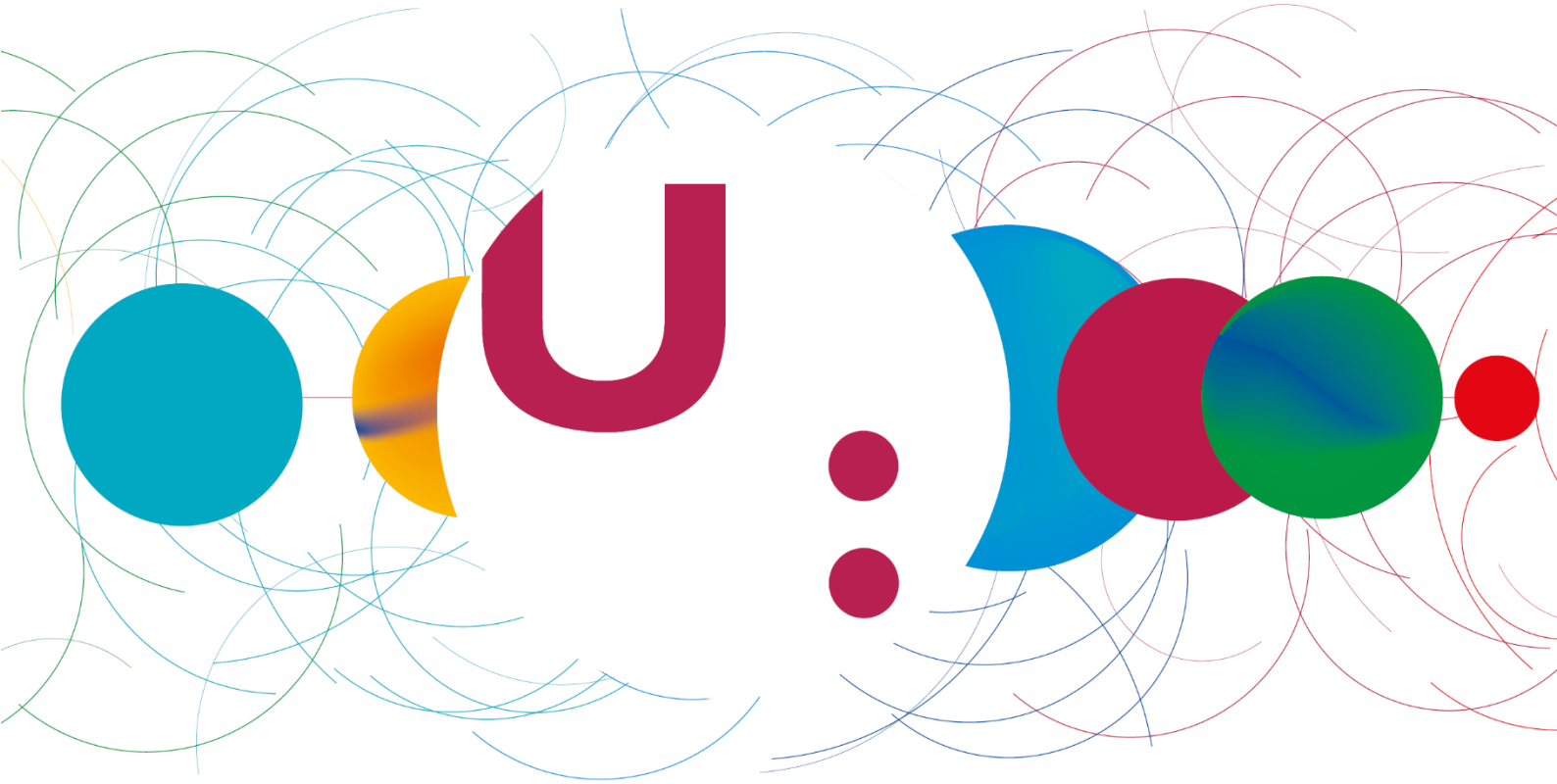

FACULTY

OF CHEMICAL TECHNOLOGY

UNIVERSITY OF PARDUBICE

ANNUAL ACTIVITY REPORT 2022

FACULTY
OF CHEMICAL TECHNOLOGY
University of Pardubice

ANNUAL ACTIVITY REPORT 2022


FAKULTA CHEMICKO TECHNOLOGICKÁ

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INTRODUCTION BY THE DEAN OF FACULTY

Dear colleagues, Dear supporters of the Faculty of Chemical Technology at the University of Pardubice

You hold in your hands the Annual Activity Report of the Faculty of Chemical Technology at the University of Pardubice for 2022 in which we look back at all of the things which happened at the faculty during the course of the past year. We give a summary overview of the most important events in the life of the faculty and provide information about how, with the involvement of all staff and students of the faculty, we managed to cope with all of the tasks and duties imposed on us in the field of education, scientific research and also the third role, i.e. the social role, both within the University of Pardubice itself and in the national and international arena.

A significant part of this Annual Report provides a recap of the last year in the term of office of the Dean, prof. Ing. Petr Kalenda, CSc. I would like to thank him and the entire previous management team, which I had the honour of being part of, for their work and efforts to develop and spread the good name of the Faculty of Chemical Technology at the University of Pardubice.

Similar to previous years marked by the pandemic, 2022 was an exceptional year too. War in Ukraine, the energy crisis and the economic consequences of inflation represented difficult challenges which we had to face and which will continue to affect us in the period ahead. I do however believe that in spite of these difficulties, we did successfully manage to handle all of the important things with our heads held high. We offered 67 bachelor's, master's and doctoral degree programmes to those interested, including 14 programmes in English. Our academic and research staff are involved in basic and applied research projects and have achieved many excellent results in this field. We organised a number of popular and educational events, such as excursions for primary and secondary school pupils and the University of the Third Age. Our staff and students also got involved in charity activities supported by the faculty, be this within the framework of a collection of essential supplies for Ukraine or a pre-Christmas collection of clothes for Diakonia Broumov.

Many challenges do however await us in the future, challenges which we should see as opportunities and take advantage of. First and foremost, we should seize the opportunity offered by the rising demographic curve and work hard to make our study programmes more attractive, reflecting the changing interests of applicants and current societal needs. Here, our attention must be focused on identifying and supporting talented students. We must also work systematically on development of our scientific research activities, both in cooperation with individual faculty teams and in collaboration with renowned institutes in the Czech Republic and abroad. All this must be done in the context of a well-thought-out and effective staffing policy. We must also not forget to develop positive relationships with all stakeholders in the region and beyond, be this in the form of expanding our range of interesting popular and educational events or supporting donations and volunteering activities among faculty staff and students.

Successful implementation of these plans will require the active involvement and seamless cooperation of our academic, research and other staff, alongside the dedicated participation of our students. Their collective efforts form the bedrock for cultivation of a unique and robust faculty, one which is then able to enjoy a respected global reputation. I would therefore like to express my heartfelt gratitude to the entire staff and students of the Faculty of Chemical Technology at the University of Pardubice. Your unwavering cooperation so far has been invaluable. As we venture into the future, I extend my sincerest wishes for your continued well-being, unwavering strength, and a spirit of mutual respect which will guide us towards greater achievements.

prof. Ing. Petr Němec, Ph.D.
Dean


YTTERBIUM
HAFNIUM
WOLFRAM
OSMIUM
PLATINA
RTUŤ
OLOVO
POLONIUM
RADON
RADIUM
THORIUM
URAN
PLUTONIUM
CURIUM
KALIFORNIUM
FERMIUM
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1 BASIC INFORMATION ABOUT THE FACULTY

1.1 Name, abbreviation and registered office

Faculty of Chemical Technology, abbreviated to "FChT"

Registered office: Studentská 573, 532 10 Pardubice

1.2 Mission, vision and strategic objectives

The mission, vision and strategic objectives of the faculty as an integral part of the University of Pardubice are based on the university-wide concept and strategic objectives. Implementation of the Strategic Plan of the Faculty of Chemical Technology at the University of Pardubice in 2022 was based on the Strategic Plan of the University of Pardubice for the period from 2021 and its concretisation for 2022. It built on the following priority objectives and strategic priorities which were defined by the Strategic Plan of the Faculty of Chemical Technology at the University of Pardubice for the period from 2021 and its concretisation for 2022:

Priority objective 1: Student competencies for the 21st century

Strategic priorities:

S1.1 Implementation of study programmes on a level comparable to those abroad.

S1.2 Development of the quality of study programmes with an emphasis on use of the acquired knowledge and skills for future employment.

S1.3 Use of new technologies and modern aids for provision of education.

S1.4 Strengthening of student global competences necessary for their future employment.

S1.5 Internationalisation of bachelor's and master's degree programmes.

S1.6 Increasing the quality and deepening the internationalisation of doctoral studies.

S1.7 Strengthening quality assessment of study programmes and strategic management of educational activities.

S1.8 Expanding the range of lifelong learning courses.

S1.9 Interfaculty and interdisciplinary cooperation within the framework of educational activities.

S1.10 Availability of information resources.

S1.11 Systematic care for students and systematic work with graduates.

Priority objective 2: High-quality and respected scientific research and creative activities

Strategic priorities:

S2.1 Application of the faculty system for assessment of the quality of R&D&I.

S2.2 Development of high-quality or strategic disciplines in which the faculty implements doctoral degree programmes.

S2.3 Reinforcement of excellence in selected subdisciplines of FORD.

S2.4 Strategic management of R&D&I and orientation of the faculty towards fields with international level.

S2.5 Development of modern and internationally comparable infrastructure.

S2.6 Linking the scientific-research and creative activities of the faculty with their practical application with emphasis on commercialisation of the obtained results.

S2.7 Permanent emphasis on student involvement in scientific research activities.

S2.8 Promotion of collaboration between faculty departments. Promotion of inter-faculty cooperation.

S2.9 Reinforcement of the principles of open science.

Priority objective 3: Human resources

Strategic priorities:

S3.1 Reinforcement of the system of individual and career development of employees, including motivation supporting and developing their work activities and performance.

S3.2 Implementation of a regular comprehensive appraisal system for staff in line with their performance and achievements.

S3.3 Support for professional development and training of employees, acquisition of knowledge, skills and key competences.

S3.4 Reinforcement of strategic human resources management.

Priority objective 4: International dimension and internationalisation

Strategic priorities:

S4.1 Development of strategic partnerships and international cooperation in education and R&D&I.

S4.2 Support for student and staff mobility.

S4.3 Implementation of attractive study programmes and teaching of subjects in English.

S4.4 Support for strategic management of internationalisation.

S4.5 Implementation of the results of quality assessment of internationalisation.

Priority objective 5: Tradition and development of the faculty

Strategic priorities:

S5.1 Preservation of traditions and development of the faculty with a society-wide impact.

S5.2 Implementation of a marketing strategy with the aim of developing the identity and strengthening the reputation of the faculty.

S5.3 Reinforcement of mutual cooperation with an emphasis on synergy between faculty departments.

S5.4 Reinforcement of the "third role" of the faculty within the Czech Republic.

S5.5 Infrastructure fit for the 21st century.

1.3 Faculty management and its organisational structure

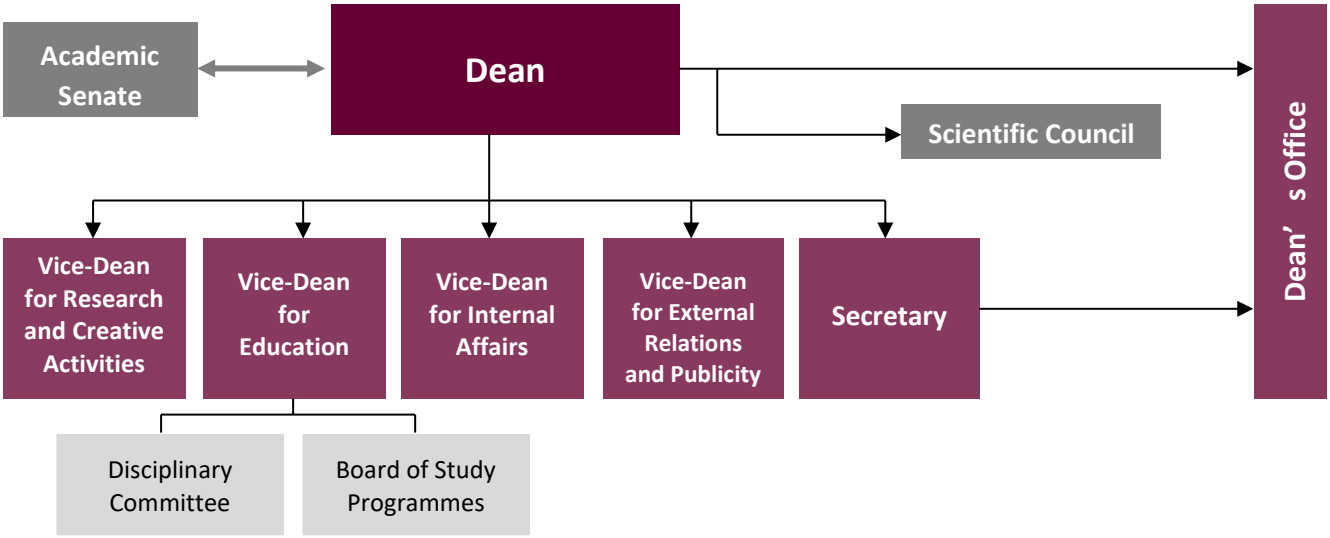
Faculty management until 1 October 2022

Dean:	prof. Ing. Petr Kalenda, CSc.	
Vice-Deans:	prof. Ing. Petr Němec, Ph.D.	Vice-Dean for Education, Statutory Representative of the Dean
	prof. Ing. Petr Mošner, Dr. (until 6 October 2022)	Vice-Dean for Research and Development
	Mgr. Lucie Stříbrná, Ph.D. (until 6 October 2022)	Vice-Dean for External Relations and Publicity
Secretary:	Ing. Martin Šprync	

Faculty management from 2 October 2022

Dean:	prof. Ing. Petr Němec, Ph.D.	
Vice-Deans:	prof. Ing. Petr Kalenda, CSc. (from 7 October 2022)	Vice-Dean for Education, Statutory Representative of the Dean
	prof. Ing. Petr Mošner, Dr. (from 7 October 2022)	Vice-Dean for Research and Creative Activities
	doc. Ing. Alena Komersová, Ph.D. (from 7 October 2022)	Vice-Dean for External Relations and Publicity
	doc. Ing. Liběna Tetřevová, Ph.D. (from 7 October 2022)	Vice-Dean for Internal Affairs
Secretary:	Ing. Martin Šprync	

Organisational structure of the faculty



DEPARTMENTS AND CENTRES/INSTITUTES

- Department of Analytical Chemistry
- Institute of Applied Physics and Mathematics
- Department of Inorganic Technology
- Institute of Energetic Materials
- Department of Biological and Biochemical Sciences
- Institute of Chemistry and Technology of Macromolecular Materials
- Department of Paints and Organic Coatings
- Department of Polymer and Textile Chemistry
- Department of Wood, Pulp and Paper
- Department of Economy and Management of Chemical and Food Industry
- Institute of Organic Chemistry and Technology
- Department of Mechanisms of Organic Reactions
- Department of Organic Materials
- Department of Organic Technology
- Department of Physical Chemistry
- Institute of Environmental and Chemical Engineering
- Department of Chemical Engineering
- Department of Environmental Protection
- Faculty Development Workshops
- Department of General and Inorganic Chemistry
- Centre of Materials and Nanotechnologies
- Department of Graphic Arts and Photophysics
- Joint Laboratory of Solid State Chemistry

Joint Centres/Laboratories: JLAP, JLMP, JLNMR, JLAM, PTL, UEC

Legend:

JLAP	Joint Laboratory of Analysis and Evaluation of Polymers
JLMP	Joint Laboratory of Membrane Processes
JLNMR	Joint Laboratory of NMR Spectroscopy
JLAM	Joint Laboratory of Applied Medical Science
PTL	Printing Test Laboratory
UEC	University Ecology Centre

1.4 Academic Senate

Composition of the Academic Senate until 6 December 2022

Presidium:

doc. Ing. Martin Adam, Ph.D., Chair
Ing. Aleš Eisner, Ph.D.
Ing. Lada Dubnová

Members:

doc. Ing. Martin Adam, Ph.D.
prof. RNDr. Zuzana Bílková, Ph.D. (from 1 October 2022)
doc. Ing. Marek Bouška, Ph.D.
prof. Ing. Čestmír Drašar, Dr. (until 31 August 2022)
Ing. Lada Dubnová
Ing. Aleš Eisner, Ph.D.
Ing. Michaela Frühbauerová (from 24 February 2022)
prof. Ing. Roman Jambor, Ph.D.
doc. Ing. Alena Komersová, Ph.D. (until 1 October 2022)
Bc. Petr Leinweber
Ing. Diego Alejandro Valdés Mitchell (until 23 February 2022)
Ing. Patrik Pařík, Ph.D.
Ing. Barbora Skalická (from 15 June 2022)
Bc. Jakub Staněk (until 7 June 2022)
Ing. Jan Vávra, Ph.D. (from 1 September 2022)
doc. Ing. David Veselý, Ph.D.
prof. Ing. Jaromír Vinklárek, Dr.
Bc. Lukáš Vlk
doc. Ing. Tomáš Weidlich, Ph.D.

Composition of the Academic Senate from 7 December 2022

Presidium:

doc. Ing. Martin Adam, Ph.D., Chair
doc. Ing. Pavel Čičmanec, Ph.D.
Ing. Marie Nevyhoštěná

Members:

doc. Ing. Martin Adam, Ph.D.
Ing. Jaroslav Barták, Ph.D.
doc. Ing. Pavel Čičmanec, Ph.D.
Ing. Aleš Eisner, Ph.D.

Jana Hrušková
prof. Ing. Roman Jambor, Ph.D.
Ing. Petr Knotek, Ph.D.
Bc. Petr Leinweber
Ing. Marie Nevyhoštěná
Ing. Patrik Pařík, Ph.D.
Martin Šanda
Josef Velebný
doc. Ing. David Veselý, Ph.D.
prof. Ing. Jaromír Vinklárek, Dr.
doc. Ing. Tomáš Weidlich, Ph.D.

1.5 Scientific Council

Composition of the Scientific Council until 10 October 2022

Chair:	prof. Ing. Petr Kalenda, CSc., Dean of the Faculty of Chemical Technology
Internal members:	prof. Ing. Libor Čapek, Ph.D.
	prof. Ing. Zdeněk Černošek, CSc.
	prof. Ing. Čestmír Drašar, Dr.
	prof. Ing. Radim Hrdina, CSc.
	prof. Ing. Jaromíra Chýlková, CSc.
	prof. Ing. Roman Jambor, Ph.D.
	prof. Mgr. Roman Kanďár, Ph.D.
	prof. Ing. Jiří Kulhánek, Ph.D.
	prof. Ing. Jiří Málek, DrSc.
	prof. Ing. Petr Mikulášek, CSc.
	prof. Ing. Petr Mošner, Dr.
	prof. Ing. Petr Němec, Ph.D.
	prof. Ing. Aleš Růžička, Ph.D.
	prof. Ing. Miloš Sedlák, DrSc.
	prof. Ing. Petra Šulcová, Ph.D.
	doc. Ing. Liběna Tetřevová, Ph.D.
	prof. Ing. Ladislav Tichý, DrSc.
	prof. Ing. Karel Ventura, CSc.
	prof. Ing. Jaromír Vinklárek, Dr.
	prof. Ing. Svatopluk Zeman, DrSc.

External members:

prof. RNDr. Jiří Barek, CSc.	Faculty of Science, CU Prague
prof. Ing. Roman Čermák, Ph.D.	Dean of the Faculty of Technology, TBU in Zlín
prof. Ing. Anton Gatial, DrSc.	Dean of the Faculty of Chemical and Food Technology, STU Bratislava
Mgr. Karolína Gondková	Director of Higher Education, MEYS CR, Prague
prof. Ing. Jiří Hanika, DrSc., Dr.h.c.	Institute of Chemical Process Fundamentals of CAS, p.r.i., Prague
prof. Ing. Kamila Kočí, Ph.D.	Institute of Environmental Technology, TUO Ostrava
prof. Ing. Zdeňka Kolská, Ph.D.	Faculty of Science, JEPU Ústí nad Labem
Ing. Josef Liška	CEO of Synthesia, a.s., Pardubice

Ing. David Pohl, Ph.D.	Chairman of the Board of Synthos, a.s., Kralupy nad Vltavou
prof. Ing. Václav Švorčík, DrSc.	Faculty of Chemical Technology, UCHT in Prague
prof. Ing. Martin Weiter, Ph.D.	Vice-Rector, BUT in Brno

Composition of the Scientific Council from 11 October 2022

Chair:	prof. Ing. Petr Němec, Ph.D., Dean of the Faculty of Chemical Technology
Internal members:	prof. Ing. Petr Kalenda, CSc.
	prof. Ing. Libor Čapek, Ph.D.
	prof. Ing. Čestmír Drašar, Dr.
	prof. Ing. Michal Holčapek, Ph.D.
	prof. Ing. Aleš Imramovský, Ph.D.
	prof. Ing. Roman Jambor, Ph.D.
	doc. Ing. Alena Komersová, Ph.D.
	prof. Ing. Miroslav Ludwig, CSc.
	prof. Ing. Jiří Málek, DrSc.
	prof. Ing. Petr Mošner, Dr.
	doc. Ing. Jiří Pachman, Ph.D.
	doc. RNDr. Tomáš Roušar, Ph.D.
	prof. Ing. Aleš Růžička, Ph.D.
	prof. Ing. Miloš Sedlák, DrSc.
	prof. Ing. Petra Šulcová, Ph.D.
	doc. Ing. Liběna Tetřevová, Ph.D.
	prof. Ing. Ladislav Tichý, DrSc.
	prof. Ing. Karel Ventura, CSc.
	prof. Ing. Jaromír Vinklárek, Dr.
	doc. Ing. Tomáš Weidlich, Ph.D.

External members:

prof. RNDr. Jiří Barek, CSc.	Faculty of Science, CU Praha
prof. Ing. Roman Čermák, Ph.D.	Dean of the Faculty of Technology, TBU in Zlín
Mgr. Karolína Gondková	Director of Higher Education, MEYS CR, Praha
prof. RNDr. Libor Grubhoffer, CSc., Hon. D.Sc., Dr.h.c.	Biology Centre CAS, p.r.i.
prof. Ing. Jiří Hanika, DrSc., Dr.h.c.	Institute of Chemical Process Fundamentals of CAS, p.r.i., Prague
prof. Ing. Kamila Kočí, Ph.D.	Institute of Environmental Technology, TUO Ostrava
prof. Ing. Zdeňka Kolská, Ph.D.	Faculty of Science, JEPU Ústí nad Labem
Ing. Josef Liška	CEO of Synthesia, a.s., Pardubice
Ing. David Pohl, Ph.D.	Chairman of the Board of Synthos, a.s., Kralupy nad Vltavou
prof. Ing. Václav Švorčík, DrSc.	Faculty of Chemical Technology, UCHT in Prague
Ing. Daniel Tamchyna, MBA	CEO of Spolchemie, Spolek pro chemickou a hutní výrobu, a.s., Ústí nad Labem
prof. Ing. Martin Weiter, Ph.D.	Vice-Rector, BUT in Brno

1.6 Disciplinary Committee

Composition of the Disciplinary Committee until 10 October 2022

Chair:	prof. Ing. Petr Němec, Ph.D., Vice-Dean for Education
Members:	Anna Gondková, student of a bachelor's degree programme
	Ing. Michal Kašpar, student of a doctoral degree programme
	prof. Ing. Petr Mikulášek, CSc., Head of IEnviChE
	Ing. Petr Resl, student of a doctoral degree programme
	doc. Ing. David Veselý, Ph.D., Head of IChTMM

Composition of the Disciplinary Committee from 11 October 2022

Chair:	prof. Ing. Petr Kalenda, CSc., Vice-Dean for Education
Members:	Anna Gondková, student of a bachelor's degree programme
	Ing. Michal Kašpar, student of a doctoral degree programme
	Ing. Petr Resl, student of a doctoral degree programme
	doc. Ing. David Veselý, Ph.D., Head of IChTMM
	prof. Ing. Miloš Sedlák, DrSc., Head of IOChT

1.7 Representation in the Higher Education Council

The faculty is represented in the Higher Education Council by prof. Ing. Petra Šulcová, Ph.D. (member of the Presidium) and doc. Ing. Marek Bouška, Ph.D. (member of the Assembly).

1.8 Changes in the field of internal regulations

The internal regulations of the faculty which govern the activities of the faculty are in particular constituted by directives, orders, measures and notices. The following internal regulations were issued in 2022.

Name of internal regulation	Ref. No.
Rules of Procedure of the Academic Senate of the Faculty of Chemical Technology at the University of Pardubice of 15 March 2022	x
Electoral Rules of the Academic Senate of the Faculty of Chemical Technology at the University of Pardubice of 15 March 2022	x
Directive No. 1/2022: Determination of fees for peer reviews	sfcht/46/22
Directive No. 2/2022: Rules of the model for distribution of funds of the Faculty of Chemical Technology for 2022	sfcht/148/22
Directive No. 3/2022: Schedule of State Final Examinations for master's degree programmes in the academic year 2022/2023	sfcht/309/22
Directive No. 4/2022: Schedule of State Final Examinations for bachelor's degree programmes in the academic year 2022/2023	sfcht/310/22
Directive No. 5/2022: Admissions procedure for the academic year 2023/2024	sfcht/143/22
Amendment No. 1 to Directive No. 6/2020: Criteria for selection of excellent basic and applied research teams at the Faculty of Chemical Technology at the University of Pardubice	sfcht/34/22
Amendment No. 1 to Directive No. 6/2021: Admissions procedure for the academic year 2022/2023	sfcht/40/22
Amendment No. 2 to Directive No. 6/2021: Admissions procedure for the academic year 2022/2023	sfcht/58/22
Amendment No. 3 to Directive No. 6/2021: Admissions procedure for the academic year 2022/2023	sfcht/75/22
Amendment No. 2 to Directive No. 10/2019: Subjects for study by students of doctoral study programmes at the Faculty of Chemical Technology at the University of Pardubice	sfcht/326/22
Dean's Measure No. 1/2022: Measure of the Dean of the FChT for student internships in hospitals and similar institutions during the academic year 2021/2022	sfcht/39/22
Dean's Measure No. 2/2022: Obstacles to work on the side of the employer	sfcht/176/22
Dean's Measure No. 3/2022: Obstacles to work on the side of the employer	sfcht/178/22

Dean's Measure No. 4/2022: Obstacles to work on the side of the employer	sfcht/182/22
Dean's Measure No. 5/2022: Obstacles to work on the side of the employer	sfcht/195/22
Dean's Measure No. 6/2022: Measure on operations at the FChT – cancellation of Dean's Measure No. 6/2020, Amendment No. 1 to Dean's Measure No. 6/2020, Amendment No. 2 to Dean's Measure No. 6/2020	sfcht/205/22
Notice No. 1/2022: Conditions for and amount of the Student Prize awarded by the Dean of the Faculty of Chemical Technology at the University of Pardubice in 2022	sfcht/61/22
Notice No. 2/2022: Conference of doctoral students in English	sfcht/83/22
Notice No. 3/2022: Graduation ceremony 2022	sfcht/93/22
Notice No. 4/2022: Holidays for students of doctoral degree programmes	sfcht/101/22
Notice No. 5/2022: Additional admissions procedure for the 1st year of bachelor's studies in the academic year 2022/23	sfcht/143/22
Notice No. 6/2022: Establishment of sub-inventory committees	sfcht/149/22
Notice No. 7/2022: Additional admissions procedure for the 1st year of doctoral studies in the academic year 2022/2023	sfcht/172/22
Notice No. 8/2022: Academic Oath Ceremony 2022	sfcht/177/22
Notice No. 9/2022: Matriculation of 1st year students at the FChT	sfcht/213/22
Notice No. 10/2022: Cancellation of tuition for 1st year students of bachelor's degree programmes	sfcht/214/22
Notice No. 11/2022: Additional admissions procedure for the 1st year of doctoral studies in the academic year 2022/2023	sfcht/330/22
Notice No. 12/2022: Conference of doctoral students in English	sfcht/406/22

2 STUDY PROGRAMMES, ORGANISATION OF STUDIES AND EDUCATIONAL ACTIVITIES

2.1 Accredited study programmes

The FChT had a total of 67 accredited study programmes in 2022. These included 15 bachelor's, 21 master's and 31 doctoral study programmes. From the above-mentioned study programmes, 2 master's and 12 doctoral study programmes were offered in English.

In the academic years 2021/2022 and 2022/2023, the FChT had the following accredited study programmes.

Originally accredited study programmes						
Code	Name of study programme	Name of field of study	Standard length of study (years)			CCFE code
			Bc.	Mgr.	Ph.D.	
B3912	Special Chemical and Biological Fields	Laboratory Assistant	3			5345R020
B2802	Chemistry and Technical Chemistry	Chemistry and Technical Chemistry	3			2802R011
B2901	Chemistry and Technology of Foodstuffs	Evaluation and Analysis of Foodstuffs	3			2901R003
B2829	Inorganic and Polymer Materials	Inorganic Materials	3			2808R023
N2808	Chemistry and Technology of Materials	Chemistry and Technology of Paper and Pulp		2		2808T015
		Organic Coatings and Paints		2		2808T022
		Technology of Organic Specialities		2		2801T007
		Technology of Polymer Manufacturing and Processing		2		2801T009
N1407	Chemistry	Organic Chemistry		2		2802T003
P1418	Inorganic Chemistry	Inorganic Chemistry			4	1401V002
P1421	Organic Chemistry	Organic Chemistry			4	1402V001
P1419	Analytical Chemistry	Analytical Chemistry			4	1403V001
P1420	Physical Chemistry	Physical Chemistry			4	1404V001
P2832	Chemistry and Chemical Technology	Inorganic Technology			4	2801V001
		Organic Technology			4	2801V003
P2833	Chemistry and Technology of Materials	Surface Engineering			4	2808V027
		Chemistry and Technology of Inorganic Materials			4	2808V003
		Engineering of Energetic Materials			4	2808V035
P2837	Chemical and Process Engineering	Chemical Engineering			4	2807V004
		Environmental Engineering			4	3904V005

Newly accredited study programmes				
Code	Name of study programme	Standard length of study (years)		
		Bc.	Mgr.	Ph.D.
B0488A050003	Economics and Management of Chemical Industry Enterprises	3		
B0512A130006	Analysis of Biological Materials	3		
B0531A130012	Pharmacochemistry and Medicinal Materials	3		
B0531A130013	Surface Protection of Building and Construction Materials	3		
B0531A130014	Graphic Arts and Printing Technology	3		
B0588A130001	Chemistry and Technology of Environmental Protection	3		
B0531A130017	Polymer Materials and Composites	3		
B0531A130013	Inorganic and Bioinorganic Materials	3		

B0531A130024	Evaluation and Analysis of Foodstuffs		3		
B0531A130025	Chemistry		3		
B0914P360019	Laboratory Diagnostics in Medicine		3		
N0413A050010	Economics and Management of Chemical Industry Enterprises			2	
N0512A130006	Analysis of Biological Materials			2	
N0531A130013	Graphic Arts and Printing Technology			2	
N0711A130008	Engineering of Energetic Materials			2	
N0914P360001	Bioanalytical Laboratory Diagnostics in Medicine			2	
N0531A130027	Engineering of Energetic Materials			2	
N0531A130028	Analytical Chemistry			2	
N0531A130029	Inorganic and Bioinorganic Chemistry			2	
N0531A130030	Evaluation and Analysis of Foodstuffs			2	
N0531A130031	Material Engineering			2	
N0531A130035	Physical Chemistry			2	
N0711A130013	Chemical and Process Engineering	Chemical Engineering		2	
		Environmental Protection		2	
N0711A130014	Sustainable Development in Chemistry and Technology			2	
N0711A130015	Inorganic Technology			2	
N0531A130047	Organic Chemistry and Technology	Organic Chemistry		2	
		Technology of Organic Specialities		2	
N0531A130032	Materials Chemistry			2	
N0531A130052	Chemistry and Technology of Paper and Pulp			2	
N0531A130053	Organic Coatings and Paints			2	
N0531A130054	Technology of Polymer Manufacturing and Processing			2	
P0711D130001	Organic Technology				4
P0531D130009	Analytical Chemistry				4
P0531D130011	Inorganic Chemistry				4
P0711D130025	Inorganic Technology				4
P0512D130013	Biochemistry				4
P0531D130052	Physical Chemistry				4
P711D130027	Chemical and Process Engineering	Chemical Engineering			4
		Environmental Engineering			4
P0531D130013	Chemistry and Technology of Inorganic Materials				4
P0531D130053	Engineering of Energetic Materials				4
P0531D130015	Organic Chemistry				4
P0413D050023	Economics and Management of Enterprises with Process Manufacturing Operations				4
P0531S130070	Surface Engineering				4
P0531D130010	Analytical Chemistry				4
P0531D130012	Inorganic Chemistry				4
P0711D130028	Inorganic Technology				4
P0512D130014	Biochemistry				4
P0413D050024	Economics and Management of Businesses with Process Manufacturing Operations				4
P0531D130054	Physical Chemistry				4
P0711D130026	Chemical and Process Engineering	Chemical Engineering			4
		Environmental Engineering			4
P0531D130014	Chemistry and Technology of Inorganic Materials				4
P0531D130051	Engineering of Energetic Materials				4
P0531D130016	Organic Chemistry				4
P0711D130002	Organic Technology				4
P0531D130071	Surface Engineering				4

2.2 Innovation of study programmes

In 2022, in close cooperation with programme guarantors, course supervisors and other teaching staff, continuous innovation of individual study programmes and their courses was implemented within the framework of valid accreditations.

2.3 Application of ECTS and learning outcomes methodology

The principles of a credit system are applied corresponding to the international ECTS – European Credit Transfer System. Use of the credit system is enshrined in the Study and Examination Regulations of the University of Pardubice.

The profiles of graduates of bachelor's, master's and doctoral study programmes are described in the newly accredited study programmes, as are the learning outcomes of individual subjects, in relation to the outcomes of the INP National Qualifications Framework for Tertiary Education (Q-RAM) and in accordance with the Framework of Higher Education Qualifications of the Czech Republic.

2.4 Interest in studying at the faculty

Open days in 2022

An open day was held on 26 January 2022. A total of 50 secondary school students took part (8 grammar school students and 42 students from other secondary schools). Potential future students listened to some basic information provided by the vice-dean of the faculty about study options and study programmes offered by the faculty. They were also told about the conditions of the admissions procedure and opportunities for studying abroad within the framework of the ERASMUS+ programme. After the end of the common part of the programme, people interested in studying at the faculty were able to discuss things further with the teachers of the individual study programmes they were interested in. The second planned open day on 27 January 2022 did not take place due to the COVID-19 pandemic.

Cooperation with primary and secondary schools and the search for talented students

The FChT has long been involved in cooperation with secondary schools and in the search for talented students and applicants for study at the faculty. Significant activities in this area include:

- systematic promotion of the faculty at selected secondary schools,
- excursions by secondary schools to faculty premises,
- competition entitled "Search for the Best Young Chemist in the Czech Republic" (for primary schools),
- competition entitled "Chemistry Contest" (for secondary schools),
- competition entitled "Chemistry Olympics" (for secondary schools),
- Students' Professional Activity contest – SPA (for secondary schools).

Admissions procedure

The admissions procedure for studies in bachelor's degree programmes for the academic year 2022/2023 took place in two rounds. The deadline for the first round of applications was 28 February 2022. This was subsequently extended until 31 May 2022. In view of the fact that the capacity of some bachelor's degree programmes was not filled during the first round of the admissions procedure, a second round was announced with the deadline for applications being 10 August 2022. The second round of the admissions procedure was then carried out by evaluating the applicants' academic results from secondary school - on the basis of these results, a ranking was drawn up, according to which the applicants were admitted to their chosen course of study where the capacity of the study programmes so allowed.

The deadline for submission of applications for master's degree programmes was 30 June 2022. The admissions procedure was held in the period from 31 August until 1 September 2022. Entrance examinations took the form of an oral interview or a written test.

The deadline for submission of applications for doctoral degree programmes was 31 May 2022. The admissions procedure in the form of an oral interview was held on 14 June 2022. The second round for submission of applications took place from 8 August until 2 September 2022 and the admissions procedure was held during the course of September 2022. The third round for submission of applications took place from 31 October until 11 November 2022, followed by implementation of the admissions procedure.

The results of the admissions procedures held in 2022 are summarised in the following table.

Number of students who applied, were accepted and enrolled in the 1st year of bachelor's, master's and doctoral studies			
Number of students	**Applied**	**Accepted**	**Enrolled**
Bc.	964	552	306
Mgr.	245	180	138
Ph.D.	35	34	32
Total	1244	766	476

2.5 Students of implemented study programmes

The number of students at the faculty as of 31 October of the respective year is given in the following tables. The letter *f* after the number indicates foreign students.

Total number of students					
Year	**2018**	**2019**	**2020**	**2021**	**2022**
Number of students	1276+150f	1262+142f	1236+132f	1190+132f	1087+119f

Number of students by form and level of study					
Form and level of study	**2018/19**	**2019/20**	**2020/21**	**2021/22**	**2022/23**
Students with Czech citizenship	1276	1262	1236	1190	1087
Foreign students	150	142	132	132	119
Total students	**1426**	**1404**	**1368**	**1322**	**1206**
Full-time study Bachelor's programmes Master's programmes	 841+99f 278+27f	 866+95f 268+26f	 859+78f 264+25f	 813+85f 264+20f	 709+72f 263+15f
Total full-time	**1189+121f**	**1134+121f**	**1123+103f**	**1077+105f**	**972+87f**
Combined study Bachelor's programmes	 1+0f	-	-	-	-
Total combined	**1+0f**	-	-	-	-
Doctoral programmes	**156+24f**	**128+21f**	**113+29f**	**113+27f**	**115+32f**

Number of full-time students by study programme						
Study programme	**2020/2021**		**2021/2022**		**2022/23**	
	Bc.	**Mgr.**	**Bc.**	**Mgr.**	**Bc.**	**Mgr.**
*Chemistry and Technical Chemistry	56+3f	-	33+2f	-	2+0f	-
* Chemistry and Technology of Foodstuffs	56+5f	20+2f	28+1f	2+1f	8+0f	0+1f
*Graphic Arts and Printing Technology	10+1f	2+1f	7+0f	1+0f	1+0f	1+0f
*Special Chemical and Biological Fields	340+23f	8+0f	333+26f	2+0f	206+15F	1+0f
*Chemical and Process Engineering	19+1f	-	1+0f	-	-	-
*Pharmacochemistry and Medicinal Materials	32+4f	-	5+0f	-	1+0f	-

*Surface Protection of Building and Construction Materials		6+0f	-	-	-	-	-
*Inorganic and Polymer Materials		16+2f	-	9+1f	-	1+0f	-
* Chemical and Process Engineering		-	7+1f	-	-	-	-
* Chemistry and Technology of Materials		-	38+6f	-	33+5f	-	14+1f
*Chemistry		-	34+4f	-	9+3f	-	3+1f
Economics and Management of Chemical Industry Enterprises		31+4f	10+0f	30+4f	13+0f	18+1f	23+1f
Analysis of Biological Materials		40+6f	27+5f	49+12f	25+3f	43+10f	26+4f
Pharmacochemistry and Medicinal Materials		69+14f	-	94+18f	-	86+21f	-
Surface Protection of Building and Construction Materials		11+0f	-	17+0f	-	8+0f	-
Graphic Arts and Printing Technology		29+1f	13+0f	38+2f	7+1f	33+2f	8+1f
Chemistry and Technology of Environmental Protection		30+3f	-	22+5f	-	20+3f	-
Polymer Materials and Composites		12+4f	-	11+3f	-	11+1f	-
Engineering of Energetic Materials		-	2+0f	-	-	-	-
Bioanalytical Laboratory Diagnostics in Medicine		-	46+2f	-	54+1f	-	48+0f
Laboratory Diagnostics in Medicine		-	-	-	-	102+7f	-
Inorganic and Bioinorganic Materials		17+0f	-	21+1f	-	25+2f	-
Organic Chemistry and Technology	Organic Chemistry	-	-	-	10+0f	-	14+0f
	Techn. Org. Specialit.	-	-	-	1+0f	-	-
Organic Coatings and Paints		-	-	-	-	-	4+0f
Technology if Polymer Manufacturing and Processing		-	-	-	-	-	6+0f
Evaluation and Analysis of Foodstuffs		35+4f	12+3f -	50+4f	30+4f	59+6f	27+1f
Chemistry		50+3f	-	65+6f	-	85+4f	-
Engineering of Energetic Materials		-	4+0f	-	9+0f	-	11+1f
Analytical Chemistry		-	10+1f	-	21+2f	-	23+1f
Inorganic and Bioinorganic Chemistry		-	5+0f	-	6+0f	-	9+0f
Material Engineering		-	7+0f	-	12+0f	-	10+0f
Materials Chemistry		-	-	-	-	-	0+2f
Physical Chemistry		-	6+0f	-	7+0f	-	10+0f
Chemical and Process Engineering	Chemical Engineering	-	3+0f	-	3+0f	-	4+1f
	Env. Protection	-	3+0f	-	5+0f	-	4+0f
Sustainable Dev. in Chemistry and Technology		-	4+0f	-	9+0f	-	12+0f
Inorganic Technology		-	3+0f	-	5+0f	-	5+0f
Total		**1123+103f**		**1077+105f**		**972+87f**	

* Originally accredited study programmes.

Number and proportion of doctoral students					
Year	**2018/19**	**2019/20**	**2020/21**	**2021/22**	**2022/23**
Number of students	180	149	142	140	147
Percentage of total number of students (%)	12.6	10.6	10.3	10.5	12.1

2.6 Student failure rates

The failure rate of students (as of 31 October) over the last five academic years in individual study programmes implemented at the FChT is shown in following table.

Student failure rates in %					
Level of study	**2017/18**	**2018/19**	**2019/20**	**2020/21**	**2021/22**
Bc.	33.2%	32.5%	27.6%	30.3%	31.6%
Mgr.	7.9%	7.5%	9.9%	12.1%	10.6%
Ph.D.	10.6%	9.4%	13.4%	13.4%	10.7%

2.7 Graduates of implemented study programmes

Care for graduates of study programmes at the FChT is provided in cooperation with the University of Pardubice, which operates the graduate website https://absolventi.upce.cz/. Registration allows graduates to keep up to date, receiving information and news about their home University of Pardubice and the faculty they graduated from.

Development of the number of FChT graduates from the point of view of individual levels of study over the last five years is shown in the following table.

Numbers of graduates of individual levels of study					
Level of study	**2018**	**2019**	**2020**	**2021**	**2022**
Bc.	176	172	163	172	165
Mgr.	43	36	26	31	39
Ing.	121	89	96	81	76
Ph.D.	32	29	28	17	16
Total	**372**	**326**	**313**	**301**	**296**

The numbers in the table correspond to the V 12-01 statement for the period from 1 January to 31 December of the respective year.

Awarded theses of FChT students

In 2022, a number of dissertations, diploma and bachelor theses were awarded for their outstanding theoretical and experimental level. The following prizes were awarded:

- Student Prize awarded by the Dean of the Faculty of Chemical Technology at the University of Pardubice for an outstanding dissertation in the academic year 2021/2022 (5 prizes),
- Level I Student Prize awarded by the Rector for a diploma thesis defended in 2022 (1 prize),
- Level II Student Prize awarded by the Rector for a diploma thesis defended in 2022 (3 prizes),
- Student Prize awarded by the Dean of the Faculty of Chemical Technology at the University of Pardubice for an outstanding level and defence of a diploma thesis (8 awards),
- Prize awarded by Pfizer, spol. s r. o. for the best diploma thesis defended in 2022 in the field of pharmacochemistry (3 prizes),
- Prize awarded by DEVRO in the field of food, biochemical and biological sciences, food packaging materials, technologies and related materials (3 prizes),
- Prize awarded by the CEO of Synthesia, a.s., for the most interesting diploma thesis in the field of organic pigments and technologies, processes, materials and technologies which have a major impact on industrial production (2 prizes),
- Prize of the Miroslav Jureček Foundation (2 prizes),
- Student Prize awarded by the Dean of the Faculty of Chemical Technology at the University of Pardubice for an outstanding level and defence of a bachelor's thesis (7 prizes),
- Prize awarded by Pfizer, spol. s r. o. for an outstanding bachelor's thesis defended in 2022 (3 prizes),
- Prize awarded by Synthesia, a.s., Pardubice for an outstanding bachelor's thesis defended in 2022 (4 prizes).

Cooperation with future employers of students

The faculty enjoyed cooperation with future employers of students in 2022. Apart from publishing information about demand on the part of companies for graduates of the faculty, the faculty organised a meeting of students and representatives of chemical companies called CONTACT 2022 on 9 March 2022, which was attended by 50 companies. As in previous years, the Faculty of Economics and Administration at the University of Pardubice participated in organisation of this event together with the FChT. The aim of this meeting was to put future graduates of the faculties in contact with potential employers and to help them get their bearings on the job market. Company presentations and face-to-face meetings were held in the university auditorium and on faculty premises, during which both parties had ample opportunity to talk about the things which interested them.

2.8 Other educational activities

The FChT offered a number of additional educational events for interested parties during the course of 2022. These included licensing study and the University of the Third Age, preparatory courses, as well as student research and professional activities.

Licensing study

Licensing study in the field of **"Theory and Technology of Explosives"** is intended for further education and retraining of workers in explosives, munitions, processing and disposal plants and factories, as well as workers who use, store and do business with explosives and explosive hazardous substances. This study is also suitable for obtaining basic information about protection of various facilities against gas explosions, vapour explosions or dispersion of combustible dusts (chemical and food processing plants and the energy sector, etc.). The study also includes the issue of testing and special analysis of explosives, lectures on the basics of ballistics, munitions and weapons design.

Licensing study in the field of **"Basics of Fibre, Paper and Cardboard Manufacturing and Processing Technologies"** is intended for further education and retraining of workers with a university education who work in the pulp and paper industry, who do business with paper products or who are suppliers of raw materials and equipment to the pulp and paper industry. The aim of this licensing study is to familiarise participants with the theoretical foundations of fibre, paper and cardboard manufacturing technology, including ecological aspects, and processes for processing these materials.

Licensing study in the field of **"Rock Blasting"** is intended for further education and retraining of workers from the field of blasting technology. On the basis of decision of the Czech Mining Authority 3501/II/08 of 16 January 2009, the curricula and texts of licensing study courses are approved for tuition of TBMs for the examination to acquire a TBM licence. This exam is open to students of licensing study programmes who meet the other requirements for gaining TBM licensing.

University of the Third Age

The FChT offers study at the "**University of the Third Age**" to senior citizens and others with the lecture series "**Chemistry for Life**". In this programme, the latest findings in the fields taught at the Faculty of Chemical Technology, which are of interest to the general public, are presented in a popular format. Teachers from the ranks of the academic staff of the faculties at the University of Pardubice and experts from the sphere of practical application present selected topics in an attractive manner and try to overcome the ingrained negative attitudes of the non-professional public towards chemistry as such. The "University of the Third Age"

programme promotes continuous intellectual development in the post-productive age, interest in current events, practical use of the acquired knowledge, a permanent active approach to life and creates a place for people to meet and establish new relationships.

More information about licensing study and the University of the Third Age which were implemented at the FChT in 2022 can be seen in the following table.

Licensing study and University of the Third Age				
Name of educational course	**Number of participants**	**Length of study**	**Form of study**	**Number of hours**
Theory and Technology of Explosives - implemented at the IEnM	6	4 semesters	licensing	345
Basics of Fibre, Paper and Cardboard Manufacturing and Processing Technologies – implemented at the IChTMM	21	3 semesters	licensing	200
Rock Blasting – implemented at the IEnM	7	2 semesters	licensing	300
Chemistry for Life	37	4 semesters	U3A	184

Preparatory courses

Before the beginning of regular tuition in the winter semester of the 1st year of bachelor's degree studies, the Department of General and Inorganic Chemistry organises a course entitled "General and Inorganic Chemistry" every year. The course is aimed at acquiring and consolidating the most basic chemical skills such as chemical nomenclature, solving chemical equations, learning about amount of substance and preparing solutions with the defined concentration.

Student Research and Professional Activities

Student Research and Professional Activities (SRPA) is the name of an activity for students of bachelor's and master's degree programmes at the FChT which engages students in research and professional activities beyond the framework of their studies. SRPA is an important form of preparation for students, during which they learn to present the results of their work, develop research and professional skills and contribute towards improvement of their argumentation skills, presentation skills and professional writing. The eighth year saw participation by 34 students from 12 faculty departments.

3 EMPLOYEES

3.1 Number of faculty employees and its development

The FChT had a total of 320.5 employees (FTE) in 2022, of which 53% were academics, 21% were researchers and the remaining 26% were other employees.

Total academics (FTE)								
	Professors	Associate professors	Assistant professors	Assistants	Lecturers	SRD staff	Extraordinary professors	TOTAL ACA
Women	5.40	13.26	37.64	3.02	-	-	-	59.32
Men	29.64	29.14	50.84	1.00	-	-	-	110.62
TOTAL	**35.04**	**42.40**	**88.48**	**4.02**	**-**	**-**	**-**	**169.94**

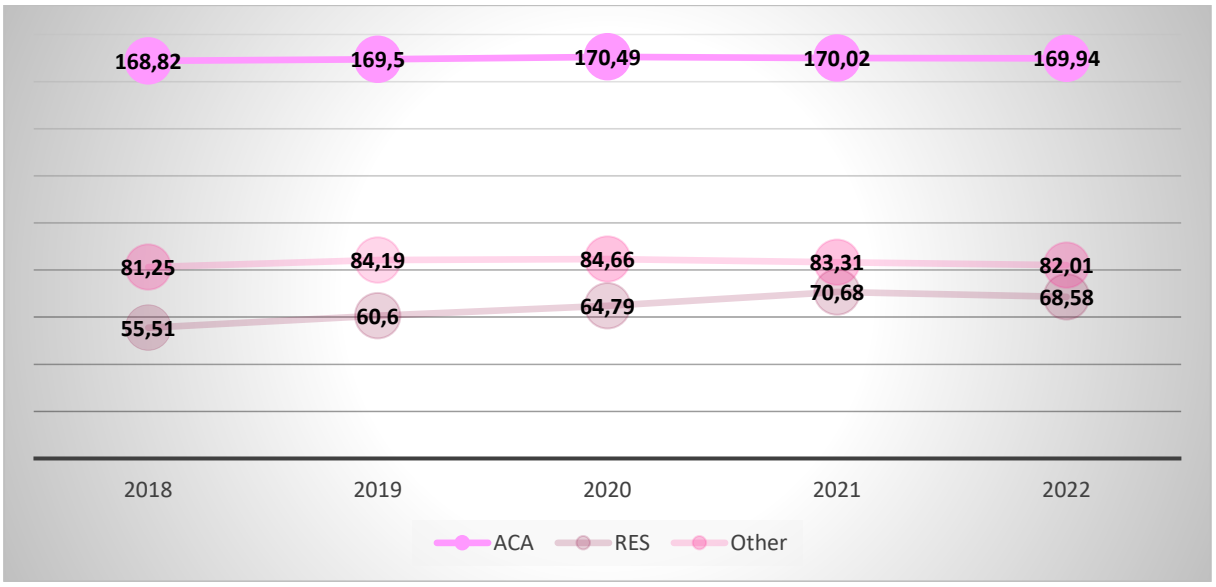
Total researchers and other employees (FTE)					
	Postdoctoral researchers ("Postdoc")	RES not included in other categories	Other SRD staff	Other employees	TOTAL RES and other employees
Women	-	28.49	-	68.18	96.67
Men	-	40.09	-	13.83	53.92
TOTAL	**-**	**68.58**	**-**	**82.01**	**150.59**

The FTE numbers of academics, researchers and other FChT employees from the point of view of nationality are shown in the following tables.

Academics with foreign nationality (FTE)						
	Professors	Associate professors	Assistant professors	Assistants	Lecturers	SRD staff involved in teaching activities
Women	-	0.33	0.48	-	-	-
Men	-	-	1.00	-	-	-
TOTAL	**-**	**0.33**	**1.48**	**-**	**-**	**-**
Of which: Germany	-	-	-	-	-	-
Poland	-	-	-	-	-	-
Austria	-	-	-	-	-	-
Slovakia	-	-	1.48	-	-	-
Other EU states	-	0.33	-	-	-	-
Other non-EU states	-	-	-	-	-	-

Researchers and other employees with foreign nationality (FTE)				
	Postdoctoral researchers ("Postdoc")	RES not included in other categories	Other SRD staff	Other employees
Women	-	9.35	-	-
Men	-	10.37	-	0.05
TOTAL	**-**	**19.72**	**-**	**0.05**
Of which: Germany	-	1.00	-	-
Poland	-	1.30	-	-
Austria	-	1.00	-	-
Slovakia	-	0.30	-	-
Other EU states	-	2.82	-	-
Other non-EU states	-	13.30	-	0.05

Development of the FTE number of FChT employees over the last five years can be seen in the following graph.



3.2 Career development rules and system of remuneration

Heads of FChT departments are obliged to prepare an annual qualification development plan for each employee and are obliged to submit this plan in writing to the Dean of Faculty by 31 January. An FChT staff development plan is prepared annually in relation to this, as was also the case in 2022, and is discussed and approved by faculty management by 1 March of each respective year.

Qualification requirements for the performance of individual work activities are defined by the Internal Wage Regulations of the University of Pardubice. The Internal Wage Regulations also lay down a uniform procedure (conditions) for the provision of fixed salaries and on-call bonuses and the amount of all such monetary benefits to university employees for work performed for the university within the framework of a basic employment relationship in accordance with Act No. 262/2006 Coll., the Labour Code, as amended. These Internal Wage Regulations also regulate the basic conditions for negotiating remuneration from an agreement in the case of university staff working for the university on the basis of agreements on work performed outside of an employment relationship.

3.3 Qualification structure of employees

Measured in terms of physical persons, a total of 334 people were working at the FChT as of 31 December 2022, including 184 academics, 69 researchers and 81 other employees. The qualification structure of academics and researchers is shown in the following tables.

Number of academics by full-time equivalent and highest qualification attained (numbers of individuals)												
FTE	prof.			doc.			DrSc., CSc., Dr., Ph.D., Th.D.			Other		
	Women	Men	TOTAL	Women	Men	TOTAL	Women	Men	TOTAL	Women	Men	TOTAL
up to 0.3	-	2	2	-	2	2	2	2	4	-	2	2
0.31–0.5	1	4	5	1	3	4	1	1	2	1	-	1
0.51–0.7	-	-	-	-	1	1	-	-	-	-	1	1
0.71–1	5	27	32	13	27	40	36	50	86	2	-	2
TOTAL	**6**	**33**	**39**	**14**	**33**	**47**	**39**	**53**	**92**	**3**	**3**	**6**

Number of researchers by full-time equivalent and highest qualification attained (numbers of individuals)												
FTE	prof., senior research fellow			doc., independent researcher			DrSc., CSc., Dr., Ph.D., Th.D.			Other		
	Women	Men	TOTAL	Women	Men	TOTAL	Women	Men	TOTAL	Women	Men	TOTAL
up to 0.3	-	-	-	-	-	-	-	-	-	-	-	-
0.31–0.5	-	1	1	-	2	2	1	2	3	-	-	-
0.51–0.7	-	-	-	-	-	-	1	1	2	-	-	-
0.71–1	-	1	1	1	2	3	22	26	48	4	5	9
TOTAL	**-**	**2**	**2**	**1**	**4**	**5**	**24**	**29**	**53**	**4**	**5**	**9**

3.4 Qualification development of employees

In 2022, three employees of the FChT enhanced their qualifications. Specification of newly appointed professors and associate professors, including those who are not core staff members at FChT, are shown in the table below. One employee of the FChT obtained a Ph.D. in 2022.

Newly appointed professors and associate professors (numbers of individuals)				
Category	Number at the faculty		Core faculty staff appointed at other universities	Average age of newly appointed
	Total	Of which core faculty staff		
Female appointed professors	1	-	-	53
Male appointed professors	2	1	-	47
Total	3	1	-	51.3
Female appointed associate professors	1	1	-	43
Male appointed associate professors	1	1	-	42
TOTAL	2	2	-	42.5

3.5 Age structure of employees

The age structure of employees at the FChT as at 31 December 2022 is shown in the following tables.

Age structure of academics (numbers of individuals)												
Age range	Women	Men	TOTAL	Women	Men	TOTAL	Women	Men	TOTAL	Women	Men	TOTAL
	Professors			Associate professors			Assistant professors			Assistants		
Up to 29	-	-	-	-	-	-	-	-	-	2	-	2
30-39	-	-	-	-	2	2	6	17	23	-	1	1
40-49	-	6	6	9	17	26	21	24	45	1	1	2
50-59	2	9	11	3	5	8	9	8	17	-	-	-
60-69	2	11	13	2	5	7	3	3	6	-	1	1
Over 70	2	7	9	-	4	4	-	1	1	-	-	-
TOTAL	**6**	**33**	**39**	**14**	**33**	**47**	**39**	**53**	**92**	**3**	**3**	**6**

Age structure of researchers (numbers of individuals)			
Agre range	Women	Men	TOTAL
	Researchers not included in other categories		
Up to 29 let	4	8	12
30-39	15	18	33
40-49	5	12	17
50-59	3	-	3
60-69	2	1	3
Over 70	-	1	1
TOTAL	**29**	**40**	**69**

Age structure of other employees (numbers of individuals)			
Agre range	Women	Men	TOTAL
	Other employees		
Up to 29 let	-	-	-
30-39	6	-	6
40-49	22	5	27
50-59	28	1	29
60-69	10	5	15
Over 70	-	4	4
TOTAL	**66**	**15**	**81**

3.6 Employee representation in management, advisory and other bodies

The gender representation of FChT employees in management bodies and gender representation of SRD staff and their representation in advisory and other bodies as of 31 December 2022 can be seen in the following tables.

Management workers (numbers of individuals)							
	Dean	Vice-Dean	Academic Senate	Scientific Council	Secretary	Head of Department /Institute/ Research Site	TOTAL management workers
Women	0	2	0	3	0	3	8
Men	1	2	10	18	1	11	43
TOTAL	**1**	**4**	**10**	**21**	**1**	**14**	**51**

Proportion of SRD staff and their involvement in advisory and other bodies in %		
	Total share of SRD staff	Of which involved in advisory and other bodies
Women	8.68	-
Men	11.97	-
TOTAL	**20.65**	**-**

3.7 Employee work-life balance

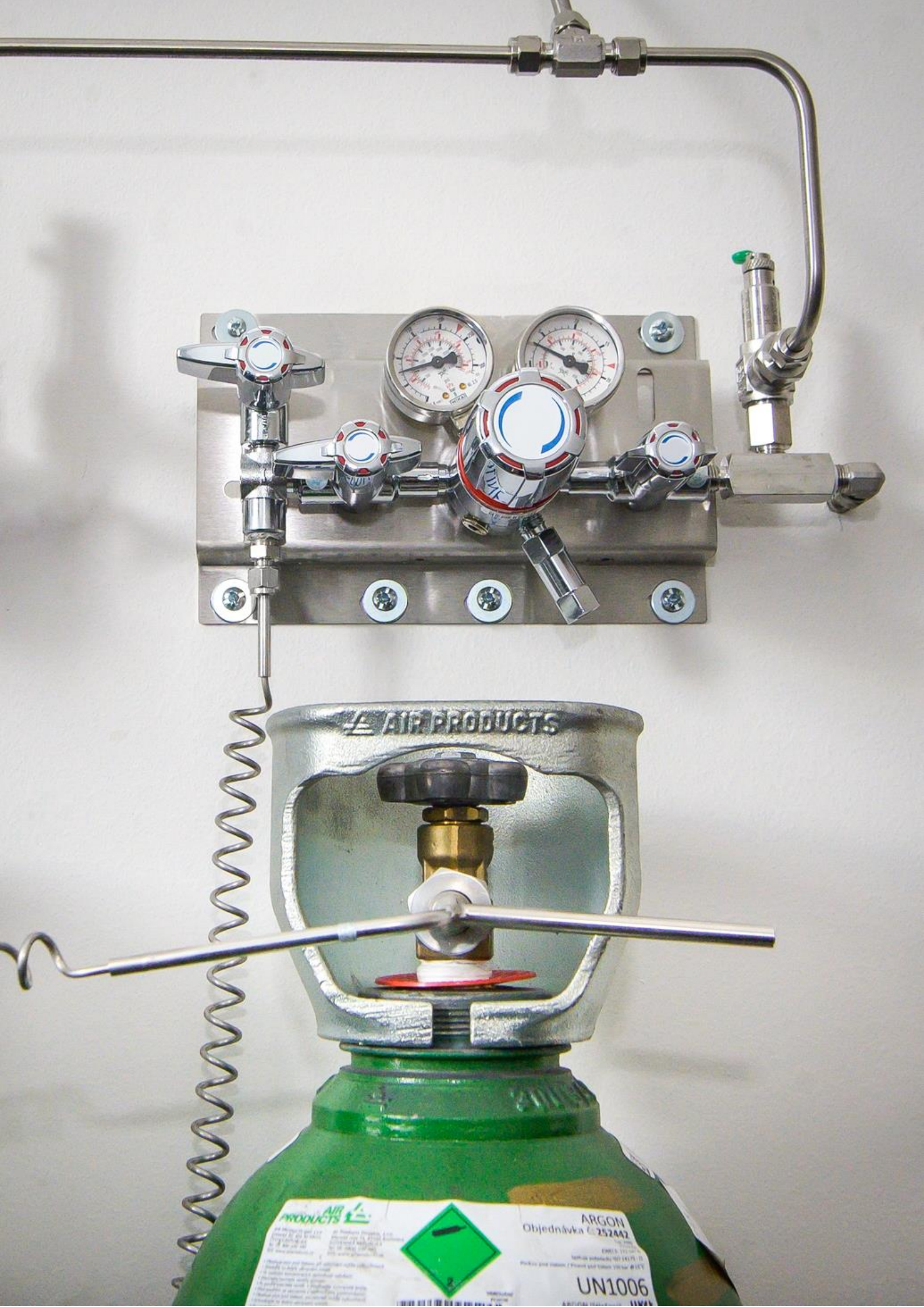
Ensuring the appropriate work-life balance for employees is a priority for the faculty. Employees with young children, for example, are accommodated when setting holiday dates, and in the case of academic staff, this is respected when drawing up the timetable. As regards the employment contracts of employees, these are both fixed-term and open-ended, full-time and part-time.

Work-life balance				
	Number of fixed-term employment contracts	Number of open-ended employment contracts	Number of full-time employment contracts	Number of part-time employment contracts
Women	45	113	144	14
Men	50	126	150	26
TOTAL	**95**	**239**	**294**	**40**

3.8 Average gross salary of employees

Average gross salary of FChT and University of Pardubice employees as a whole over the last five years is shown in the following table.

Average gross salary of employees in CZK					
	2018	**2019**	**2020**	**2021**	**2022**
FChT					
Average gross salary	44,481.00	50,408.00	47,528.00	52,884.00	50,826.00
UPCE					
Average gross salary	37,360.00	40,591.00	40,698.00	43,143.00	43,789.00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4 INTERNATIONALISATION

4.1 Involvement in international cooperation

The FChT is involved in international cooperation in the field of research and teaching. Projects both of foreign providers and also projects funded by domestic providers intended to support bilateral cooperation are submitted and implemented.

Implementation of the research project New Materials and Processing in Organic Electronics (MADRAS) continued successfully in 2022. This is funded by Horizon 2020 - the European Union's framework programme for research and innovation. The year 2022 also saw the start of two new projects supported by the Horizon Europe programme, which builds on HE2020, namely the Joint Industrial Data Exchange Pipeline (JIDEP) and Innovative Environmental Multisensing for Waterbody Quality Monitoring and Remediation Assessment (IBAIA). Apart from these three projects, the FChT was involved in implementation of five other international research projects, which are specified in more detail in Chapter 5.2.

The FChT also worked on two teaching projects in cooperation with foreign partners during the year, specification of which can be seen in the table below.

International teaching projects			
Project number	**Project name**	**Provider/programme**	**Principal investigator**
EHP-CZ-ICP-4-019	NEW Trends in Education of Sustainability-oriented Courses (NEWTEC)	MF/Financial mechanisms of the EEA and Norway	Vávra Jan, Ing., Ph.D.
KA220-HED-797789EC4	A New Academic Path for EU Project Managers: Narrowing the Gaps to Enable Better Project Design and Management in Europe	EU/ERASMUS+	Košťálová Jana, Ing., Ph.D.

In connection with involvement by the FChT in international cooperation, expenditure was incurred in 2022 for foreign business trips in the amount of CZK 6,854,000.00. The following table shows development of costs for foreign business trips over the last five years, which was significantly affected by the COVID-19 pandemic in 2020 and 2021.

Costs for foreign business trips (in CZK thousands)					
Year	**2018**	**2019**	**2020**	**2021**	**2022**
Costs for foreign business trips	6,558	6,417	522	1,148	6,854

4.2 International mobility of students, academics and other staff

The FChT continued to participate in international cooperation within the framework of the Erasmus+ programme in 2022, as is shown in the table below.

Mobility of students, academics and other staff in the Erasmus+ programme					
Index	**2018**	**2019**	**2020**	**2021**	**2022**
Number of outgoing students	14	15	21	14	17
Number of incoming students	14	26	13	5	9
Number of outgoing academics	11	11	2	2	3
Number of incoming academics	7	3	2	0	2
Number of outgoing other workers	2	2	0	0	2
Number of incoming other workers	1	1	0	0	1

The faculty was also involved in the following three networks within the framework of the CEEPUS programme ("Central European Exchange Programme for University Studies") during the respective year:

- CIII-CZ-0212 - Ing. Radovan Metelka, Ph.D.,
- CIII-RO-1111 - Ing. Radovan Metelka, Ph.D.,
- CIII-RS-0704 - Ing. Bohumil Jašúrek, Ph.D.

Mobility within the framework of the CEEPUS programme is specified below.

Mobility of students and academics in the CEEPUS programme					
Index	**2018**	**2019**	**2020**	**2021**	**2022**
Number of projects	3	2	2	3	3
Number of outgoing students	4	0	0	0	1
Number of incoming students	6	19	4	1	7
Number of outgoing academics	16	5	1	0	5
Number of incoming academics	21	19	1	4	10
Grants (in CZK thousands)	420	456.5	166.5	93	241

4.3 Overview of cooperation agreements with foreign partners

The FChT has concluded agreements in particular supporting mobility of students, academic and other staff with the following foreign partners.

Agreements with foreign partners in the field of education	
Belgium	Artevelde University of Applied Sciences
Croatia	University of Dubrovnik
Croatia	University of Zagreb
Denmark	University of Southern Denmark
Finland	Åbo Akademi University
France	ENSTA Bretagne
France	Grenoble Institute of Technology
France	University of Lille
France	University of Lorraine
France	University of Rennes I
Germany	Chemnitz University of Technology
Germany	Friedrich Schiller University Jena
Germany	Technical University of Munich
Germany	Eberhard Karl University of Tübingen
Greece	National and Kapodistrian University of Athens
Greece	Agricultural University of Athens (2 agreements)
Greece	University of West Attica (2 agreements)
Greece	University of Piraeus
Hungary	University of Debrecen
Hungary	University of Dunaújváros
Italy	University of L'Aquila
Italy	University of Modena and Reggio Emilia
Italy	University of Turin
Latvia	Riga Technical University
Lithuania	Kauno kolegia Higher Education Institution
Lithuania	Klaipeda University

Netherlands	Hanze University of Applied Sciences
Norway	Norwegian University of Science
Poland	AGH University of Science and Technology
Poland	University of Agriculture in Krakow
Poland	University of Lodz
Poland	Maria Curie-Skłodowska University
Poland	West Pomeranian University of Technology
Poland	Nicolaus Copernicus University in Toruń
Poland	Military University of Technology in Warsaw
Portugal	University of Aveiro
Portugal	University of Minho
Portugal	University of Coimbra
Portugal	University of Madeira
Portugal	Polytechnic Institute of Viseu
Romania	Transylvania University of Brasov
Romania	Military Technical Academy “Ferdinand I”
Romania	Craiova University
Slovakia	Slovak University of Technology in Bratislava (2 agreements)
Slovakia	Technical University of Košice (2 agreements)
Slovakia	Constantine the Philosopher University in Nitra
Slovakia	University of Ljubljana (2 agreements)
Serbia	University of Novi Sad
Spain	University of Burgos
Spain	Jaume I University
Spain	University of Huelva
Spain	University of Jaén
Spain	University of Málaga
Spain	University of the Balearic Islands
Spain	University of Seville
Spain	University of La Laguna
Sweden	Umeå University
Turkey	Ankara University
Turkey	Çanakkale Onsekiz Mart University
Turkey	Marmara University
Turkey	Mersin University – Meu

Other forms of contractual cooperation based on memoranda and agreements in the field of scientific research are developed by the faculty with the following partners.

Memoranda and agreements with foreign partners in the field of scientific research			
Foreign university/institution	**City**	**Country**	**Year of conclusion of agreement**
University of Graz	Graz	Austria	1993
South Valley University	Qena, Aswan	Egypt	2001
Eberhard Karl University of Tübingen	Tübingen	FRG	2004
National Institute of Chemistry	Ljubljana	Slovenia	1994
University of Ljubljana	Ljubljana	Slovenia	1998
Technical University of Szczecin (now the West Pomeranian University of Technology)	Szczecin	Poland	1998
Technical University of Košice	Košice	Slovakia	2000
Institute of Industrial Organic Chemistry	Warsaw	Poland	2001
National Institute for Material Science	Tsukuba	Japan	2009
Kumamoto University	Kumamoto	Japan	2015
Austin Peay State University	Clarksville	USA	2013
Tennessee Tech University	Cookeville	USA	2016
Matsumoto University	Matsumoto	Japan	2006
Alexander Dubček University in Trenčín	Trenčín	Slovakia	2011

Other than agreements concluded by the faculty, agreements also exist on the level of the university, e.g. with the Friedrich Schiller University in Jena, Germany, the Kyoto Prefectural University of Medicine in Kyoto, Japan, the Military University of Technology in Warsaw, Poland, the Nanyang Technological University in Singapore, Singapore, the Toyota Technological Institute in Nagoja, Japan, the University of Rennes I in Rennes, France, the Vietnam Academy of Science and Technology in Hanoi, Vietnam and the VNU University of Sciences in Hanoi, Vietnam, on the basis of which a mutually beneficial cooperation with a number of FChT departments takes place.

5 RESEARCH AND OTHER CREATIVE ACTIVITIES

5.1 Development of research and other creative activities

Research and other creative activities of the faculty are focused primarily on high-quality basic and applied research and are carried out in accordance with the Strategic Plan of the Faculty of Chemical Technology at the University of Pardubice for the period from 2021 and its specification in the form of Implementation of the Strategic Plan of the Faculty of Chemical Technology at the University of Pardubice for the given year.

Research, experimental development and innovation are based on chemical sciences and fields of study which are specific to the faculty, have been developed over the long term, and in which the faculty has already achieved demonstrable results in the past and therefore has a recognised reputation in a national and international context. The FChT carries out research, experimental development and innovations mainly in the scientific field of 1 Natural Sciences (FORD 1.4 Chemical Sciences) and the scientific field of 2 Engineering and Technology (FORD 2.5 Materials Engineering).

The basic scientific research units are working groups of departments/institutes which are actively involved in projects funded mainly by the Grant Agency of the Czech Republic, the Technology Agency of the Czech Republic and ministerial providers of support. An important contribution towards development of the faculty's scientific research activities is also constituted by funds obtained in connection with cooperation with industry and international cooperation. This is also related to the high level of publication and creative activities oriented towards articles in professional periodicals with impact factors, monographs and patents, etc. In financial terms, the volume of creative activities with a focus on science, research and innovation in 2022 accounted for a significant part of the FChT budget.

The FChT has a dominant focus on basic/applied research in the following fields:

- inorganic pigments for ceramics and paints,
- analysis and separation of bio-analytical and food compounds,
- analysis of diagnostically relevant materials for the study of metabolism and oxidative stress in patients with different types of diseases,
- biologically active compounds for applications in human and veterinary medicine,
- detection of microorganisms using cultivation-based and molecular biology methods,
- electrochemistry and interfacial chemistry and methodologies for the preparation and subsequent elemental analysis of samples with a focus on the development and application of separation, analytical, detection and diagnostic techniques, instrumentation and sensors relating to human health, environmental protection and materials analysis,
- energetic materials for use mainly in the automotive, aerospace, mining, construction and defence sectors,
- photonics, optics and optoelectronics,
- environmental processes (e.g. technologies applicable to pre-treatment and treatment of process, waste and municipal water),
- chemical processes with high added value, which relates mainly to research into new and highly selective adsorbents, catalysts (homogeneous and heterogeneous catalysis) and photocatalysts,
- identification/detection of biomarkers in patients with neurodegenerative diseases and cancers, among other things, with the aim of early detection of cancer,
- bulk glasses and amorphous thin films,
- organic dyes for dyeing and printing,
- organic materials for optoelectronics,

- organic pigments for the automotive and construction industries,
- organic coatings and paints,
- organometallic and coordination compounds with subsequent application in catalytically controlled processes, as precursors of advanced materials, or compounds with biological effects,
- advanced low-dimensional nanomaterials using modern synthesis methods, their use in various applications (e.g. batteries, catalysts, water decomposition and solar cells, etc.),
- nanobiomedical technologies,
- semiconductors and materials for thermoelectric applications,
- polymer materials, fibres, composites and organic coatings,
- material printing,
- membrane separation processes,
- safety engineering and risk analysis methods for the requirements of the chemical industry,
- glass-forming materials (amorphous/crystalline form, bulk materials/thin films), advanced viscous and kinetic phenomena and physicochemical processes associated with the use of these materials,
- determination of sensitivity of individual cell types to the effects of genotoxic agents,
- fibres based on novel polysaccharides with biological properties.

5.2 Grants and projects

An overview of development of the volume of funds flowing into the FChT over the last five years from research and other creative activities can be seen in the following table. Development of the number of projects and the amount of funding received from the GACR and TACR, which represent a significant group of FChT projects, is then specified.

Funds raised within the framework of research and other creative activities					
Year	**2018**	**2019**	**2020**	**2021**	**2022**
Institutional support for the development of the research organisation (CZK thousands)	138,998	140,872	151,052	156,143	170,038
Foreign grants (CZK thousands)	10,039	7,647	5,073	2,243	3,292
Domestic grants (CZK thousands)	256,092	181,913	154,794	135,628	118,814
Student grant competition (CZK thousands)	17,762	18,334	12,715	12,415	11,924
Additional activities (CZK thousands)	5,573	5,264	7,285	6,742	6,231

Number of projects and amount of funding received from GACR and TACR (principal investigators and co-investigators)						
Provider	**2018**		**2019**		**2020**	
	Number of projects implemented	**Funds in CZK thousands**	**Number of projects implemented**	**Funds in CZK thousands**	**Number of projects implemented**	**Funds in CZK thousands**
GACR	24	38,365	29	50,294	27	53,463
TACR	17	13,595	19	16,970	19	17,279
Provider	**2021**		**2022**			
	Number of projects implemented	**Funds in CZK thousands**	**Number of projects implemented**	**Funds in CZK thousands**		
GACR	23	47,755	23	42,922		
TACR	17	16,479	11	12,449		

An overview of the individual projects implemented in 2022 at the FChT is given in the following tables.

International projects

International projects			
Project no.		**Provider/programme**	**Principal investigator**
862492	New Materials and Processing in Organic Electronics (MADRAS)	EU/Horizon 2020	Syrový Tomáš, doc. Ing., Ph.D.
101058732	Joint Industrial Data Exchange Pipeline (JIDEP)	EU/Horizon Europe	Syrový Tomáš, doc. Ing., Ph.D.
101092723	Innovative Environmental Multisensing for Waterbody Quality Monitoring and Remediation Assessment (IBAIA)	EU/Horizon Europe	Němec Petr, prof. Ing., Ph.D.
OISE-2106457	International Research Experiences for Students (IRES)	National Science Foundation	Vlček Miroslav, prof. Ing., CSc.
TH80020009	Tellurium-free Thermoelectric Modules for Waste Heat Recovery by Interface Engineering (THERMOS)	TACR/M-ERA.NET 3	Bureš Filip, prof. Ing., Ph.D.
EHP-BFNU-OVNKM-3-134-01-2020	Programme for Exchange of Best Practices in Social Responsibility	MF/Financial mechanisms of the EEA and Norway	Tetřevová Liběna, doc. Ing., Ph.D.
EHP-BFNU-OVNKM-4-079-2022	Towards Regenerative and Sustainable Development and Society	MF/ Financial mechanisms of the EEA and Norway	Tetřevová Liběna, doc. Ing., Ph.D.
LTAIN19101	Carbon-conjugated 2D-covalent Organic Frameworks Based on Alternative D-A-D/A-D-A Systems with Exceptional Optoelectronic Properties	MEYS/ Czech-Indian mobility programme	Bureš Filip, prof. Ing., Ph.D.

GACR, TACR and ministerial projects

Department of Analytical Chemistry

GACR, TACR and ministerial projects			
Project number	**Project name**	**Provider**	**Principal investigator on behalf of FChT UPCE**
GACR projects			
20-23290Y	Absolute quantification of ionic and polar biomolecules using supercritical fluid chromatography in conjunction with mass spectrometry	GACR	Wolrab Denise, Dr.
21-20238S	Linking of multidimensional chromatography and mass spectrometry in quantitative approaches for detailed characterisation of the human plasma lipidome	GACR	Holčapek Michal, prof. Ing., Ph.D.
22-09556S	Self-adaptive multidimensional separation	GACR	Česla Petr, doc. Ing., Ph.D.
MH projects			
NU21-03-00499	Prospective study on early detection of pancreatic cancer and monitoring of treatment progress based on lipidomic profiling by mass spectrometry	MH	Holčapek Michal, prof. Ing., Ph.D.

Department of General and Inorganic Chemistry

GACR, TACR and ministerial projects			
Project number	**Project name**	**Provider**	**Principal investigator on behalf of FChT UPCE**
GACR projects			
20-10417S	Auto-ionized cations of non-transition elements as catalysts for ROP reactions	GACR	Jambor Roman, prof. Ing., Ph.D.
21-02964S	Nitrogen ligands for non-transition metal elements - bulkier, more conjugated and more reactive	GACR	Růžička Aleš, prof. Ing., Ph.D.
22-03945S	Polyhedral (car)borates - cationic and catalytically applicable	GACR	Růžička Aleš, prof. Ing., Ph.D.
22-17230S	Organometallic cations of tellurium for activation of E-H bonds in boranes, silanes and phosphines	GACR	Dostál Libor, doc. Ing., Ph.D.
TACR projects			
TH04010080	Functional dyes for security printing	TACR	Růžička Aleš, prof. Ing., Ph.D.
TH04010146	Production of polyglycerol and its application in the production of alkyds, polyesters and polyurethanes	TACR	Růžička Aleš, prof. Ing., Ph.D.
GAMA2-03/001	Lactic acid derivatives for disinfection applications	TACR	Olejník Roman, Ing., Ph.D.
MIT projects			
FV40362	Vinyl chloroformate production technology for advanced materials	MIT	Růžička Aleš, prof. Ing., Ph.D.

Department of Inorganic Technology

GACR, TACR and ministerial projects			
Project number	**Project name**	**Provider**	**Principal investigator on behalf of FChT UPCE**
GACR projects			
22-11397S	Mixed perovskites as multifunctional materials in pigment study	GACR	Šulcová Petra, prof. Ing., Ph.D.
MI projects			
VJ01010004	Development of a strategic cluster for efficient instrumental technological processes in the detection of forgeries of modern art in the forensic field	MI	Šulcová Petra, prof. Ing., Ph.D.

Department of Biological and Biochemical Sciences

GACR, TACR and ministerial projects			
Project number	**Project name**	**Provider**	**Principal investigator on behalf of FChT UPCE**
OP RDE projects			
CZ.02.1.01/0.0/0.0/17_048/0007421	Strengthening interdisciplinary cooperation in research into nanomaterials and in the study of their effects on living organisms	MEYS	Bílková Zuzana, prof. RNDr., Ph.D.
CZ.02.1.01/0.0/0.0/18_069/0010054	IT4Neuro	MEYS	Roušar Tomáš, doc. RNDr., Ph.D.

Department of Physical Chemistry

GACR, TACR and ministerial projects			
Project number	**Project name**	**Provider**	**Principal investigator on behalf of FChT UPCE**
GACR projects			
20-02183Y	Kinetic processes in chalcogenide bulk samples and thin films - relationship between crystal growth, viscosity and self-diffusion	GACR	Barták Jaroslav, Ing., Ph.D.
20-12735S	Research into zeolites with nanostructured architecture: synergy of experiment and theory	GACR	Bulánek Roman, prof. Ing., Ph.D.
20-09914S	Heterojunction photocatalysts and TiO_2 photocatalysts simultaneously doped with metals and non-metals for environmental photocatalytic reactions	GACR	Čapek Libor, prof. Ing., Ph.D.
22-23120S	Catalysts for the oxidative dehydrogenation of boron-based alkanes	GACR	Bulánek Roman, prof. Ing., Ph.D.

Department of Graphic Arts and Photophysics

GACR, TACR and ministerial projects			
Project number	**Project name**	**Provider**	**Principal investigator on behalf of FChT UPCE**
GACR projects			
22-05179S	Infrared photonics for chemical sensors: Material strategy based on amorphous chalcogenides	GACR	Nazabal Virginie, doc., Dr.
22-07635S	Advanced methods for the preparation of telluride semimetals and non-transition metals	GACR	Němec Petr, prof. Ing., Ph.D.
TACR projects			
GAMA2-01 /007	Development of inkjet varnish cured with UV LED technology	TACR	Jašúrek Bohumil, Ing., Ph.D.
FW03010448	OILSENSE – Detection systems for industrial equipment based on large area sensors	TACR	Syrový Tomáš, doc. Ing., Ph.D.
TK04030083	EllyteMat – Advanced materials for lithium and post-lithium battery electrolytes	TACR	Syrový Tomáš, doc. Ing., Ph.D.
MIT projects			
CZ.01.1.02/0.0 /0.0/21_374/00 26916	Development of a system for environmental impact assessment of printing products using the LCA method	MIT	Němec Petr, prof. Ing., Ph.D.
MA projects			
QK1810010	SMARTFIELD – Automatic system for collection and processing of temperature and humidity parameters of microclimate and soil for precision agriculture in the Czech Republic based on the principle of the Internet of Things (IoT)	MA	Syrový Tomáš, doc. Ing., Ph.D.

Department of Organic Chemistry and Technology

GACR, TACR and ministerial projects			
Project number	**Project name**	**Provider**	**Principal investigator on behalf of FChT UPCE**
GACR projects			
22-14988S	DikyanPyraZin: A versatile tool for photoredox catalysis	GACR	Bureš Filip, prof. Ing., Ph.D.
TACR projects			
TH80020009	THERMOS – Telluride-free thermoelectric waste heat recovery modules prepared by interfacial modifications	TACR	Bureš Filip, prof. Ing., Ph.D.
MEYS projects			
LTAIN19101	Conjugated 2D covalent carbon-based organic structures and alternating D-A-D/A-D-A systems with strong optoelectronic properties	MEYS	Bureš Filip, prof. Ing., Ph.D.
OP RDE projects			
CZ.02.1.01/0.0 /0.0/16_025/ 0007445	Organic redox batteries for traditional and renewable energy	MEYS	Bureš Filip, prof. Ing., Ph.D.

Department of Environmental and Chemical Engineering

GACR, TACR and ministerial projects			
Project number	**Project name**	**Provider**	**Principal investigator on behalf of FChT UPCE**
GACR projects			
20-01589S	New strategies for improving the sensor properties of novel electrode materials through their pre-treatment or surface modification	GACR	Šelešovská Renáta, doc. Ing., Ph.D.
TACR projects			
TJ04000226	Combined procedure for the elimination of chloroacetanilide pesticides from contaminated water and soil	TACR	Peroutková Petra, Ing.
GAMA2-01/005	Removal of hazardous components from contaminated materials for recycling in the spirit of the circular economy	TACR	Weidlich Tomáš, doc. Ing., Ph.D.
GAMA2-03/006	Equipment for capturing metal ions from polluted water by biological immobilisation and the path towards its commercialisation	TACR	Palarčík Jiří, Ing., Ph.D.
GAMA2-03/009	Increasing the resistance of textile protection of the respiratory system of persons by impregnation with a virucidal product, Part II.	TACR	Weidlich Tomáš, doc. Ing., Ph.D.

Department of Chemistry and Technology of Macromolecular Materials

GACR, TACR and ministerial projects			
Project number	**Project name**	**Provider**	**Principal investigator on behalf of FChT UPCE**
GACR projects			
22-05244S	Ionic liquids containing metal immobilised on 2D materials as heterogeneous catalysts for polymerisation	GACR	Honzíček Jan, Ing., Ph.D.
MIT projects			
FV40136	Innovative enhancement of the performance and durability of combustible mass ammunition	MIT	Filipi Michaela, Ing., Ph.D.

Department of Applied Physics and Mathematics

GACR, TACR and ministerial projects			
Project number	**Project name**	**Provider**	**Principal investigator on behalf of FChT UPCE**
GACR projects			
19-16315S	Exploration of electronic states of transition metals in tetradymites and their band structure - comparison of 3d, 4d and 5d elements	GACR	Navrátil Jiří, Ing., CSc.
19-13659S	Interfaces between thin-layered chalcogenides containing iron and insulators: effect on structure, magnetism and unconventional superconductivity	GACR	Drašar Čestmír, prof. Ing., Dr.
22-05919S	Bi2O2Se layered semiconductors doped with transition metals: correlation of transport, magnetic and thermoelectric properties	GACR	Drašar Čestmír, prof. Ing., Dr.

Centre of Materials and Nanotechnologies

GACR, TACR and ministerial projects			
Project number	**Project name**	**Provider**	**Principal investigator on behalf of FChT UPCE**
GACR grants			
19-17997S	Transition between amorphous and crystalline states (3D2D) in van der Waals bonded chalcogenide materials	GACR	Krbal Miloš, Ing., Ph.D.
GC20-23392J	Influence of glass-forming ability and modification of photoinduced properties of hybrid amorphous chalcogenides through controlled concentration of free electron pairs	GACR	Krbal Miloš, Ing., Ph.D.
21-27243S	Synthesis of large-area TiO^2 nanotube layers for efficient photocatalytic degradation of gas-phase pollutants and viruses	GACR	Macák Jan, Dr. Ing.
MEYS projects			
LM2018103	CEMNAT Research infrastructure	MEYS	Vlček Miroslav, prof. Ing., CSc.
OP RDE projects			
CZ.02.1.01/0.0 /0.0/17_048/ 0007376	Sensors with high sensitivity and materials with low density based on polymer nanocomposites-NANOMAT	MEYS	Vlček Miroslav, prof. Ing., CSc.

Faculty project

Project number	Project name	Provider	Principal investigator on behalf of FChT UPCE
OP RDE projects			
OP VVV – PRAKTIK: CZ.02.2.67/0.0 /0.0/16_016/ 0002458	Modernisation of practical tuition and improvement of practical skills in technically oriented study programmes	MEYS	Bělina Petr, Ing., Ph.D.

SGC projects

Project number	Project name	Provider	Principal investigator on behalf of FChT UPCE
SGC FChT 2022			
SGS_2022_001	Research in key areas of environmental chemistry and engineering and management of sustainable business processes	UPCE	Mikulášek Petr, prof. Ing., CSc.
SGS_2022_002	Instrumental analytical methods for analysis of materials, food and biological samples	UPCE	Bajerová Petra, doc. Ing., Ph.D.
SGS_2022_003	Preparation, characterisation and study of utility properties of promising organic compounds and materials	UPCE	Hanusek Jiří, prof. Ing., Ph.D.
SGS_2022_004	Analytical, molecular biological, microbiological and cytological methods for laboratory diagnosis of various diseases and pathological states	UPCE	Kanďár Roman, prof. Mgr., Ph.D.
SGS_2022_005	Study of the synthesis, structure and reactivity of advanced macromolecular and supramolecular structures of materials	UPCE	Bouška Marek, doc. Ing., Ph.D.
SGS_2022_006	Research into new inorganic compounds and materials	UPCE	Vinklárek Jaromír, prof. Ing., Dr.
SGS_2022_007	Basic research and application of materials promising for chemical and pharmaceutical technologies	UPCE	Košťál Petr, Ing. Ph.D.,

5.3 Publication and other creative activities

Data documenting the publication activities of the FChT in journals indexed in the Web of Science database and their concretisation in terms of journals with impact factors over the last five years can be seen in the following tables.

Number of publications in journals indexed in the Web of Science					
Year	**2018**	**2019**	**2020**	**2021**	**2022**
Number of publications	211	225	209	211	183

Number of publications in journals with impact factors by quartile (FORD – AIS)					
Year	**2018**	**2019**	**2020**	**2021**	**2022**
Number of publications J_{imp} – Q1	52	58	51	61	49
Number of publications J_{imp} – Q2	83	87	106	105	105
Number of publications J_{imp} – Q3	48	53	33	31	20
Number of publications J_{imp} – Q4	20	33	12	10	6

The number of applied research results generated by the FChT over the last five years, including awarded patents, utility models, functional samples, prototypes, validated technologies and certified methodologies, can be seen in the following table.

Number of results of applied research					
Year	**2018**	**2019**	**2020**	**2021**	**2022**
Number of results	21	33	29	29	21

An overview of selected publication and other creative activities of FChT in 2022 from the point of view of individual departments/institutes can be seen in the following table.

Publication and other creative activities in 2022 by individual departments/institutes and groups of results				
Department/Institute	**A1**	**A2**	**C**	**D**
DGInCh	24	-	-	2
IOChT	20	-	-	7
DAlCh	39	-	3	1
DPCh	25	-	-	-
IEnviChE	23	-	1	-
IAPM	6	-	-	-
JLSSCh	17	-	-	-
DEMCh	2	2	1	-
DInT	9	-	-	-
IChTMM	10	-	3	9
DBBS	22	1	-	-
DGAP	10	-	-	9
IEnM	12	1	-	1
CEMNAT	35	-	-	1

Legend:

A1 Publications in a professional periodical included in the Web of Science database – J_{imp}

A2 Publications in professional periodicals included in the SCOPUS database – J_{SC}

C Monographs, selected chapters, study texts, lecture notes

D Awarded patents, utility models, functional samples, prototypes, proven technologies and certified methodologies

5.4 Editorial activities

Specialist books

1. Tetřevová L., Midttun A. et al.: Moderní trendy společenské odpovědnosti firem, univerzit a municipalit: Příklady dobré praxe z České republiky a Norska, 1st edition, on-line, 198 pages, ISBN: 978-80-7560-418-7 (pdf). Available from: https://eshop.upce.cz/epub?fakulta=fcht

Lecture notes and study texts

1. Hrubeš J., Tywoniak A., Chvíla S., Balouch M. et al.: Chemiklání 2016–2020: řešené úlohy, 1st edition, 328 copies, 140 pages, ISBN: 978-80-7560-394-4.
2. Šňupárek J.: Makromolekulární chemie. Úvod do chemie a technologie polymerů, 4th revised and supplemented edition, 250 copies, 192 pages, ISBN: 978-80-7560-404-0.
3. Cakl J., Jiránková H., Doleček P., Šiška B.: Úvod do procesů a zařízení potravinářských výrob I., 2nd revised edition, 200 copies, 144 pages, ISBN: 978-80-7560-405-7.

4. Kanďár R.: Vybrané kapitoly z obecné biochemie, klinické biochemie a pathobiochemie II, 1st edition, 200 copies, 128 pages, ISBN: 978-80-7560-409-5.
5. Štěpánková Š., Žáková P., Kanďár R.: Laboratorní cvičení z obecné a klinické biochemie, 3rd supplemented edition, 311 copies, 180 pages, ISBN: 978-80-7560-448-4.

Total of 1,289 copies and 784 pages of text.

Collections and proceedings

1. Scientific Papers of the University of Pardubice, Series A, Faculty of Chemical Technology, Volume 28 (2022), 78 x, ISBN: 978-80-7560-428-6, ISSN: 1211-5541.
2. Proceedings of the 24th International Seminar New Trends in Research of Energetic Materials, 30 x (ISBN: 978-80-7560-407-1) + 7 x CD-ROM (ISBN: 978-80-7560-408-8 (pdf)) + 200 x USB.
3. 29th International Conference on Organometallic Chemistry, 557 x, ISBN: 978-80-7560-420-0.
4. CHEM2CHANGE Environmental Chemistry towards Global Change, 2nd Online ACE Seminar on Chemistry and the Environment Led by Early-Career Scientists, Book of Abstracts, on-line, ISBN: 978-80-7560-406-4 (pdf), available at: https://eshop.upce.cz/epub?fakulta=fcht.
5. Studentská vědecká odborná činnost 2021/2022 – Sborník příspěvků, 114 x, ISBN: 978-80-7560-434-7.
6. 53. seminář o tenzidech a detergentech, 58 copies, ISBN: 978-80-7560-437-8.
7. Sborník 24. konference o speciálních anorganických pigmentech a práškových materiálech, 33 x CD-ROM, ISBN: 978-80-7560-419-4 (pdf).

The FChT published a total of 7 titles with a total print run of 927 copies, 40 x CD-ROM and 200 x USB.

6 COOPERATION WITH THE SPHERE OF PRACTICAL APPLICATION

6.1 Cooperation in educational and creative activities

Cooperation with the sphere of practical application in educational activities

Cooperation between the faculty and the sphere of practical application, especially with industrial enterprises, is permanently implemented in several forms. This was also the case in 2022.

Cooperation with the sphere of practical application in the field of educational activities was implemented by means of:

- internships for students of all forms of study in industrial enterprises and research institutions,
- excursions of students to manufacturing companies, research institutions and specialist workplaces,
- work experience by students (compulsory work experience set out in the study plan),
- membership of experts from the world of work in the Scientific Council of the FChT,
- membership of experts from the world of work in the specialist boards of doctoral study programmes,
- appointment of experts from the world of work to examination boards of state final examinations and appointment to dissertation defence committees,
- entrusting tuition to leading experts from the world of work, especially those parts of courses in which students are familiarised with real technological procedures and processes,
- one-off lectures by experts from the world of work for students at all levels of study.

Student internships in industrial companies were carried out in 2022 mainly in Synthesia, a.s., Pardubice and Výzkumný ústav organických syntéz, a.s., Pardubice. These internships give students an insight into a wider range of research and production. Students from the bachelor's degree programmes Analysis of Biological Materials and Graphic Arts as well as those from the master's degree programmes Analysis of Biological Materials, Bioanalytical Diagnostics in Medicine and Evaluation and Analysis of Foodstuffs also complete internships in other chemical and food processing companies, as well as in hospitals and medical facilities throughout the Czech Republic. Completion of internships increases student employability on the job market after successful completion of their studies.

Cooperation with the sphere of practical application in creative activities

The activity of joint laboratories continued in 2022:

- Joint Laboratory of Membrane Processes MEGA, a.s., Stráž pod Ralskem and the University of Pardubice, Faculty of Chemical Technology (JLMP),
- Joint Laboratory for Analysis and Evaluation of Polymers SYNPO, a.s., Pardubice and the University of Pardubice, Faculty of Chemical Technology (JLAP),
- Joint Laboratory of Applied Medical Science Pardubice Hospital, Pardubice and the University of Pardubice, Faculty of Chemical Technology (JLAM).

In this area it is necessary to emphasise cooperation between the faculty and industrial enterprises, research institutions and hospitals. It is not possible to list all of the partners with which individual faculty departments are involved in various projects, be this in the form of basic or applied research, implemented through joint research teams and complementary activities. There is however no doubt that this form of cooperation in resolving current problems in industrial and application practice contributes, among other things, towards

development of scientific research at the faculty and towards the education of students and therefore sustained attention must be dedicated to it.

Overview of cooperating entities

An overview of the entities with which the FChT cooperated in 2022 on TACR projects, projects of ministerial providers of support and contractual research projects is given in the following tables.

Cooperating organisations for TACR projects	Cooperating organisations for ministerial projects
Central Glass Czech, s.r.o., Prague	AGROSPOL, agrární družstvo, Knínice u Boskovic, Blansko
EPS biotechnology, s.r.o., Kunovice	Centrum organické chemie, s.r.o., Rybitví
Synpo, a.s., Pardubice	Explosia, a.s., Pardubice
TESLA BLATNÁ, a.s., Blatná	University Hospital Hradec Králové, Hradec Králové
Tomáš Baťa University in Zlín, Zlín	University Hospital Olomouc, Olomouc
Brno University of Technology, Brno	National Gallery, Prague
Výzkumný ústav organických syntéz, a.s., Rybitví	NOVATISK, a.s., Blansko
University of West Bohemia, Pilsen	Palacký University in Olomouc, Olomouc
	General University Hospital in Prague, Prague
	Výzkumný ústav organických syntéz, a.s., Rybitví
	Crop Research Institute, p.r.i., Prague
	University of West Bohemia, Pilsen

Cooperating organisations for contractual research projects
2print, s.r.o., Příbram
Colognia press, a.s., Kolín
DEMCAK, s.r.o., Lázně Bohdaneč
European Defence Agency
HEUBACH Research Centre, s.r.o., Pardubice
Innovative Senzor Technology, s.r.o., Rožnov pod Radhoštěm
IQS Group, s.r.o., Husinec – Řež
Lachepra, s.r.o., Pardubice
Magna Exteriors (Bohemia), s.r.o., Liberec
Mondi Štětí, a.s., Štětí
ORLEN UniCRE, a.s., Ústí nad Labem
OZM Research, s.r.o., Hrochův Týnec
PARAMO, a.s., Pardubice
PPC MORAVA – CHEM, s.r.o., Český Těšín
PYROTECHNICKÁ SLUŽBA, s.r.o., Ostrava
ŠKODA AUTO, a.s., Mladá Boleslav

Cooperation was also developed with a number of other entities, e.g. the following.

Other cooperating organisations
American Society for Mass Spectrometry
American Vacuum Society
Association of the Paper and Pulp Industry
Central Polytechnic Workshops
Czech Herpetological Society
Czech Immunological Society
Czech Medical Association of J. E. Purkyně, Czech Society of Clinical Biochemistry
Czech Membrane Platform
Czech Glass Society
Czech Anthropological Society
Czech Chemical Society
Czech Society of Chemical Engineering
Czech Society for Biochemistry and Molecular Biology
Czech Society for New Materials and Technologies
Czech Society of Industrial Chemistry
Czechoslovak Microscopy Society
Czechoslovak Society for Microbiology
Czechoslovak Association for Crystal Growth
Czech Battery Cluster
Electrochemical Society
Eurachem-Czech Republic
European Federation of Chemical Engineering, Working Party on Membranes
European Membrane Society
European Microscopy Society
European Thermoelectric Society
FATIPEC
Hi-Tech Innovation Cluster
International Adsorption Society
International Association of Research Organizations for the Information, Media and Graphic Arts Industries
International Circle of Educational Institutes for Graphic Media Technologies and Management
International Confederation for Thermal Analysis and Calorimetry
International Lipidomics Society
International Polymer Colloids Group
International Project Management Association Czech Republic
International Society of Electrochemistry
International Zeolite Association
Union of Czech Mathematicians and Physicists
Regional Innovation Council of the Pardubice Region
Materials Research Society
Optical Society
Jan Marek Marci Spectroscopy Society
Czech Association for Blasting Techniques and Pyrotechnics
Association of the Pulp and Paper Industry
Czech Association of Textile Chemists and Colourists

6.2 Important professional events

A number of interesting and socially beneficial events took place at the FChT in 2022. These include the following.

Thermoanalytical Seminar

A seminar, the aim of which was to enable students, young and experienced scientists to exchange knowledge and experience in the use of thermoanalytical techniques in various fields of research.

Organiser: Department of Inorganic Technology

Date: 27 January 2022

24th International Seminar "New Trends in Research of Energetic Materials"

A seminar on new trends in research of energetic materials, a global gathering of mainly young professionals and university teachers working in the fields of teaching, research, development, processing, analysis and applications of all types of energetic materials.

Organiser: Institute of Energetic Materials

Date: 6 - 8 April 2022

9. International Conference on Chemical Technology - ICCT 2022

An international conference continuing the long tradition of chemical technology conferences, which aims to familiarise the professional public with key issues in chemistry and energy and to develop mutual awareness among experts, promote discussion and motivate cooperation between representatives of the chemical industry and academia. The aim of the conference is to create a space for international cooperation between businesses, universities and research institutes.

Organiser: Czech Society for Industrial Chemistry, Faculty of Chemical Technology

Date: 25 - 27 April 2022

8th Pharmacokinetic Seminar

A seminar for students and professionals focusing on dissolution and dissolution testing.

Organiser: Department of Physical Chemistry

Date: 16 - 17 June 2022

29th International Conference on Organometallic Chemistry (ICOMC)

A conference, the aim of which is to provide an opportunity to present and discuss results from all areas of modern organometallic chemistry. The programme was organised in parallel sessions, focusing on various aspects of traditional and emerging areas of organometallic chemistry and related fields.

Organiser: Department of General and Inorganic Chemistry

Date: 17 - 22 July 2022

24th CSIP-PM: Conference on Special Inorganic Pigments and Powder Materials

This conference with international participation was focused on the exchange of new knowledge in the field of powder materials and inorganic pigments, their applications, physicochemical properties and methods of their evaluation, ecological aspects of production and use of inorganic pigments. Results of scientific research activities in the field of ceramics, ceramic surface treatments and refractories were presented at the conference.

Organiser: Department of Inorganic Technology

Date: 22 September 2022

53rd Seminar on Surfactants and Detergents

A seminar for those interested in research in the field of production, analysis and application of surfactants.

Organiser: Department of Analytical Chemistry

Date: 9 - 11 November 2022

15th Conference on Pigments and Binders

This conference focused on pigments and their applications in construction, coatings and plastics and on organic binders for coatings and construction, inorganic binders for ceramics, construction, high-temperature coatings and others. Attention was also paid to nanomaterials, special materials and technologies recently emerging in the field of surface treatments and their technologies.

Organiser: Institute of Chemistry and Technology of Macromolecular Materials, Department of Paints and Organic Coatings, CHEMAGAZÍN

Date: 7 - 8 November 2022

16th Sensing in Electroanalysis

A seminar of partners cooperating within the framework of European projects dealing with electroanalysis.

Organiser: Department of Analytical Chemistry

Date: 14 - 18 November 2022


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7 SPATIAL CAPACITY AND INFORMATION AND COMMUNICATION TECHNOLOGIES

7.1 Spatial capacity and sites

The Faculty of Chemical Technology is located in Pardubice – at Stavařov, Studentská 573. This site is home to the dean's office and the HA, HB and HC buildings house lecture halls, classrooms, laboratories and offices for staff and students of doctoral degree programmes. Other faculty sites are located at Stavařov, Studentská 84 (building EA), in the Technology Pavilion in Doubravice, Doubravice 41 and in the town centre at Čs. legion 565.

The faculty has three large-capacity lecture halls on the na Stavařově campus. These are lecture hall C1 with capacity to accommodate 234 people, lecture hall C2 with capacity to accommodate 99 people and lecture hall C3 with capacity to accommodate 55 people.

An important part of the faculty's spatial capacities is constituted by laboratories, which comprise 52 rooms with capacity to accommodate 920 people. The faculty also has 27 classrooms with capacity to accommodate 787 people and 7 computer rooms with capacity to accommodate 153 people.

7.2 Information and communication technologies

The information and communication systems of the Faculty of Chemical Technology are part of the complex system of information and communication technologies of the University of Pardubice. They are used both for teaching and scientific research activities, but also within the framework of the operational and management activities of the faculty.

The faculty's information infrastructure consists of computer rooms including the relevant technical equipment, personal computers and other computer and office equipment used by faculty staff and students of doctoral study programmes, audio-visual and presentation equipment, including interactive whiteboards, and software.

The Faculty of Chemical Technology uses information systems operated by the Centre of Information Technologies and Services (CITS) of the University of Pardubice, as well as funding access to a range of commercial products from major technology companies. The key systems operated by CITS and used by students and faculty staff include the following systems:

- STAG – a study programme management system,
- iFIS – an economic information system, which includes modules such as economic management, a filing system, a public procurement management system and a register of contracts,
- VERSO – an information system with modules: management information system, IPOS internal enquiry and ordering system, orders, liquidation lists, contract register, grants and projects, travel orders and room reservations,
- OBD – an information system including a module for recording publication activity and an internal grant competition module.

All students and employees of the university also have the opportunity to use Microsoft Office 365 cloud services within the framework of the Microsoft Campus Agreement. They have a complete suite of Office applications at their disposal including Word, Excel, PowerPoint, OneNote, Outlook, Teams, Access and Publisher. An internet connection and services of the national e-infrastructure for science, research and education CESNET are provided. Students and employees can also use the Eduroam wireless data network which is available throughout the campus.

In the current period, the Faculty of Chemical Technology also has more than 230 software licenses which entitle it to use software in various areas of its teaching and scientific research activities. In 2022, new software was purchased, namely ATTIS, Koala Acquisition & Analysis, OLYMPUS Stream 2.5 and Spartan'20 for Windows.

8 QUALITY ASSURANCE AND EVALUATION OF IMPLEMENTED ACTIVITIES

8.1 Internal system of control and evaluation

Control and evaluation of activities is performed on a regular basis at the FChT, both on the level of the faculty and also on the level of individual departments. This includes areas of educational and research activities as well as the third role of the faculty. The faculty's own operational activities are also subject to internal control and evaluation. Internal control and evaluation activities were also performed in 2022, mainly in the following areas.

Control and evaluation of academic staff

All academic staff at the faculty were subjected to an annual evaluation from the point of view of the following criteria:

Teaching activities:

- teaching: lectures - exercises - seminars – laboratory work,
- supervision of diploma and bachelor theses, supervision of doctoral students,
- developed teaching aids, curricula, laboratory tasks, laboratory building,
- teaching positions at other universities (faculties),

Research activities:

- publications published in the past year,
- participation in conferences,
- grants, technology projects, complementary activities,
- foreign stays and trips,
- positions and membership in scientific and professional boards and committees,

Other activities:

- organisational activity,
- enhancing qualifications,
- promotion, popularisation of science and research, education and cooperation with the world of work,
- other activity worthy of consideration.

Control and evaluation of the quality of educational activities

Pedagogical issues are regularly discussed by the Board of Study Programme of the FChT and this was also the case in 2022. Evaluation of teaching was also performed by students via the IS STP, which was organised on a university-wide platform.

Control and evaluation of excellence

Evaluation was also performed in 2022 of excellent scientific teams in basic and applied research, in particular with regard to:

- implementation of research projects,
- publishing activity,
- recognition by the international community,
- management of the research team,

- resolution of specialist problems in applied research,
- commercialisation of the results of applied research.

In all cases, emphasis was placed on the quality of activities, e.g. taking into account the results of evaluation of research organisations.

8.2 External control

The most important element of external control of the University of Pardubice and its Faculty of Chemical Technology is undoubtedly evaluation performed by the National Accreditation Bureau for Higher Education within the framework of application for institutional accreditation of the University of Pardubice, which took place in 2018. The Faculty of Chemical Technology actively participated in preparation of institutional accreditation for the fields of education Chemistry, Economics and Health Studies. On 7 September 2018, the decision granting the University of Pardubice institutional accreditation for 10 years came into force for:

- the field of education Transport and within the framework of this, bachelor's, master's and doctoral degree programmes,
- the field of education Economics and within the framework of this, bachelor's, master's and doctoral degree programmes,
- the field of education Historical Sciences and within the framework of this, bachelor's, master's and doctoral degree programmes,
- the field of education Chemistry and within the framework of this, bachelor's, master's and doctoral degree programmes,
- the field of education Information Technology and within the framework of this, bachelor's, master's and doctoral degree programmes,
- the field of education Health Studies and within the framework of this, bachelor's and master's degree programmes.

Institutional accreditation within the framework of the above-mentioned fields of education enables the University of Pardubice, via the Internal Evaluation Board (IAB) of the University of Pardubice, to implement internal processes leading to the acquisition, extension or renewal of accreditation. The Faculty of Chemical Technology was represented in the IAB in 2022 by prof. Ing. Petr Kalenda, CSc. The IAB has three expert committees: the Technical and Science Committee, the Economic and Health Studies Committee and the Humanities and Arts Committee. The FChT was represented in 2022 in the Technical and Science Committee by its Chair (prof. Ing. Petr Kalenda, CSc.) and two of its members (prof. Ing. Petr Mikulášek, CSc. and prof. Ing. Petr Němec, Ph.D.). Prof. Ing. Hana Lošťáková, CSc. and Ing. Jan Vávra, Ph.D represented the FChT in the IAB Economic Committee in 2022. In addition to this, the professional guarantee of the course and quality of studies in doctoral study programmes is monitored and evaluated by specialist boards which are established for each doctoral study programme separately.
With regard to the external control of science and research results, M17+ Methodology for Evaluating Research Organisations and Research, Development and Innovation Purpose-tied Aid Programmes has been gradually introduced since 2017. The methodology applied during evaluation by the Research, Development and Innovation Council is available at: http://www.vyzkum.cz/.

ABBREVIATIONS USED

ACA	Academics
AIS	Article Influence Score
Bc.	Bachelor's degree programme, title
BUT	Brno University of Technology
CAS	Czech Academy of Sciences
CCFE	Classification of core fields of education
CEEPUS	Central European Exchange Programme for University Studies
CEMNAT	Centre of Materials and Nanotechnologies
CITS	Centre for information technologies and services
CR	Czech Republic
CU	Charles University in Prague
DAlCh	Department of Analytical Chemistry
DBBS	Department of Biological and Biochemical Sciences
DEMCh	Department of Economics and Management of Chemical and Food Industry
DGAP	Department of Graphic Arts and Photophysics
DGInCh	Department of General and Inorganic Chemistry
DInT	Department of Inorganic Technology
DPCh	Department of Physical Chemistry
ECTS	European Credit Transfer System
EEA	European Economic Area
EU	European Union
f	Foreigner – foreign student
FChT	Faculty of Chemical Technology
FORD	Fields of Research and Development
GACR	Czech Science Foundation
IAB	Internal Evaluation Board
IAPM	Institute of Applied Physics and Mathematics
IChTMM	Institute of Chemistry and Technology of Macromolecular Materials
IEnM	Institute of Energetic Materials
IEnviChE	Institute of Environmental and Chemical Engineering
iFIS	Economic information system
INP	Individual national project
IOChT	Institute of Organic Chemistry and Technology
IS STP	Information system for management of study programmes
JEPU	J. E. Purkyně University in Ústí nad Labem
JLAM	Joint Laboratory of Applied Medical Science
JLAP	Joint Laboratory of Analysis and Evaluation of Polymers
JLMP	Joint Laboratory of Membrane Processes
JLSSCh	Joint Laboratory of Solid State Chemistry
MF	Ministry of Finance

MIT	Ministry of Industry and Trade
MEYS	Ministry of Education, Youth and Sports
MI	Ministry of the Interior
MH	Ministry of Health
MA	Ministry of Agriculture
Mgr.	Master's degree programme
OBD	Information system including a module for recording publication activity and an internal grant competition module
OP RDE	Operation Programme Research, Development and Education
Ph.D.	Doctoral degree programme, title
p.r.i.	Public research institution
R&D&I	Research, experimental development and innovation
RES	Researchers
SGC	Student grant competition
SP	Study programme
SRD	Scientific, research and development (staff)
SRPA	Student Research and Professional Activities
STP	see IS STP
STU	Slovak University of Technology in Bratislava
TACR	Technology Agency of the Czech Republic
TBM	Technical Blasting Manager
TBU	Tomáš Baťa University in Zlín
TUO	Technical University of Ostrava
U3A	University of the Third Age
UCHT	University of Chemistry and Technology in Prague
UPCE	University of Pardubice
VERSO	Information system
WoS	Web of Science

The Annual Activity Report of the Faculty of Chemical Technology at the University of Pardubice was approved by the Academic Senate of the Faculty of Chemical Technology on 18 May 2023.