AJ.pdf
https://www.ucm.sk/docs/legislativa/2022/predpisy_-_en/2020-8_Studijny_poriadok_UCM_AJ.pdf

The basic condition for admission to doctoral studies is a second-level university education (Section 56 (3) of Act No. 131/2002 Coll. On Higher Education Institutions and on Amendments to Certain Acts). Graduates of domestic or foreign universities can apply for admission to study if they have completed a master's or engineering study.

b) - Admission procedures.

https://www.ucm.sk/docs/legislativa/2022/predpisy_-_en/2021-29_Poriadok_prijimacieho_konania_UCM_AJ.pdf
https://www.ucm.sk/docs/legislativa/2022/predpisy_-_en/2020-8_Studijny_poriadok_UCM_AJ.pdf

The admission procedure at FNS UCM is carried out in accordance with Act no. 131/2002 Coll. on Higher Education Institutions and on Amendments to Certain Acts, Sections 56 to 58. The admission process will enable an applicant who proves the fulfilment of the specified conditions for admission to study to become a student of the chosen study program. An applicant who does not prove the fulfilment of the basic conditions for admission to the study at the time of verification of the fulfilment of the conditions for admission may be admitted to the study conditionally if he/she is obliged to prove the fulfilment of the basic conditions of admission to the study no later than on the day determined for enrolment.The method of admission is governed by the general conditions approved by the academic senate of the faculty for the relevant academic year, which must be published together with the offer of study programs and the planned number of admitted applicants no later than September 20 of the academic year preceding the academic year. candidate accepted. General conditions of admission to study in accordance with Act no. 131/2002 Coll. about universities and university duties are published on the website of the faculty and university. Applications for university studies are accepted by the deadline, which is usually published, usually by the end of April of the respective academic year. Applicants apply for the topics listed, which are published on the faculty's website. During the admission to doctoral studies, there will be an admission interview, which takes place in the form of an interview, where the applicant presents his/her motives, a project on the topic of the dissertation and prerequisites for study, as well as knowledge of a foreign language.

c) - Results of the admission process over the last period.

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10. - Feedback on the quality of provided education

a) - Procedures for monitoring and evaluating students' opinions on the study programme quality.

The function of the survey of opinions of relevant target groups is to find out their opinions on various aspects of educational activities in order to obtain information that will lead to its improvement and to the adoption of effective measures to help increase quality in all areas of faculty activities. The relevant target groups are the internal target groups of the respondents (students, teachers and other staff) and the external target groups of the respondents (especially graduates, employers and practitioners).
https://www.ucm.sk/docs/legislativa/2022/predpisy_-_en/2021-18_Ziskavanie_relevantnej_spatnej_vazby_od_zainteresovanych_stran_AJ.pdf

A report on the summary results of regular monitoring and evaluation of quality in the field of international relations and cooperation is prepared once a year, which is discussed and approved by the Rector's Board, the Dean's Board and the Scientific Council of the relevant faculty.
http://fpv.ucm.sk/sk/o-nas/system-kvality-fakulty/2-uncategorised/158-hodnotenie-kvality-fakulty.html

b) - Results of student feedback and related measures to improve the study programme quality.

Monitoring and evaluating the quality of information and promotion is a key area for eliminating information inequalities and raising the profile of the faculty and its study programmes among students, applicants, teachers, employers and other members of the public. Evaluation is carried out through a comprehensive report or through a quality measurement and evaluation information system.
http://fpv.ucm.sk/sk/o-nas/system-kvality-fakulty/2-uncategorised/158-hodnotenie-kvality-fakulty.html
A Report on the evaluation of the FNS UCM students' feedback is carried out annually.
http://fpv.ucm.sk/images/pdf/Sprava%20o%20vyhodnoteni%20spatnej%20vazby%20za%20rok%202022_2023.pdf

c) - Results of graduate feedback and related measures to improve the study programme quality.

The feedback results are published in the FNS Quality Report. The report contains an evaluation of the questionnaire surveys as well as proposed measures to eliminate the shortcomings.
http://fpv.ucm.sk/sk/o-nas/system-kvality-fakulty.html
At the same time, the Study Programme Boards receive the Alumni Questionnaire Evaluation Reports and propose actions (evidence is in the relevant Study Programme Board minutes).
http://fpv.ucm.sk/sk/o-nas/system-kvality-fakulty.html?layout=edit&id=243

11. - References to other relevant internal regulations and information concerning the study or the study programme student

(e.g study guide, accommodation regulations, fee directive, guidelines for student loans, etc.).

https://www.ucm.sk/docs/legislativa/2022/predpisy_-_en/2021-42_Smernica_o_doktorandskom_studiu_Univerzity_sv._Cyrila_a_Metoda_v_Trnave_AJ.pdf
Study schedule of FNS UCM
http://fpv.ucm.sk/en/study/admission-procedure.html
Accommodation Regulations of the UCM Student House
https://www.ucm.sk/docs/legislativa/2022/predpisy_-_en/2021-27_Ubytovaci_poriadok_studentskeho_domova_UCM_AJ.pdf
Tuition fees and fees associated with studying at UCM
https://www.ucm.sk/docs/dokumenty/2022/2021-20_Smernica_o_skolnom_a_poplatkoch_spojenych_so_studiom_UCM_AJ.pdf
Scholarships
https://www.ucm.sk/sk/stipendia/?highlight=%9Atipendi%E1
https://www.ucm.sk/docs/legislativa/2022/predpisy_-_en/2021-12_Stipendijny_poriadok_UCM_AJ.pdf