

Faculty of Science
University of Ostrava

Annual Report 2007

May 2007

Contact address:
Faculty of Science
University of Ostrava
30. dubna 22
CZ 701 03 Ostrava
Czech Republic
Phone: +420 597 092 100
WWW: <http://prf.osu.cz/>

Annual Report 2007

Editor: Petr Šaloun

Copy Editor: Jana Goralová

Translated by Jana Klimánková

Cover designer: Pavel Noga

Published by: Faculty of Science

University of Ostrava

30. dubna 22, CZ 701 03 Ostrava, Czech Republic

Phone: +420 597 092 100

Printed by: Grafické a tiskové studio L+L, Ostrava, Czech Republic

© 2008, Dana Kričfaluši, Petr Šaloun, Petra Konečná, Iveta Nevludová

ISBN 978-80-7368-439-6

Contents

Introduction	7
1 Faculty Management Bodies	9
1.1 Organization Chart	9
1.2 Academic Senate of the Faculty	10
1.3 Dean's Office.....	11
1.4 Organization diagram of the Dean's Office	12
2 Study	13
2.1 Admission procedure statistics	13
2.2 New study programmes and fields of study	18
2.3 Student Research Conferences and Competitions	19
3 ERASMUS	21
3.1 Teacher's mobility under the ERASMUS Programme	21
3.2 SOCRATES – ARION, Comenius.....	22
3.3 Students mobility during the year 2007.....	22
3.4 List of Bilateral Agreements – SOCRATES – ERASMUS Programme	24
4 Research Programmes	27
4.1 Summary of project costs (faculty)	27
4.2 Research projects financed by the Faculty of Science (Internal projects).....	27
4.3 Summary of project costs (departments).....	28
5 Faculty service	31
5.1 The libraries and depository and reading rooms of Faculty of Science	31
6 Centre for Lifelong Education	35
7 Department for Support of Project Activities	37
8 Economic department	39
9 Institute of economics and management	41
9.1 Staff	41
9.2 Theses	41
9.3 Research projects.....	42
9.4 Equipment.....	42
9.5 Contacts and Cooperation.....	42
9.6 Membership in Professional Organizations.....	43
9.7 Publications	43
10 Department of Mathematics	45
10.1 Staff	45
10.2 PhD. students	46
10.3 Study programmes.....	46
10.4 Theses	47
10.5 Research projects.....	48
10.6 Equipment.....	49
10.7 Conferences and seminars	49
10.8 Contacts and cooperations	49
10.9 Student research activity.....	50
10.10 Membership in Professional Organisations.....	50
10.11 Publications	51
11 Department of Physics	54
11.1 Staff	54
11.2 PhD. students	55
11.3 Study programmes.....	56

11.4	Theses.....	57
11.5	Research projects	57
11.6	Equipment	58
11.7	Conferences and seminars.....	58
11.8	Contacts and cooperation.....	58
11.9	Student research activity	60
11.10	Membership in Professional Organisations	60
11.11	Publications.....	60
12	Department of Informatics and Computers	64
12.1	Staff.....	64
12.2	PhD. Students.....	65
12.3	Study programmes	66
12.4	Theses.....	66
12.5	Research projects	70
12.6	Equipment	70
12.7	Conferences and seminars.....	71
12.8	Contacts and cooperation.....	72
12.9	Membership in Professional Organisations	73
12.10	Publications.....	74
13	Department of Chemistry	80
13.1	Staff.....	80
13.2	Study programmes	81
13.3	Theses.....	81
13.4	Research projects	82
13.5	Equipment	83
13.6	Conferences and seminars.....	83
13.7	Contacts and cooperation.....	83
13.8	Student research activity	84
13.9	Membership in Professional Organizations	84
13.10	Publications.....	84
14	Department of Physical Geography and Geocology	88
14.1	Staff.....	88
14.2	PhD. students	90
14.3	Study programmes	91
14.4	Theses.....	91
14.5	Research projects	94
14.6	Equipment	94
14.7	Conferences and seminars.....	95
14.8	Contacts and Cooperation	95
14.9	Membership in Professional Organisation.....	96
14.10	Publications.....	97
15	Department of Biology and Ecology	102
15.1	Staff.....	102
15.2	Study programmes	103
15.3	Theses.....	104
15.4	Research projects	107
15.5	Equipment	108
15.6	Conferences and seminars.....	108
15.7	Contacts and cooperation.....	109
15.8	Student research activities.....	111

15.9	Membership in Professional Organizations.....	111
15.10	Publications	112
16	Department of Human Geography and Regional Development	118
16.1	Staff	118
16.2	PhD. Students	121
16.3	Study programmes	121
16.4	Theses	122
16.5	Research projects	126
16.6	Equipment.....	128
16.7	Conferences and seminars	128
16.8	Contacts and Cooperation.....	128
16.9	Membership in Professional Organisations.....	131
16.10	Publications	131
17	Financial results for the year 2007	136
18	Faculty of Science Personnel (by 31. 12. 2007)	138

Introduction

In 2007 the activities of the Faculty of Science were mainly focused on the Long-term Development Plan for University of Ostrava for the period of 2006 – 2010, including its updating during 2007. This annual report attests to the important contribution made by employees and students of the faculty toward carrying out the goals set out in this documentation.

The faculty administration saw many changes carried out in 2007, with the arrival of a new administrative team on March 1, 2007, after the dean at that time, Prof. Močkoř, was appointed rector of University of Ostrava. The organizational structure of the dean's office also underwent changes – four new sections were created for the purpose of providing quality service in support of the faculty's main activities.

In the field of education, our offer of highly structured study programs was further developed. In 2007 applicants were newly accepted for 3 bachelor programs, 1 follow-up master's program and 1 doctoral program. Another 2 fields of study in the combined form were also added. A study program consisting of 10 academic modules was begun in 2007 at University of Ostrava. It is with pleasure to report that 3 of these university modules (Geography and Tourism, Basics of Information Technology, and Acquiring and Using Information) are provided by the Faculty of Science itself. Graduating with an aggregate of subjects from individual modules enables students to expand their knowledge base and put it to practice afterwards. The faculty has long been an organizer of educational events for the public. In 2007 the Centre for Lifelong Education at the Faculty of Science in cooperation with departments offered a wide range of interesting courses.

As for science and research, departmental employees continued with their individual research assignments, resulting above all in the publication of their results and reports. The faculty supported the research activities of the departments with internal grants totalling CZK 4.9 million. Students have traditionally participated in research assignments in the faculty, and the best among them have taken part in a contest focusing on the scientific and skilful activities of students in the faculty and their commendable representation of the faculty in similar contests organized by other universities. No less important was the commitment of faculty employees in carrying out other innovative and progressive projects, including those from the European Social Fund. The projects completed at the faculty in 2007 were worth nearly CZK 26 million, of which 47% involved research, 36% development, and 17% went to application.

Our presence abroad has also increased. The number of students enrolled in foreign universities has gone up, as well as the number of students coming here to study. Our faculty has also played host to many professionals from abroad.

We are pleased that the faculty is a traditional organizer of conferences - in 2007 it was the 17th Vojtěch Jarník International Mathematical Competition with more than 100 participants – students of mathematical sciences from the whole Europe or the 8th *Conference ICTE (Information and Communication Technology in Education)*. Other important events were *International Conference on Migration and Development* and *The 3rd International Conference on Globalisation* organized by the Department of Human Geography and Regional Development, international conference *State of Geomorphological Research in 2007*

organized by the Department of Physical Geography and Geoecology or conferences organized within projects of European Social Fund.

We are trying to provide much more information about the activities of the faculty. The annual report on the activities of the faculty in 2006, which was prepared in English for the first time, had many mailings abroad. The electronic information bulletin, *Life Outdoors*, was launched in the first half of 2007. Employees at the faculty took part in a host of events popularizing natural sciences among elementary and high school students. We would just like to mention the highly successful Chemistry in the Castle or Chemistry – It's life.

The Faculty of Science, University of Ostrava, is a modern and dynamic part of the university, as evident by the information inside this annual report. Naturally, many employees and students deserve credit for making the faculty grow and helping it to achieve its goals. I would therefore like to take this opportunity to sincerely thank them for their efforts.

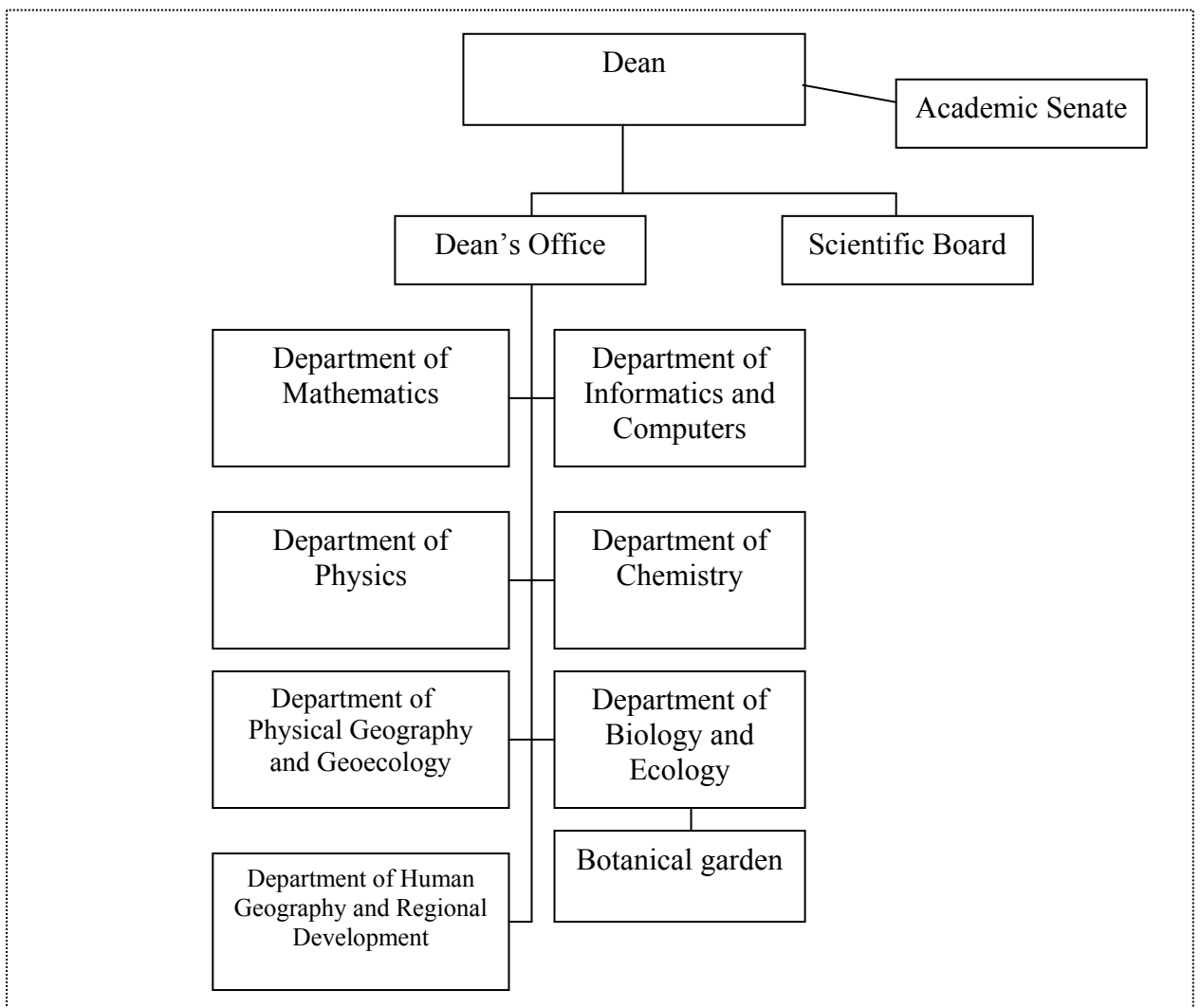
Dana Kričfaluši
Dean

1 Faculty Management Bodies

According to the University Code, academic management bodies of a faculty are the following:

- the Academic Senate of the faculty;
- the Dean;
- the Scientific Board of the faculty;
- the Disciplinary Commission of the faculty.

1.1 Organization Chart



1.2 Academic Senate of the Faculty

The Academic Senate of a faculty is a representative body of the faculty. It is divided into the employee part and the student part.

Members of the Academic Senate in 2007

Presidium of the Academic Senate

Roman Maršálek, PhD.

Chair

Monika Šumberová

Chair of the employee part

Kateřina Chlopčiková

Chair of the student part

Members of the employee part of the Academic Senate

Martina Daňková, PhD.

Aleš Dolný, PhD.

Radek Dušek, PhD.

Rostislav Fojtík

Hashim Habiballa, PhD.,

Jan Hradecký, PhD.

Ivan Janeček, PhD.

Jiří Kalina, Assoc. Professor

Ladislav Mišík, Assoc. Professor

Renáta Sedlářiková

Václav Slovák, Assoc. Professor

Eliška Treterová

Martina Daňková, PhD. and Ladislav Mišík, Assoc. Professor resigned from the Senate. Šárka Cimalová, (former alternate member) became a member of the senate instead of Martina Daňková, PhD. David Bartl, PhD. was elected to the Senate in by-election (17. – 18. 12. 2007).

Members of the student part of the Academic Senate

Miroslava Peřinová

Kateřina Chlopčiková

Jan Kubala

Ondřej Planka

Libor Pučok

Marek Vajgl

Vratislav Vozník

Kateřina Chlopčiková, Jan Kubala and Ondřej Planka resigned from the Senate. Daniel Antal and Patrik Molitor (former alternate members) became members of the senate. Lukáš Staňák was elected to the Senate in by-election (17. – 18. 12. 2007).

Roman Maršálek, PhD.

Chair of Academic Senate of the Faculty of Science, University of Ostrava

1.3 Dean's Office

Iveta Nevludová
Faculty Administrator
Monika Javorská
Secretary to the Dean

Academic Affairs Department:

Natálie Šimonková
Head of the Department
David Kožušník
Marie Placková
Věra Jandová
Jana Goralová

Science and Public Relations Department:

Eva Bouřová
Dana Závorková
Jana Goralová

Centre for Lifelong Education:

Eva Burianová, PhD.
Head of the Centre
Simona Polochová
Gabriela Burianová
Centre administrator

Institute of Economy and Management

Hana Filipczyková, Assoc. Professor
Tibor Paulík, Professor

Projects Department:

Cyril Klimeš, Assoc. Professor
Head of the Department
Lenka Káňová
Lukáš Straňák
Pavla Janoschová

Economic Department:

Lenka Káňová
Pavla Janíková
Pavla Janoschová

Personnel Department:

Zdeňka Pavlíčková (until 31. 8. 2007)
Šárka Gazdová (since 2. 7. 2007)

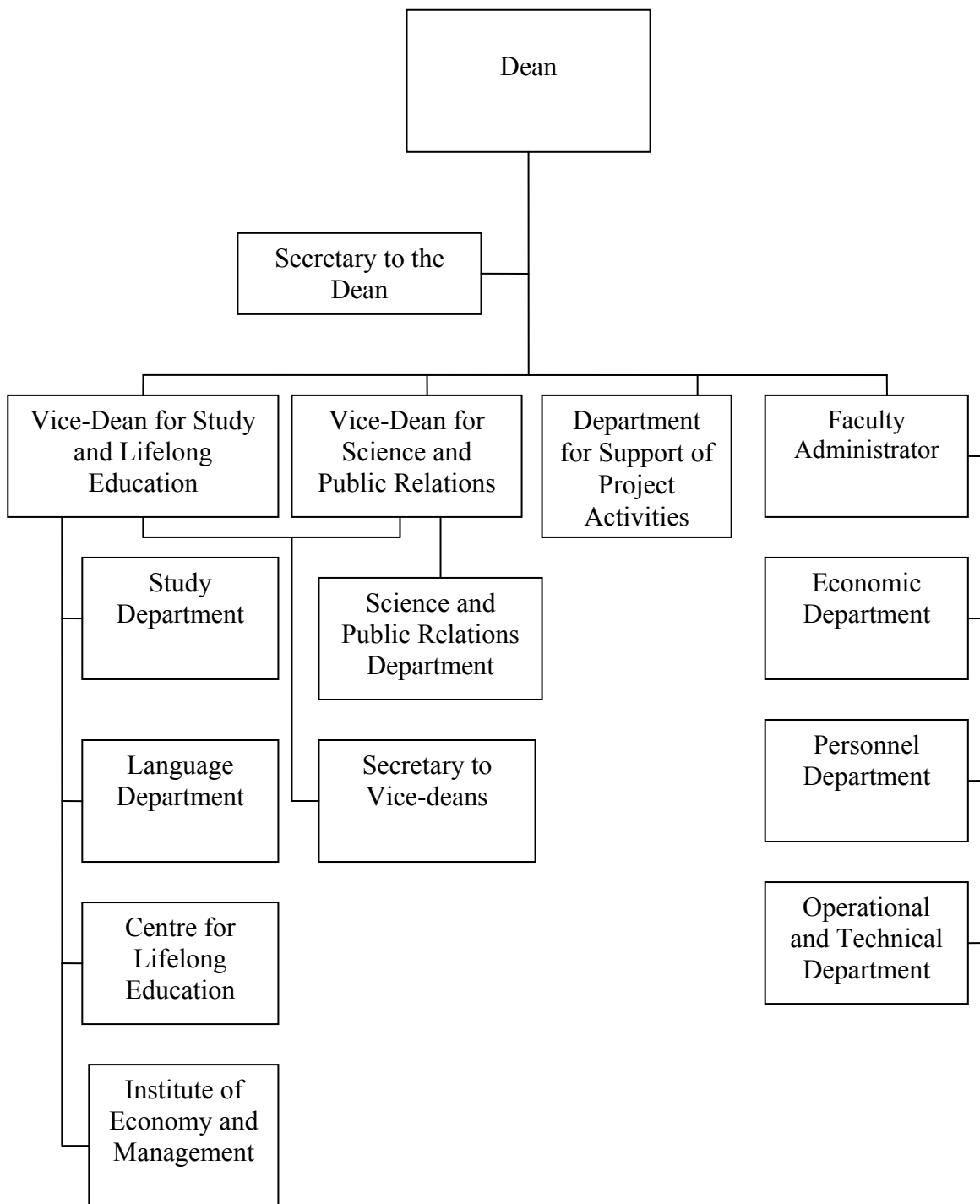
Operational and Technical Department

Jan Kyjovský
Josef Bystroň

Language Department:

Blanka Novotná
Jana Klimánková
Senior assistants

1.4 Organization diagram of the Dean's Office



Faculty of Science, University of Ostrava

Dean's office board



Dana Kričfaluši, Assoc. Professor
Dean of the Faculty of Science



Petra Konečná, PhD.
Vice-Dean for Study and Lifelong Education



Petr Šaloun, Assoc. Professor
Vice-Dean for Science and External Relations

Scientific Board of the Faculty of Science

Chair

Dana Kričfaluši, Assoc. Professor

Members from the Faculty of Science

Vladimír Baar, Assoc. Professor
Cyril Klimeš, Assoc. Professor
Petra Konečná, PhD.
Ivan Křivý, Professor
Vladislav Kříž, Professor
Kateřina Malachová, Assoc. Professor
Erika Mechlová, Professor
Jiří Močkoř, Professor
Monika Mulková, PhD.
Vilém Novák, Professor
Rudolf Peter
Petr Rumpel, PhD.
Ladislav Sklenák, Assoc. Professor
Petr Šaloun, Assoc. Professor
Boleslav Taraba, Professor

External members

Vojtěch Dirner, Professor
Jiří Doškář, Professor
Pavel Drábek, Professor
Dušan Drbohlav, Assoc. Professor
Robert Ištók, Assoc. Professor
Anatol Malijevský, Professor
Michal V. Marek, Professor
Radko Mesiar, Professor
Tomáš Pitner, PhD.
Milan Trizna, Assoc. Professor
Milan Turčáni, Professor
Radomír Halaš, Assoc. Professor
Jan Vymětal, Assoc. Professor
Kamil Wichterle, Professor

2 Study

In the academic year 2006/2007 **413 students** properly completed their studies at the Faculty of Science, University of Ostrava:

- in bachelor study 238 graduates
- in master non teaching study 118 graduates
- in master study programme following bachelor study programme 50 graduates
- in doctoral study 7 graduates

The acceptance process for the academic year 2007/2008

Entrance exams (PZ) for **bachelor and postgraduate study programmes** took place on 24. 3. 2007, 28. 4. 2007, 19. 5. 2007 (SCIO), with one makeup term on 19. 6. 2007.

2.1 Admission procedure statistics

Field of study	Number of Applications	Admitted without PZ	Took the PZ	Total admitted *)	Enrolled
Fields of study within one-branch bachelor study programmes					
Biophysics	7	0	7	1	1
Measurement and Computer Presentation of Data	3	0	3	0	0
Computer-based Modelling in Physics	6	0	5	5	4
Applied Information Science (combined study form)	81	81	0	60	56
Applied information Science (distance form of study)	123	123	0	109	106
Applied Mathematics	13	0	11	3	3
Applied Mathematics for Economics	32	0	28	9	9
Mathematical and Computer Methods of Data Processing	8	0	8	4	4
Investment Counselling	5	0	4	4	3
Applied Mathematics (combined study form)	12	12	0	9	6
Applied Mathematics for Economics (combined study form)	17	17	0	13	13
Mathematical and Computer Methods of Data Processing (combined study form)	6	6	0	4	2
Investment Counselling (combined study form)	10	0	7	7	5
Applied Ecology	70	0	69	25	23
Applied Ecology (combined study form)	75	0	64	33	33
Systematic Biology and Ecology	149	0	143	39	35
Experimental Biology	64	0	61	21	16
Landscape Protection and Formation	192	0	182	27	26
Physical Geography and Geoecology	73	0	69	20	17
Cartography and Geoinformatics	55	0	54	12	12
Political and Cultural Geography	166	0	161	51	46
Geography and Regional Development	212	0	206	35	33
Chemistry	50	0	49	17	15

Field of study	Number of applications	Admitted without PZ	Took the PZ	Total admitted *)	Enrolled
Information Science	176	0	167	54	49
Total	1605	239	1298	562	517
Bachelor study programmes studied in a combination of two subjects					
Mathematics – English language and literature	1	0	0	0	0
Mathematics – German language and literature	2	0	2	0	0
Mathematics – Geography	12	0	12	2	2
Mathematics – Czech language and literature	2	0	2	1	1
Mathematics – History	1	0	1	0	0
Mathematics – Musical appreciation	2	0	2	2	2
Mathematics – Physical Training	3	0	3	1	1
Mathematics – Civics	1	0	1	0	0
Mathematics – Russian language and literature	1	0	1	0	0
Geography – English language and literature	10	0	10	5	4
Geography – French language and literature	1	0	1	0	0
Geography – German language and literature	6	0	5	2	2
Geography – Russian language and literature	1	0	1	0	0
Geography – Information Science	9	0	9	1	1
Geography – Czech language and literature	7	0	7	3	2
Geography – Basic of Social Sciences	7	0	7	2	0
Geography – History	12	0	11	5	3
Geography – Musical appreciation	2	0	2	1	1
Geography – Christian Education	1	0	1	0	0
Geography – Civics	6	0	6	2	1
Geography – Physical Training	8	0	7	2	2
Geography – Spanish language and literature	1	0	1	0	0
Chemistry – English language and literature	3	0	3	0	0
Chemistry – German language and literature	1	0	1	0	0
Chemistry – Mathematics	5	0	5	3	3
Chemistry – Geography	2	0	2	1	1
Chemistry – Biology	102	0	95	36	29
Chemistry – Information Science	1	0	1	0	0
Chemistry – Physical Training	1	0	0	0	0
Biology – English language and literature	16	0	14	5	2
Biology – German language and literature	4	0	4	1	0
Biology – French language and literature	1	0	1	0	0
Biology – Russian language and literature	1	0	1	0	0
Biology – Spanish language and literature	2	0	2	0	0

Field of study	Number of applications	Admitted without PZ	Took the PZ	Total admitted *)	Enrolled
Biology – Mathematics	7	0	7	2	2
Biology – Geography	78	0	76	13	9
Biology – Information Science	16	0	16	8	7
Biology – Czech language and literature	12	0	11	1	1
Biology – Basic of Social Sciences	14	0	14	5	4
Biology – History	2	0	2	0	0
Biology – Musical appreciation	1	0	1	1	1
Biology – Civics	10	0	10	3	2
Biology – Technology Education	1	0	1	0	0
Biology – Physical Training	13	0	11	3	3
Biology – Art Education	1	0	1	1	1
Physics - Mathematics	15	0	15	8	8
Physics – Geography	1	0	1	0	0
Physics – Chemistry	1	0	1	0	0
Physics – Biology	11	0	11	5	5
Physics - Information Science	1	0	1	0	0
Information Science – Mathematics	9	0	9	2	2
Information Science – English language and literature	53	0	53	22	20
Information Science – Czech language and literature	2	0	2	0	0
Information Science –History	2	0	2	0	0
Information Science – Musical appreciation	1	0	1	0	0
Information Science – Civics	2	0	2	0	0
Information Science – Technology Education	3	0	3	1	1
Information Science – Physical Training	5	0	5	2	1
Information Science – Art Education	1	0	1	0	0
Total	497	0	478	152	124
Master study programmes following bachelor study programmes					
Biophysics	6	1	3	4	4
Applied Mathematics	9	6	0	6	5
Applied Mathematics for Economics	27	22	0	22	19
MPMZI	3	3	0	3	3
Systematic Biology and Ecology	65	0	55	32	31
Landscape Protection and Formation	24	0	18	11	11
Physical Geography and Geoecology	28	0	22	17	14
Political and Cultural Geography	56	3	41	27	23
Geography and Regional Development	60	4	47	34	34
Information Systems	41	0	37	29	26
Information Systems (combined study form)	38	0	33	19	17
Physical Chemistry of Surfaces	12	4	7	7	6
Teaching for Secondary Schools - Mathematics	2	0	2	1	1
Teaching for Secondary Schools - Geography	18	0	13	12	10

Field of study	Number of applications	Admitted without PZ	Took the PZ	Total admitted *)	Enrolled
Teaching for Secondary Schools - Chemistry	6	0	6	6	5
Teaching for Secondary School – Biology	7	0	5	4	2
Teaching for Secondary School - Physics	4	0	3	3	3
Teaching for Secondary School – Information Science	2	0	0	0	0
Teaching for Primary School – Information Science	6	0	6	3	3
Total	414	43	298	240	217
Master study programmes following bachelor study programmes studied in a combination of two subjects					
Teaching for Secondary Schools – Geography – Information Science	1	0	0	0	0
Teaching for Secondary Schools – Chemistry - Biology	2	0	1	0	0
Teaching for Secondary Schools – Biology - Mathematics	2	0	2	1	1
Teaching for Secondary Schools – Biology - Geography	2	0	1	1	1
Teaching for Secondary Schools – Physics – Mathematics	1	0	0	0	0
Teaching for Secondary Schools – Information Science - Mathematics	3	0	0	0	0
Teaching for Secondary Schools – Biology - Geography	2	0	2	0	0
Total	13	0	6	2	2
TOTAL	2 529	282	2 080	956	860

Annotation:

*) The total number of students accepted including transfers between departments carried out by request.

Entrance exams (PZ) for **doctoral study programme in Applied Mathematics** took place on 29. 6. 2007 with the following results:

Field of study	Number of applications	Admitted without PZ	Took PZ	Passed PZ	Total admitted	Enrolled
Applied Mathematics	1	0	1	1	1	1
Applied Algebra	0	0	0	0	0	0
Fuzzy Modelling	2	0	2	2	2	2

Entrance exams for **doctoral study programme in Geography, Environmental Geography** took place on 21. 6. 2007 and field of study Political and cultural geography took place on 16. 6. 2007 with the following results:

Field of study	Number of applications	Admitted without PZ	Took PZ	Passed PZ	Total admitted	Enrolled
Environmental Geography	4	0	4	4	4	4
Political and cultural geography	5	0	5	5	5	5

Entrance exams for **doctoral study programme in Information Science** took place on 28. 8. 2007 with the following results:

Field of study	Number of applications	Admitted without PZ	Took PZ	Passed PZ	Total admitted	Enrolled
Information Systems	6	0	5	4	4	4

Entrance exams for **doctoral study programme in Specialisation – Pedagogy** took place on 20. 6. 2006 with the following results:

Field of study	Number of applications	Admitted without PZ	Took PZ	Passed PZ	Total admitted	Enrolled
Theory of Education in Physics	5	0	5	5	5	5

Academic year 2007/2008

Number of students enrolled in the Faculty of Science, University of Ostrava in the academic year 2007/2008.

Number of students according to the degree programmes (as of 1. 11. 2007).

Study programme	Field group code	Degree programme				Total
		Bc.	NMgr.	Mgr.	PhD.	
Mathematics	B1101	11				11
Applied Mathematics	B1103	84				84
Geography	B1301	350				350
Chemistry	B1407	104				104
Biology	B1501	304				304
Ecology and Environmental Protection	B1601	67				67
Physics	B1701	14				14
Applied Physics	B1702	15				15
Information Science	B1801	163				163
Applied Information Science	B1802	241				241
Applied Mathematics	M1103			35		35
Geography	M1301			69		69
Ecology and Environmental Protection	M1601			3		3
Information Science	M1801			26		26
Teaching for Primary Schools	M7503			36		36
Teaching for Secondary Schools	M7504			59		59
Applied Mathematics	N1103		43			43
Mathematics	N1101		1			1
Geography	N1301		149			149
Chemistry	N1407		13			13
Biology	N1501		52			52
Ecology and Environmental	N1601		16			16

Protection						
Physics	N1701		6			6
Applied Physics	N1702		14			14
Information Science	N1801		84			84
Teaching for Secondary Schools	N7503		3			
Applied Mathematics	P1103				28	28
Geography	P1301				34	34
Information Science	P1801				19	19
Specialisation – Pedagogy	P7507				24	24
Total		1 353	381	228	105	2 067

Number of students according to the form of the study (as of 1. 11. 2007).

Form of the study	Study programmes				Total
	Bc.	NMgr.	Mgr.	PhD.	
Full-time	1 044	349	228	22	1 643
Combined	154	32		83	269
Distance	155				155

Number of international students at the Faculty of Science, University of Ostrava.

Type of the study programme	FS
Bachelor	15
Master study programme following bachelor study programme	16
Master	3
Doctoral	4
Total	38

2.2 New study programmes and fields of study

In 2007 following study programmes and fields of study were newly accredited:

Field group code	Title of study programme	Field of the study	Length (in academic years) / form of the study			
			B	MN	P	FS
B1103	Applied Mathematics	Investment Consultancy	3			P,K
B1301	Geography	Geography and Regional Development	3			K
B1702	Applied Physics	Computer modelling in physics	3			P
B1801	Information Science	Information Science (two-branch)	3			K
N1801	Information Science	Informatics systems		2		K
P1103	Applied Mathematics	Applied Mathematics			4	P,K
P1103	Applied Mathematics	Applied Algebra			4	P,K
P1301	Geography	Political and Cultural Geography			3	P,K

2.3 Student Research Conferences and Competitions

No.	Conference	Venue	Date	Number of Participants
1.	17 th Vojtěch Jarník Mathematical Competition	Ostrava	26.-29. 3.	116
2.	Student's scientific competition – section Mathematics: A, P, Z9, B, C	Ostrava	24. 1. 21. 3.	40 21, 107, 37, 39
3.	Environmental Changes and Biological Assessment III.	Ostrava	26. - 28. 4.	10
4.	Student scientific competition – section Physics and Chemistry	Ostrava	10. 5.	12

Student research conference in areas of Physics and Chemistry is annually organized by Jiří Kalina, Assoc. Professor and Roman Maršálek, PhD. from the departments of physics and chemistry respectively. Twelve students' papers were presented and three best papers, one best presentation and one special price were awarded.

The Vojtěch Jarník Mathematical Competition is held at the University of Ostrava every year in March or April. The competition is intended for university students who are interested in mathematics. List and summary of all events for students are in the Table above.

3 ERASMUS

The ERASMUS programme was launched in June 1987 and 3244 participated in its first academic year. Now, more than 150 000 people benefit each year from the programme. The Commission and the 31 participating countries will celebrate its 20th anniversary throughout the year 2007.

The ERASMUS programme, which is arguably one of the best-known Community actions, encourages student and teacher mobility, and promotes transnational cooperation projects among universities across Europe.

3.1 Teacher's mobility under the ERASMUS Programme

Name	Country	University	Date	Length
Bednár, P.	Denmark	Roskilde	27.6. – 3.7.	7
Hančl, J.	Italy	Udine	2.1.- 1.2.	31
Hančl, J.	The Netherlands	Leiden	6.2. – 4.3.	27
Hančl, J.	Italy	Pisa	4.6. - 24.6.	21
Hančl, J.	The Netherlands	Leiden	10.9. – 12.10	33
Havrlant, J.	Poland	Krakov	1.7. – 9.7.	9
Huňka, F.	Ireland	Dublin	14. – 18. 5.	5
Huňka, F.	Ireland	Dublin	17.- 21.9.	5
Konečná, P.	Poland	Katovice	7.- 18.5.	12
Krtička, L.	Finland	Joensuu	20. – 27.2.	8
Malachová, K.	Poland	Katovice	3. – 7. 12.	5
Mišík, L.	Slovakia	Bratislava	5.1. – 18. 1.	14
Mišík, L.	Slovakia	Zvolen	19.1, - 2.2.	15
Mišík, K.	Austria	Graz	30.4. – 27.5.	28
Mišík, L.	Hungary	Eger	15.10.- 28. 10.	14
Pavličková, Z.	Germany	Freiburg	3. – 11. 6.	9
Pečinka, P.	Germany	Freiburg	3. – 11. 6.	9
Plášek, V.	Spain	Barcelona	3. – 9. 9.	7
Siwek, T.	Poland	Warsaw	15.- 27.4.	13
Siwek, T.	Spain	Sevilla	5.- 16.11.	12
Tóth, J.	Slovakia	Bratislava	5.1. – 18. 1.	14
Tóth, J.	Slovakia	Zvolen	19.1, - 2.2.	15
Tóth, J.	Austria	Graz	30.4. – 27.5.	28
Toth, J.	Hungary	Eger	5.- 18.10.	14
Vencálek, J.	Slovakia	Ružomberok	29.10. - 11.11.	14
Volná, E.	Germany	Berlin	18.11 – 1.12.	14

3.2 SOCRATES – ARION, Comenius

Name	State, Organisation	Date	Days
Klimánková, J.	Sweden, Stockholm - Grundtvig	2. - 5. 7.	4
Klimánková, J.	Austria, Graz - Grundtvig	29. 6. - 2.7.	4
Telnarová, Z.	Austria, Graz - Grundtvig	29. 6. - 2.7.	4
Volná, E.	Ireland, Limerick - Grundtvig 2	15. - 18. 2.	4
Volná, E.	Sweden, Kristianstad - Grundtvig 2	21. - 27. 4.	7
Volná, E.	Denmark, Jelling - Comenius	4. - 6. 10.	3

3.3 Students mobility during the year 2007

a) Under the SOCRATES – ERASMUS Programme

Summer semester 2006/2007

Name	Place	Country	Date	Support of the Faculty (CZK)
Adamcová Kateřina	Würzburg	Germany	10/06 – 02/07	6 480
Alblová Michaela	Cler. Ferr.	France	09/06 – 06/07	12 960
Barna Lukáš	Ljubljana	Slovenia	09/06 – 06/07	12 960
Bibová Karolína	Pécs	Hungary	02/07 – 06/07	
Cvikýřová Vendula	Münster	Germany	10/06 – 03/07	10 800
Čapková Lucie	Sevilla	Spain	09/06 – 02/07	14 400
Čechová Ludmila	Paris	France	09/06 – 06/07	14 400
Doskočilová Kateřina	Liverpool	Great Britain	09/06 – 06/07	24 000
Dvořák Petr	Klagenfurt	Austria	10/06 – 01/07	4 320
Egriová Sabina	Freiburg	Germany	09/06 – 02/07	
Glovařák Marian	Sakarya	Turkey	09/06 – 01/07	5 760
Hasalová Jana	Joensuu	Finland	01/07 - 06/07	12 000
Hýblová Martina	Leeds	Great Britain	09/06 – 01/07	5 760
Jindrová Petra	Paris	France	09/06 – 06/07	14 400
Kapiasová Kateřina	Pécs	Hungary	02/07 – 06/07	
Kijonka Václav	Graz	Austria	03/07 – 06/07	
Kleslo Tomáš	Erfurt	Germany	10/06 – 02/07	5 400
Kliment Michal	Graz	Austria	02/07 – 06/07	
Kolínek Ondřej	Tours	France	09/06 - 06/07	14 400
Kostelníková Veronika	Munich	Germany	10/06 – 03/07	6 480
Krajčová Jana	Münster	Germany	10/06 – 03/07	5 400
Krsek Petr	Leiden	The Netherlands	09/06 – 12/06	
Kubincová Libuše	Udine	Italy	10/06 – 12/06	
Kubizňák Pavel	Jönköping	Sweden	08/06 – 06/07	24 000
Machovičová	Munich	Germany	10/06 – 09/07	12 960

Renata				
Matějková Dagmar	Graz	Austria	09/06 – 02/07	5 400
Michník Tomasz	Dublin	Ireland	02/07 – 05/07	9 600
Mikesková Hana	Bials-Biala	Poland	02/07 – 06/07	7 200
Motyka Oldřich	Bials-Biala	Poland	10/06 - 01/07	---
Nedopílek Vít	Oradea	Rumania	02/07 – 07/07	
Obracaj Janusz	Roskilde	Denmark	02/07- 08/07	12 000
Obračajová Adéla	Salerno	Italy	01/07 – 07/07	8 640
Opálková Miroslava	Erlangen	Germany	03/07 – 07/07	5 400
Ottmár Aleš	Istanbul	Turkey	09/06 – 07/07	17 280
Pešatová Renáta	Salerno	Italy	01/07 – 07/07	8 640
Polednová Vladimíra	Jönköping	Sweden	01/07 – 07/07	12 000
Povolná Ivana	Roskilde	Denmark	09/06 – 06/07	24 000
Přibyla Zdeněk	Oradea	Rumania	02/07 – 07/07	
Ramík, Dominik	Dublin	Ireland	02/07 – 05/07	9 600
Rýparová Michaela	Graz	Austria	10/06 – 02/07	
Řezníčková Jana	Ljubljana	Slovenia	02/07 – 06/07	6 480
Starzyková Lenka	Graz	Austria	09/06 – 02/07	10 800
Svoboda Tomáš	Sakarya	Turkey	09/06 – 01/07	5 760
Škrabalová Zuzana	Sevilla	Spain	02/07– 07/07	8 640
Šnajdrová Michaela	Sevilla	Spain	09/06 – 02/07	8 640
Trchalíková Veronika	Sevilla	Spain	02/07– 07/07	8 640
Vichová Veronika	B.Bystrica	Slovakia	02/07 – 06/07	
Volná Markéta	Joensuu	Finland	01/07 - 06/07	12 000
Zahnašová Radka	Munich	Germany	04/07 – 09/07	6 480
Zbránková Veronika	Katovice	Poland	10/06 – 02/07	1 080
Židík Miloš	Roskilde	Denmark	09/06 – 02/07	12 000
Rusínská Kateřina	Lija	Malta	3 weeks course	10 000

Winter Semester 2007/2008

Name	University, Country	Date
Bílková Barbora	Roskilde, Denmark	9/07 – 1/08
Citnarová Veronika	Klagenfurt, Austria	10/07 – 1/07
Henneberg Pavel	Braga, Portugal	9/07 – 2/08
Hochmanová Tereza	Bratislava, Slovakia	9/07 – 2/08
Holman Martin	Oradea, Rumania	9/07 – 6/08
Chlopčíková Kateřina	Sevilla, Spain	9/07 – 06/08
Kadlčíková Jana	Krakow, Poland	10/07- 1/08
Kliment Michal	Graz, Austria	10/07 – 1/08

Kořínková Lucie	Sevilla, Spain	9/07 – 06/08
Krčmářský David	Graz, Austria	10/07 – 1/08
Kubíková Liběna	Klagenfurt, Austria	10/07 – 1/07
Kuncová Petra	Sakarya, Turkey	9/07 – 1/08
Litvakova Petra	Erlangen, Germany	10/07 – 6/08
Marková Lenka	Ljubljana, Slovenia	9/07 – 1/08
Petrová Zuzana	Salamanca, Spain	9/07 – 6/08
Pobořilová Marie	Sakarya, Turkey	9/07 – 1/08
Sýkorová Lucie	Ljubljana, Slovenia	9/07 – 1/08
Tomášková Hana	Tours, France	9/07 – 2/08
Valasová Aneta	Bratislava, Slovakia	9/07 – 2/08
Večeř Ondřej	Aegean, Greek	10/07 – 1/08
Zacios Jan	Berlin, Germany	10/07 – 6/08
Žaludová Michaela	Braga, Portugal	9/07 – 2/08

Note: Since the academic year 2004/2005 students can apply for special scholarship to help fund their study abroad within the framework of the Socrates-Erasmus programme (Dean's regulation No. 3/2006). In 2007 39 applicants were granted the special scholarship and the amount of money spent on the support of the study stays abroad was 451 260,- CZK.

b) Others

Name	Dpt	Country	Place	Conference	Date	Days
Genčev, M.	KMA	Slovakia	Smolenice	18th Conf. on Number Theory	26.- 31.8.	6
Pělučová, M.	KMA	Slovakia	Nitra	ISCAM	18.-21.4.	4
Šustek, J.	KMA	UK	Edinburg	Conf. on Number Theory	1.- 10.7.	10
Šustek, J.	KMA	Slovakia	Smolenice	Konference	26.-31.8.	6
Červeň, J.	KBE	Slovakia	T.Matliare	Chemický sjezd	3.- 6.9.	4
Hranická, Z.	KCH	Slovakia	Bratislava	FCHPT	13.-15.11.	3
Bardoňová, D.	KCH	Slovakia	Bratislava	FCHPT	13.-15.11.	3
Němcová, M.	KCH	Slovakia	Bratislava	FCHPT	13.-15.11.	3

KMA Department of Mathematics

KBE Department of Biology and Ecology

KCHE Department of Chemistry

3.4 List of Bilateral Agreements – SOCRATES – ERASMUS Programme

Code of university	Place	Country	Coordinator	Department
BG ROUSSE 01	Rousse	Bulgaria	Mechlová	FY
DK ROSKILD 01	Roskilde	Denmark	Drobík	SGRR
SF JOENSUU 01	Joensuu	Finland	Drobík	SGRR
F CLERMON 02	Clermont Ferrand	France	Drobík	SGRR
F PARISO 04	Paris	France	Drobík	SGRR
F TOURS 01	Tours	France	Drobík	SGRR
IRL DUBLIN 04	Dublin	Ireland	Huňka	IP
I CATANIA 01	Catania	Italy	Perfilieva	MA
I PISA 01	Pisa	Italy	Hančl	MA
I UDIN 01	Udine	Italy	Hančl	MA

I UDIN 01	Udine	Italy	Mechlová	FY
HU EGER 01	Eger	Hungary	Tóth	MA
NL LEIDEN 01	Leiden	The Netherlands	Hančl	MA
PL BIELSKO 02	Bielsko-Biala	Poland	Živný	BE
PL GDANSK 01	Gdaňsk	Poland	Drobík	SGRR
PL KATOWIC 01	Katowice	Poland	Majkus	BE
PL KRAKOW 01	Krakow	Poland	Drobík	SGRR
PL WARSZAW31	Warszawa	Poland	Drobík	SGRR
PL WROCLAW 01	Wroclaw	Poland	Živný	BE
P BRAGA 01	Braga	Portugal	Drobík	SGRR
P PORTALE 01	Portalegre	Portugal	Sochor	IP
A GRAZ 01	Graz	Austria	Mišík	MA
A GRAZ 02	Graz	Austria	Mišík	MA
A KLAGENF 01	Klagenfurt	Austria	Drobík	SGRR
RO CLUJNAP01	Cluj-Napoca	Rumania	Tóth	MA
RO ORADEA 01	Oradea	Rumania	Drobík	SGRR
G IRAKLIO 01	Heraklion	Greek	Konečná	MA
SK BANSKO 01	Banská Bystrica	Slovakia	Drobík	KSGRR
SK BANSKO 01	Banská Bystrica	Slovakia	Šaloun	IP
SK BRATISL 01	Bratislava	Slovakia	Mišík	MA
SK BRATISL 01	Bratislava	Slovakia	Živný	BE
SK KOSICE 02	Košice	Slovakia	Drobík	SGRR
SK NITRA 01	Nitra	Slovakia	Sochor	IP
SK PRESOV 01	Prešov	Slovakia	Drobík	SGRR
SK RUZOMBE 01	Ružomberok	Slovakia	Drobík	SGRR
SK TRENCIN 01	Trenčín	Slovakia	Drobík	SGRR
SK ZVOLEN 01	Zvolen	Slovakia	Mišík	MA
SI LJUBLJA 01	Ljubljana	Slovenia	Drobík	SGRR
SI LJUBLJA 01	Ljubljana	Slovenia	Živný	BE
D BERLIN 01	Berlin	Germany	Hančl	MA
D BONN 01	Bonn	Germany	Drobík	SGRR
D ERLANGE 01	Erlangen	Germany	Hančl	MA
D FREIBUR 01	Freiburg	Germany	Živný	BE
D HANNOVE 01	Hannover	Germany	Drobík	SGRR
D MUCHEN 02	Munchen	Germany	Drobík	SGRR
D MUNSTER 01	Münster	Germany	Drobík	SGRR
E BARCELO 02	Barcelona	Spain	Drobík	SGRR
E SALAMA 02	Salamanca	Spain	Drobík	SGRR
E SEVILLA 01	Sevilla	Spain	Drobík	SGRR
TR ISTABUL01	Istanbul	Turkey	Drobík	SGRR
TR SAKARYA01	Sakarya	Turkey	Drobík	SGRR
UK LIVERPO 01	Liverpool	UK	Hančl	MA

4 Research Programmes

In 2007 there were no Research Programmes solved at the Faculty of Science. Researchers from the Department of Mathematics and Department of Informatics and Computers took part at the Research Programme MSM6198898701 (Logical and Algebraic Methods for Elaboration of Information Subjected to Indeterminacy and Their Use in Fuzzy Modelling) solved at the Institute for Research and Applications of Fuzzy Modelling.

4.1 Summary of project costs (faculty)

Project type	No. of projects	Grant (ths. CZK)
Research projects financed by the Faculty of Science (Internal projects)	7	3 358
Research projects in 2007 (Filed in CEP – Central evidence of projects)	23	9 968
Development projects in 2007 (Except of CEP – Central evidence of projects)	19	15 217
• Under national budget	8	5 807
• Projects financed by the EU Commission	11	9 410
Commercial contracts	5	895

4.2 Research projects financed by the Faculty of Science (Internal projects)

Project No.	Coordinator	Project title	Grant (ths. CZK)
FPP1073	V. Špunda	Start-up project of the research centre in biophysics and chemical physics	1 540
FPP1074	P. Pečinka	Investigation of the molecular genetic mechanisms effect of genotoxic substances	320
FPP1075	T. Pánek	Geomorphological and geoecological aspects of slope deformations in the young orogenic areas	590
FPP1077	V. Mišík	Institute for advanced studies in the field of methods of number theory	700
FPP1078	R. Peter	Study of the influence of electron configuration of oxygen on the mechanism of oxidation of carbonaceous matter	503
FPP1079	P. Šaloun	Information systems and technologies of semantic web	625
FPP1080	V. Baar	Centre of political and cultural geography	620

4.3 Summary of project costs (departments)

Department of Mathematics

Project type	No. of projects	Grant (ths. CZK)
Research projects financed by the Faculty of Science (Internal projects)	1	700
Research projects in 2007 (filed in CEP – Central evidence of projects)	1	629
Development projects in 2007 (except of CEP – Central evidence of projects)	2	2 794
<ul style="list-style-type: none"> • Under national budget 	1	132
<ul style="list-style-type: none"> • Projects financed by the EU Commission 	1	2 662

Department of Informatics and Computers

Project type	No. of projects	Grant (ths. CZK)
Research projects financed by the Faculty of Science (Internal projects)	1	625
Research projects in 2007 (filed in CEP – Central evidence of projects)	2	590
Development projects in 2007 (except of CEP – Central evidence of projects)	6	4 017
<ul style="list-style-type: none"> • Under national budget 	0	0
<ul style="list-style-type: none"> • Projects financed by the EU Commission 	6	4 017

Department of Physics

Project type	No. of projects	Grant (ths. CZK)
Research projects financed by the Faculty of Science (Internal projects)	1	1 540
Research projects in 2007 (filed in CEP – Central evidence of projects)	5	2 030
Development projects in 2007 (except of CEP – Central evidence of projects)	3	1 945
<ul style="list-style-type: none"> • Under national budget 	1	1 749
<ul style="list-style-type: none"> • Projects financed by the EU Commission 	2	196
Commercial contracts	1	672

Department of Chemistry

Project type	No. of projects	Grant (ths. CZK)
Research projects financed by the Faculty of Science (Internal projects)	1	503
Research projects in 2007 (filed in CEP – Central evidence of projects)	4	2 468
Development projects in 2007 (except of CEP – Central evidence of projects)	1	1 600
<ul style="list-style-type: none"> • Under national budget 	1	1 600

Department of Biology and Ecology

Project type	No. of projects	Grant (ths. CZK)
Research projects financed by the Faculty of Science (Internal projects)	1	320
Research projects in 2007 (filed in CEP – Central evidence of projects)	5	1 522
Development projects in 2007 (except of CEP – Central evidence of projects)	5	2 326
• Under national budget	5	2 326
Commercial contracts	3	83

Department of Physical Geography and Geoecology

Project type	No. of projects	Grant (ths. CZK)
Research projects financed by the Faculty of Science (Internal projects)	1	590
Research projects in 2007 (filed in CEP – Central evidence of projects)	3	562
Development projects in 2007 (except of CEP – Central evidence of projects)	0	0
• Under national budget	0	0
Commercial contracts	1	140

Department of Human Geography and Regional Development

Project type	No. of projects	Grant (ths. CZK)
Research projects financed by the Faculty of Science (Internal projects)	1	620
Research projects in 2007 (filed in CEP – Central evidence of projects)	3	2 167
Development projects in 2007 (except of CEP – Central evidence of projects)	2	2 535
• Under national budget	0	0
• Projects financed by the EU Commission	2	2 535

5 Faculty service

5.1 The libraries and depository and reading rooms of Faculty of Science

The libraries and information services of the Faculty of Science (FS) are in two separate locations: the FS -A depository and reading room in the street 30. dubna was added to the University Library on 1. 9. 1998. At the present time it houses predominantly printed documents for the Departments of Mathematics, Informatics and Computers, and Chemistry and Physics

The FS depository and reading room in Chittussiho Street was included in the University Library on 1. 9. 2002 and provides material for the Departments of Biology and Ecology, Physical Geography and Geoecology, as well as Human Geography and Regional Development.

In addition to the organizational layout of the University Library libraries of departments and institutions provide lending services. FS involves three departmental libraries and one institutional library. These libraries mostly serve as depositories for titles acquired by employees from organizational units within the framework of grant activities.

Book stock and services in the library and depository of the Faculty of Science in 2007

Monitored criteria / reading rooms	FS - A	FS - Chit.	Total	OU Total
Attendance				
Total number of visitors in 2007	11 581	6 969	18 550	79 199
Visitors on a daily average	52	31	83	44
Number of study locations	25	20	45	219
Lending services				
Total number of checkouts	34 740	20 669	55 409	274 140
Daily average of checkouts	156	93	249	154
Free selection of stock (library units)				
Non-periodical documents	1 901	3 623	5 524	32 059
Periodical documents	47	79	126	1 997
Number of magazines titles delivered	23	39	62	403
Use of PC				
Total number of PC users in 2007	7 714	4 130	11 844	52 772
Daily average of PC users	35	19	54	30
Number of user PCs	10	6	16	61
Reprography services				
Number of reproductions (copies)	1 865	7 762	9 627	94 064
Number of pages printed using PCs	5 508	2 700	8 208	53 583
Number of scanned pages	405	195	600	10 775
Hours open during the week (during the academic year)	53	34		

Note: The total statistics given are based on the number of copies made in the framework of copying services and recorded on a counter.

Electronic information resources

The OU university library provides access to electronic information resources. Most are accessible in the framework of MŠMT grants for the support of science and research in universities (at the present time 1N for the period of 2004 - 2008). These resources represent information of a bibliographical and factual nature, as well as full-body texts recently, and are accessible within the scope of the IP address for OU. Electronic information resources also have major significance in the framework of teaching, whereby the library provides, e.g., the subject “Electronic information resources” for the Department of Geography at the Faculty of Science.

Databases accessible within the Faculty of Science

1. BIOLOGICAL ABSTRACTS
2. BioOne Full-Text
3. BLACKWELL SYNERGY
4. CZECH NATIONAL BIBLIOGRAPHY
5. EIFL DIRECT - EBSCO
6. ENCYCLOPEDIA COTO.JE
7. ENVIRONETBASE
8. ESPM - CSA ENVIRONMENTAL SCIENCES & POLLUTION MANAGEMENT DATABASE
9. GEOBASE
10. GEOREF
11. KLUWER
12. KNOVEL
13. PROQUEST 5000
14. SCIENCE DIRECT
15. SCIFINDER SCHOLAR
16. SPRINGER/LINK
17. WEB OF KNOWLEDGE
18. LAWS IN CR ONLINE
19. ZOOLOGICAL RECORD

6 Centre for Lifelong Education

Head of the Centre: Eva Burianová, PhD.
e-mail: eva.burianova@osu.cz

Centre Administrators: Simona Polochová
e-mail: simona.polochova@osu.cz
Gabriela Burianová
e-mail: gabriela.burianova@osu.cz

In 2007 the Centre for Lifelong Education at the Faculty of Science, University of Ostrava cooperated with the departments in various organizational activities, primarily in the following fields:

- study programs to expand the knowledge base within the teaching profession (Enlargement Diploma Study)
- preparatory courses for students in their first year of study,
- organization of courses within DVPP,
- realization of specialist courses,
- realization of conferences for teachers,
- realization of education for university staff,
- organization of courses within ESF project – Proposal and realization of the module system in teachers education in the Moravian – Silesian region.

Overview of activities realized within lifelong learning including the number of participants in the year 2007 can be found in the following chart.

The name of the activity	Number of participants
Preparatory Course in Mathematics (KMA) ¹	27
Enlargement Diploma Study - Informatics 1 st – 3 rd grade (KIP) ²	70
Enlargement Diploma Study - Informatics – graduates (KIP)	12
Enlargement Diploma Study of Informatics from ZŠ ⁴ to SŠ ⁵	3
Enlargement Diploma Study of Mathematics	16
Enlargement Diploma Study of Mathematics from ZŠ to SŠ	8
Enlargement Diploma Study of Biology from ZŠ to SŠ (KBE) ³	15
Enlargement Diploma Study of Biology from ZŠ to SŠ- graduates	6
Enlargement Diploma Study of Geography from ZŠ to SŠ- graduates	17
Enlargement Diploma Study of Geography – o field	10
Coordinator in the Field of ICT 1 st and 2 nd grade	47
Conference for Secondary School Teachers (KMA, KIP)	130
Course: Introduction to the Study	540
Course: Sign Language	20
Course: Application of ICT at the University of Ostrava	40
Course for people carrying out distant education	50
Course: English for Beginners I	42
Course: English for Beginners II	12
ESF Project - Proposal and Realization of the Module System in Teachers Education in the Moravian – Silesian Region – schooling of target group and lecturers	1 397
CISCO Course	9
Development project	142
Total	2 613

KMA¹ Department of Mathematics

KIP² Department of Informatics and Computers

KBE³ Department of Biology and Ecology

ZŠ⁴ Primary School

SŠ⁵ Secondary School

7 Department for Support of Project Activities

Head of the Department: Cyril Klimeš, Assoc. Professor
 e-mail: cyril.klimes@osu.cz

Staff: Lukáš Straňák
 e-mail: lukas.stranak@osu.cz
 Lenka Káňová
 e-mail: lenka.kanova@osu.cz
 Pavla Janoschová
 e-mail: pavla.janoschova@osu.cz

In 2007 Department for Support of Project Activities at the Faculty of Science, University of Ostrava, participated in co-operation with solvers of individual projects primarily in the following spheres:

- registration of the projects proposals,
- registration of the projects being solved,
- arranging formal requisites for the project (signatures of statutory representative, correspondence, communication with support providers, preparation and realization of requests for changes in the projects, preparation of contractual sources),
- communication with solvers (consultation about budget, checking formal requisites of the project proposal, etc.)
- control of objective fulfilment of the project,
- organization of meetings of control working groups,
- realization of controlling days,
- realization of opponent proceedings,
- preparation and realization of competitive examination,
- preparation of author's contracts, DPP/DPČ,
- preparation of monitoring, continuous and final reports,
- monitoring of financial drawing for individual projects and adjustment of economy,
- preparation of audits,
- preparation of co-ordination of EFQM at the faculty
- preparation of new projects (2 projects 7th RP EU),
- participation in activities and solving ESF project – System of Further Education of Research and Development Workers in Moravian-Silesian Region and its Realization
- participation in activities and realization of courses of ESF project - Modular System of Study Programmes at Universities in Moravian-Silesian Region and its Realization.

Summary of projects registered at Faculty of Science, OU in 2007

Type of the Project	Number
Research projects financed by the Faculty of Science (financed from FPP PřF OU)	7
Research projects registered in CEP (Central evidence of projects)	23
Development projects (Except of CEP)	19
• Under national budget of CR (FRVS)	8
• Financed by the EU Commission and national budget of CR (ESF, Leonardo, Grundtvig, Comenius)	11
Commercial contracts	5
TOTAL	54

Summary of projects registered at Faculty of Science, OU in 2007 according to departments

Type of the Project	Number
Department of Mathematics	4
Department of Informatics and Computers	9
Department of Physic	10
Department of Chemistry	6
Department of Biology and Ecology	14
Department of Physical Geography and Geoecology	5
Department of Human Geography and Regional Development	6
TOTAL	54

8 Economic department

Head of the Department: Lenka Káňová
e-mail: lenka.kanova@osu.cz

Staff: Pavla Janoschová
e-mail: pavla.janoschova@osu.cz
Pavla Janíková
e-mail: pavla.janikova@osu.cz

In 2007 Economic department was established at the Faculty of Science to further improve the quality of economic support of all the activities at the faculty. Economic department of the faculty started to guarantee economic services for all faculty departments and project solvers as:

- accounting,
- travelling expenses,
- administration of material possession,
- cooperation with project solvers in financial management of their projects

9 Institute of economics and management

- Economics and economic policy.
- Finance and financial management, accounting, taxes.
- Theory and practice of investing in banking and insurance.
- Management, marketing and economy of the company.
- Czech and European legislation.
- The European Union including project managing.

9.1 Staff

Head of the Department

Hana Filipczyková, Assoc. Professor

Secretary to the Department

Jana Goralová

Teaching staff

Professor

Tibor Paulík

Assoc. Professors

Hana Filipczyková

External teachers

Pavína Klumparová
Karel Kořený
Jaroslav Svoboda
Hana Svobodová
Marie Sciskalová, PhD.

9.2 Theses

Bachelor Theses

- JEDOUNOVÁ, Eva: *Accounting and taxation particularity in tourism*. Supervisor: Filipczyková Hana
- STARSIAKOVÁ, Soňa: *Selected problems of direct taxes focused on income of tax of legal entities*. Supervisor: Filipczyková Hana
- BYRTUSOVÁ, Věra: *Development of efficiency in the Czech Republic in years 2001 - 2006*. Supervisor: Paulík Tibor
- FAITHOVÁ, Lýdia: *Analysis of Bratislava and Pezinok inhabitants interest in development of new housing units in Pezinok*. Supervisor: Svobodová Hana
- HANZLÍKOVÁ, Táňa: *Acquisition of the fixed assets by using leasing*. Supervisor: Filipczyková Hana

- KONVIČKOVÁ, Jana: *Selected problems of direct taxes concentrated on a natural person income tax*. Supervisor: Filipczyková Hana
- MIKESKOVÁ, Alena: *Means of number sets*. Supervisor: Mišík Ladislav
- NGUYEN, Thi Kim Cuc: *Characteristics of the transformation process of the Czech economy*. Supervisor: Paulík Tibor
- NOVÁKOVÁ, Žaneta: *The problems at applying the death duty, the gift tax and tax of transfer of real property*. Supervisor: Filipczyková Hana
- POHLOVÁ, Jana: *Specific Problems of Long-Term Assets*. Supervisor: Filipczyková Hana
- RAMBOUSKOVÁ, Nela: *Accounting and fiscal specifics of small business*. Supervisor: Filipczyková Hana
- SATKE, Tomáš: *Unemployment development in the Czech Republic between years 2001 - 2006*. Supervisor: Paulík Tibor
- VAŇKOVÁ, Nela: *Inventory management*. Supervisor: Filipczyková Hana
- TOMÁNKOVÁ, Petra: *Specifics real estate tax*. Supervisor: Filipczyková Hana
- ŠUŠLÍKOVÁ, Zdeňka: *Development of inflation in the Czech republic in years 2001-2006*. Supervisor: Paulík Tibor

Master Theses

- ČUTKA, Petr: *Credits for entrepreneurs and legal entities*. Supervisor: Filipczyková Hana
- KLOUDOVÁ, Alena: *The specifics of small business*. Supervisor: Filipczyková Hana
- PASTUŠKOVÁ, Ivana: *Market analysis of cameras*. Supervisor: Svobodová Hana
- PETRUŠKOVÁ, Marcela: *Selected problems of retail business*. Supervisor: Filipczyková Hana

9.3 Research projects

Development projects in 2007 (except of CEP – Central evidence of projects)

Coordinator	Provider (agency)	Project title	Grant (ths. CZK)
H. Filipczyková	FRVŠ 2521/F5/b	Creation of new study programmes - Financial reporting and analysis and economic policy for field of study Application of mathematics in economy	132

9.4 Equipment

- 2 PC.
- 2 notebooks.

9.5 Contacts and Cooperation

Cooperation with Universities and Research Institutes in the Czech Republic

- VSE Prague, Economic Faculty, Department of Economic and Social Policy.
- Faculty of Finance and Accounting, Department of Financial Accounting and auditing, Prague.
- University of Tomáš Baťa, Faculty of Management and Economics, Zlín.

- Masaryk University, Economics –Faculty of Managing, Department of Economics, Department of Finance, Brno.
- VŠB – TU Ostrava, Faculty of Economics, Ostrava.
- Business School, Ostrava.
- Silesian University, School of Business Administration, Karviná.

Cooperation with Universities and Research Institutes abroad

- University of Samuel Tessedik, Faculty of Business, Pécs, (Hungary).
- University of Economics, Faculty of Economics, Department of Economy, Krakow, (Poland).
- Rzeszov univerzita, Faculty of Economics, Department of Economy, Rzeszov, (Poland).
- University of Economics, Faculty of Business, Department of Economy Department of Insurance, Bratislava (Slovakia).
- University of Matej Bel, Faculty of Economics, Banská Bystrica (Slovakia).
- Technical University in Košice, Faculty of Economics, Department of Finance, Košice (Slovakia).

Conferences 2007

Name	Dpt.	Country	Place	Name of the Conference	Date
Paulík, T.	IEM	Slovakia	Bratislava	Economy and social politics	18. - 20.4.
Paulík, T.	IEM	Poland	Krakow	Conference	18. - 19. 5.
Paulík, T.	IEM	Poland	Rzeszów	Conference	26. - 29. 9.

Short-term stays abroad 2007 (less than 10 days)

Name	Dpt.	Country	Place	Name of the Conference	Date
Paulík, T.	IEM	Slovakia	B.Bystrica	Chairman of the State Examination Board	28.1. - 2.2.
Paulík, T.	IEM	Slovakia	Bratislava	Member of Examination committee	29. 5. - 1.6.
Paulík, T.	IEM	Slovakia	Bratislava	Member of appointing committee	2. - 3.7.
Paulík, T.	IEM	Slovakia	B.Bystrica	Chairman of the State Examination Board	28.1. - 2.2.
Paulík, T.	IEM	Slovakia	B.Bystrica	Meeting of the Scientific Board	23. 10.
Paulík, T.	IEM	Slovakia	Bratislava	Member of Examination committee	29. 5. - 1.6.
Paulík, T.	IEM	Slovakia	B.Bystrica	Member of the Board	21.11.

9.6 Membership in Professional Organizations

Assoc. professor Hana Filipczyková:

- Member of the Chamber of Certified Accountants, ČR.

9.7 Publications

Articles in proceedings (proceedings from conferences or institutions)

- PAULÍK, T. *New challenges for preparation and realization of EU projects*. In Research in the area of economics and company management Education and development of

competencies in managerial and economic disciplines European structural funds projects. Brno. Brno: Faculty of Business and Management, University of Technology, 2007. ISBN 978-80214-3482-0.

- PAULÍK, T. *Economic implications of ordoliberalism. In International Conference Increasing Competitiveness or Regional, National and International Markets Development-New Challenges* . Ostrava. Ostrava: VŠB Technical university, Economical Faculty , 2007. ISBN 978-80-248-1457-5.
- FILIPCZYKOVÁ, H. *Financial reporting in a process of education at non economic universities*. In Účetní výkaznictví. Vede schopnost běžného účtování k porozumění účetní závěrce podniku? Prague. Prague: VŠE, 2007. p. 22-26. ISBN 978-80-254-0966-4.
- PAULÍK, T. *Impact of a business cycle on a convergent program in the Czech Republic*. In Hospodářska a sociální politika EU - aktuální otázky. Bratislava. Bratislava : EU NHF Bratislava, 2007. p. 264-269. ISBN 978-80-225-2351-6.
- FILIPCZYKOVÁ, H. *Insurance market in the ČR as a segment of financial market*. In Vývojové trendy v poistovníctve I. 7.6.2007-7.6.2007 Senec. Bratislava, University of: Economy, 2007. p. 30-35. ISBN 978-80-225-2318-9.

Articles in periodical publications (newspapers, magazines)

- PAULÍK, T., ŠVANTNEROVÁ, L. *Concept of belongings in economic theory*. In Národohospodářský obzor. 2nd issue. 2007, p.62-73, ISSN 1213-2446.

10 Department of Mathematics

- Theory of ordered algebraic structures, algebraic number theory, applications of category theory.
- Theory of fuzzy logic, its formal and algebraic aspects, fuzzy approximation, applications for control of technological processes, decision-making, computer science and others.
- Global variational analysis.
- Geometric methods in differential equations and mathematical physics.
- Theory of linear programming in general vector spaces and related areas.
- Measures of size and distribution of sequences of positive integers.
- Irrationality and transcendence.

10.1 Staff

Head of the Department

Ladislav Mišík, Assoc. Professor.

Deputy Head of the Department

Martin Swaczyna

Secretary to the Department

Martina Havelková

Teaching staff

Professors

Olga Krupková
Jiří Močkoř
Vilém Novák
Irina Perfiljeva

Assoc. Professors

Květoslav Burian
Jaroslav Hančl
Ladislav Mišík
János Tóth

Assistant Professors

David Bartl
Petra Konečná
Martin Swaczyna
Zuzana Václavíková
Martina Daňková
Petr Bulava
Kateřina Kabieszová

Changes carried out during the course of 2007:

On 13. 12. Petr Bulava was awarded the title of PhD.

10.2 PhD. students

Bizoň Lukáš
 Blahutová Olga
 Brychta Jan
 Dubovský Viktor
 Dyba Martin
 Genčev Marian
 Hořenková Kucosová Lenka
 Jahodová Monika
 Kabieszová Kateřina
 Kijonka Václav
 Kliment Michal
 Kramář Zdeněk
 Krčmarský David
 Lazar Vladimír
 Mácha Ferdinand
 Malíková Radka
 Otáhal Miroslav
 Paláček Radomír
 Pavliska Viktor
 Plšková Dagmar
 Polakovič Ondřej
 Štěpnička Jan
 Šustek Jan
 Večerka Arnošt
 Žižková Kateřina

PhD. students who finished doctoral study in 2007

Petr Bulava
 Martin Štěpnička

10.3 Study programmes

Code of the study programme ¹⁾	Title of the study programme	Title of the study major ²⁾	Length of the study ³⁾			
			B	MN	P	FS
B1101	Mathematics	Mathematics (two-branch study)	3			P
B1103	Applied Mathematics	Applied Mathematics for	3			P,K

¹⁾ B – bachelor study programme, N – master study programme representing a continuation of bachelor study programme, M – master study programme, P – doctoral study programme.

²⁾ Study programmes marked with an asterisk can (usually) be studied only in a chosen study programme in pairs.

³⁾ P – full time study, D – distance form of study, K – combined study form;

		Economics				
B1103	Applied Mathematics	Applied Mathematics	3			P,K
B1103	Applied Mathematics	Mathematical and Computer Methods of Data Processing	3			P,K
B1103	Applied Mathematics	Investment Counselling	3			P,K
N1101	Mathematics	Teaching for Secondary Schools-Mathematics (two-branch study)		2		P
N1101	Mathematics	Teaching for Secondary Schools-Mathematics (one-branch study)		2		P
N1103	Applied Mathematics	Applied Mathematics for Economics		2		P
N1103	Applied Mathematics	Applied Mathematics		2		P
N1103	Applied Mathematics	Mathematical and Computer Methods of Data Processing		2		P
M1103	Applied Mathematics	Applied Mathematics		5		P
M1103	Applied Mathematics	Applied Mathematics for Economics		5		P
M1103	Applied Mathematics	Teaching for Secondary Schools-Mathematics		5		P
M7504	Teaching for Secondary Schools	Teaching for Secondary Schools-Mathematics		5		P
P1103	Applied Mathematics	Applied Mathematics			3,4	P,K
P1103	Applied Mathematics	Applied Algebra			3,4	P,K
P1103	Applied Mathematics	Fuzzy Modelling			3	P,K
P1103	Applied Mathematics	Applied Mathematics			3	P,K
P1103	Applied Mathematics	Applied Algebra			3	P,K
P1103	Applied Mathematics	Fuzzy Modelling			3	P,K

10.4 Theses

Bachelor Theses

- PUSTKOVÁ, Veronika: *Solution Concepts of Cooperative Games*. Supervisor: Bartl David
- ŽÍDKOVÁ, Eva: *Improving the Efficiency in Lonka Company Using the Graph Theory*. Supervisor: Konečná Petra
- KONVIČKOVÁ Jana: *Methods of assessing a company*. Supervisor: Bartl David
- ZACIOS Jan: *The Construction of the Field of Hyperreal Numbers*. Supervisor: Bartl David
- MONIAKOVÁ, Patricie: *Completion of Metric Space*. Supervisor: Bartl David
- HRNČÍŘOVÁ, Eva: *Magic Squares and Magic Cubes*. Supervisor: Bartl David
- MIČANÍKOVÁ, Lucie: *Mathematical Models of Epidemic Spread*. Supervisor: Bulava Petr
- BÁRTOVÁ, Petra: *Theory of singularities and their applications*. Supervisor: Mišík Ladislav
- MIKESKOVÁ, Alena: *Means of number sets*. Supervisor: Mišík Ladislav-
- PHAM, Thi Bich Hanh: *Integer part of the real number*. Supervisor: Tóth János
- PUSTKOVÁ, Veronika: *Completion of a Field Using Cantor's Construction*. Supervisor: Bartl David

- STANIOWSKÁ, Veronika: *Dirichlet's principle and its applications*. Supervisor: Mišík Ladislav
- STOLAŘOVÁ, Martina: *Differential Equations as a Models for Mechanical Motion*. Supervisor: Swaczyna Martin
- VÍCHA, Tomáš: *Relation of power and logarithmic means*. Supervisor: Tóth János

Master Theses

- BRYCHTA, Jan: *Roundabout simulation*. Supervisor: Bulava Petr
- CHODŮR, Miroslav: *Company's self-evaluation by EFQM Model Excellence using fuzzy logic*. Supervisor: Močkoř Jiří
- DYBA, Martin: *Circulant matrices and algebraic computations in the MuPAD software*. Supervisor: Václavíková Zuzana
- HALADOVÁ, Hana: *The notion of fuzzy real number*. Supervisor: Mišík Ladislav
- JUREČKOVÁ, Kamila: *Development of concept of a number*. Supervisor: Mišík Ladislav
- KADULOVÁ, Šárka: *The analysis of sale of non-alcoholic beverage*. Supervisor: Hrubá Jana
- MAJČÍKOVÁ, Zuzana: *The application of differential equations solving economic dynamic systems*. Supervisor: Swaczyna Martin
- POLÁŠKOVÁ, Miroslava: *The use of linear programming methods on garbage collection-route problem solving*. Supervisor: Bartl David
- REČKOVÁ, Šárka: *The numerical mathematics in economy*. Supervisor: Václavíková Zuzana
- VAREKOVÁ, Lenka
- WOLSKÁ, Veronika: *Solution concepts of cooperative games*. Supervisor: Bartl David

Doctoral theses

- BULAVA, Petr: *Nested simulation of demographic processes*. Supervisor: Evžen Kindler

10.5 Research projects

Research projects financed by the Faculty of Science (Internal projects)

Coordinator	Provider (agency)	Project title	Grant (ths. CZK)
L. Mišík	FPP	Institute for advanced studies in the field of methods of number theory	700

Research projects in 2007 (filed in CEP – Central evidence of projects)

Coordinator	Provider (agency)	Project title	Grant (ths. CZK)
J. Močkoř	CEP_GAČR 201/07/0191	Algebraic, analytic and combinatorial number theory	629

Development projects in 2007 (except of CEP – Central evidence of projects)

Coordinator	Provider (agency)	Project title	Grant (ths. CZK)
J. Močkoř	EU_ESF	Modular System of Study Programmes at Universities in Moravian – Silesian Region and its Realization	2 662

10.6 Equipment

- 18 PC.
- 14 Notebooks.

10.7 Conferences and seminars

- The 13th Annual Conference of Secondary School Teachers of Mathematics and Informatics, Faculty of Science OU Ostrava, 2. 2. 2007, 120 participants.
- The 17th Vojtěch Jarník International Mathematical Competition 26. - 29. 3. 2007, 116 participants.
- International workshop “Sequences”, Malenovice, 3. - 5. 9. 2007.
- Summer School for PhD. students, Malenovice, 5. - 7. 9. 2007.

10.8 Contacts and cooperations

Cooperation with Universities and Research Institutes abroad

- Leiden University.
- Liverpool University.
- University of Udine.
- University of Pisa.
- Eger University.
- Babes-Bolyai Cluj-Napoca.
- Universite Jean Monnet St.Etienne.
- TU Graz.
- TU Bratislava.
- TU Zvolen.
- Mathematical Institute SAV Bratislava.
- Silesian University Katowice.

Visitors to the institute

- Antal Bege 5. 9. - 7. 9. 2007 lectures on Workshop in Malenovice.
- Radhakrishnan Nair lectures on Workshop in Malenovice.

Visits of Staff Members

Conferences 2007

Name	Dpt.	Country	Place	Name of Conference	Date
Hančl, J.	MA	UK	Liverpool	Conference	1.7.-16.7.
Hančl, J.	MA	Slovakia	Smolenice	Conference on Number Theory	26.- 31.8.
Konečná, P.	MA	Slovakia	Smolenice	Conference on Number Theory	26.- 31.8.

Mišík, L.	MA	Austria	Linz	Seminar in Fuzzy Set Theory	5. – 11. 2.
Mišík, L.	MA	Slovakia	Smolenice	Conference on Number Theory	26.- 31.8.
Mišík, L.	MA	Slovakia	Podbanské	Conference	16.- 21.9.
Močkoř, J.	MA	Italy	Rome	Conference	27. – 30.4.
Ruckí, P.	MA	Slovakia	Smolenice	Conference on Number Theory	26.- 31.8.
Swaczyna, M.	MA	Slovakia	Bratislava	Summer School in Global Analysis	20.- 24. 8.
Tóth, J.	MA	Slovakia	Smolenice	Conference on Number Theory	26.- 31.8.

Short-term stays abroad 2007 (less than 10 days)

Name	Dpt.	Place	Action	Date	Days
Hančl, J.	UK	Liverpool	Research	24.6.-1.7.	78
Hančl, J.	Italy	Udine	Research	31.10- 6.11.	6
Hančl, J.	UK	Liverpool	Research	5.-11.12.	7
Konečná, P.	Slovakia	Nitra	Research	7.- 8. 6.	
Mišík, L.	Slovakia	Bratislava	Member of Opponent Commission	8.-9.11.	2
Mišík, L.	Hungary	Sopron	Study Stay, Lecture	16. – 21.11.	6
Močkoř, J.	Spain	Madrid	Common Doctoral progr.	11.- 14.1.	4
Tóth, J.	Hungary	Sopron	Study Stay, Lecture	16. – 21.11.	6

Long-term stays abroad 2007 (more than 10 days)

Name	Country	Place	Action	Date	Days
Bartl, David	France	St. Etienne	Study Stay	1. – 28.6.	28
Hančl, J.	UK	Liverpool	Science and Research	19.5.- 4.6.	17
Hančl, J.	UK	Liverpool	Science and Research	16.7.- 27.7.	12
Mišík, L.	UK	Liverpool	Science and Research	2. – 16.7.	18
Mišík, L.	France	St. Etienne	Study Stay	3. – 17.6.	14
Novák, V.	Australia	Melbourne	Lectures Tour	1. – 31.3.	31
Tóth, J.	UK	Liverpool	Science and Research	23.6.-9.7.	18
Tóth, J.	France	St. Etienne	Study Stay	3. – 17.6.	14

10.9 Student research activity

- PhD. student Jan Šustek gave talks at the International Conference in Number Theory, Smolenice, Slovakia, 27. - 31. 8. 2007 and the international workshop Sequences, Malenovice, 3. - 5. 9. 2007.

10.10 Membership in Professional Organisations

Prof. Vilém Novák, Prof. Irina Perfiljeva, Martin Štěpnička, Martina Daňková, PhD., Dagmar Plšková, Assoc. Prof. János Tóth, Assoc. Prof. Ladislav Mišík:

- Members of Organization EUSFLAT (European Society for Fuzzy Logic and Technology).

Prof. Irina Perfiljeva:

- Member of EUSFLAT board, scientific secretary.

Petr Bulava:

- Czech and Slovak Society for System Stimulation - member of the board.

10.11 Publications

Monographic publication

- HANČL, J., RUCKI, P. *Increase your mathematical intelligence*. 1st edition. Ostrava: Ediční středisko of University of Ostrava in Ostrava, 2007. 90 pp. 1. ISBN 978-80-7368-389-4.

Parts of monographic publications, articles

- NOVÁK, V. *Mathematical fuzzy logic in modelling of natural language semantics*. In *Fuzzy Logic - A Spectrum of Theoretical & Practical Issues*. 1st edition. Berlin : Springer, 2007. p. 145-182.
- NOVÁK, V. *EQ-algebras in progress*. In *Theoretical Advances and Applications of Fuzzy Logic and Soft Computing*. 1st edition. Berlin: Springer, 2007. ISBN 3-540-72433-8. p. 876-884.
- NOVÁK, V., WANG, P. *Mathematical fuzzy logic in modelling of natural language semantics*. In *Fuzzy Logic - A Spectrum of Theoretical & Practical Issues*. 1st edition. Berlin: Springer, 2007. p. 145-182.
- KRUPKOVÁ, O. *Second Order Ordinary Differential Equations in Jet Bundles and the Inverse Problem of the Calculus of Variations*. In *Handbook on Global Analysis*. Elsevier, 2007.
- PERFILJEVA, I. *Analytical Theory of Fuzzy IF-THEN Rules with Compositional Rule of Inference*. In *Fuzzy Logic - a Spectrum of Theoretical&Practical Issues*. *Studies in Fuzziness and Soft Computing*. 215th edition. Heidelberg: Springer, 2007. ISBN 978-3-540-71257-2. p. 173-191.
- PERFILJEVA, I. *Fuzzy Transforms: A Challenge to Conventional Transforms*. In *Advances in Images and Electron Physics*. 147th edition. Amsterdam: Elsevier Academic Press, 2007. ISBN 13:978-0-12-373909-4. p. 137-196.

Articles in proceedings (proceedings of conferences or institutions)

- BARTL, D. *On the Non-Emptiness of the Core of a Cooperative Game*. In *Mathematical Methods in Economics 2007*. 2007-09-04-2007-09-06 Ostrava. Ostrava: VŠB--Technical University of Ostrava. Faculty of Economics, 2007. ISBN 978-80-248-1457-5.
- MOČKOŘ, J. *Homomorphisms of fuzzy logic models based on sets with similarities*. In *5th EUSFLAT Conference*. 2007-09-11-2007-09-14 Ostrava. Ostrava: University of Ostrava, 2007. p. 417-422. ISBN 978-80-7368-387-0.
- PERFILJEVA, I., PLŠKOVÁ, D. *Solving ODE with Fuzzy Initial Condition Using Fuzzy Transform*. In *10th Czech-Japan Seminar on data Analysis and Decision Making under Uncertainty*. 2007-09-15-2005-09-18 Liblice. Prague: VŠE in Prague, *Economica*, 2007. p. 91-100. ISBN 80-245-0915-6.
- HANČL, J., MIŠÍK, L., TÓTH, J. *Limit points of sequences of fuzzy real numbers*. In *28th Linz Seminar on Fuzzy Set Theory*. Linz. Linz: J.Kepler Universitat Linz, 2007. p. 66-69.
- MOČKOŘ, J. *Characteristic morphisms and models of fuzzy logic in a category of sets with similarities*. In *12th International fuzzy systems associations world congress*. 2007-06-18-2007-06-21 Cancun, Mexico. Cancun: Springer, 2007. p. 832-840. ISBN 1615-3871.

- NOVÁK, V. *EQ-algebras in progress*. In IFSA 2007 World Congress. 18. 6. -21. 6. Cancun, Mexico. Cancun: 2007.
- BARTL, D. *On the Non-Emptiness of the Core of a Cooperative Game*. In Mathematical Methods in Economics 2007. 2007-09-04-2007-09-06 Ostrava. Ostrava: VŠB-Technical University of Ostrava. Faculty of Economics, 2007. p.173-173. ISBN 978-80-248-1458-2.
- MOČKOŘ, J. *Error functions of locally linear functions*. In International Symposium on Management Engineering. 10.3.2006-13.6.2006 Kitakyushu. Japan: Waseda University, Japan, 2007. p. 25-31. ISBN 1349-418X.
- KRIVÝ, I., KINDLER, E. *New Flexible Simulation Tool in SIMULA*. In European Simulation and Modelling Conference ESM'2007. 2007-10-10-2007-10-13 St. Julian's. 2007.

Articles in periodical publications (newspapers, magazines)

- NOVÁK, V. *A Formal Theory of Intermediate Quantifiers*. In Fuzzy Sets and Systems. 2007, ISSN 0165-0114.
- HANČL, J., CORVAJA, P. *A transcendence criterion for infinite product*. In Rend. Lincei. Mat. Appl. 3rd edition. 2007, vol.18, no.3, p.295-303, ISSN 1120-6330.
- NOVÁK, V. *Fuzzy logic with countable evaluated syntax revisited*. In Fuzzy Sets and Systems. 1st edition. Beijing: Tsinghua University Press, Springer, 2007, vol.158, no.1, p.929-936, ISSN 0165-0114.
- HANČL, J., ŠTĚPNIČKA, J. *A note to the irrationality measure*. In press. 2007, p.1-10
- DIMARTINO, F., SESSA, S., LOIA, V., PERFILJEVA, I. *An image coding/decoding method based on direct and inverse fuzzy transforms*. In Intern. Journal of Appr. Reasoning. 2007,
- MOČKOŘ, J. *Models of fuzzy logic in a category of sets with similarity relations*. In International journal of innovative computing, Information and control. Submitted. 2007. ISSN 1349-418X.
- PERFILJEVA, I., NOVÁK, V. *System of fuzzy relation equations as a continuous model of if-then rules*. In Information Sciences. 2007, vol.177, p.3218-3227, ISSN 0020-0255.
- PERFILJEVA, I., NOVÁK, V., DVOŘÁK, A. *Fuzzy transform in the analysis of data*. In Intern. Journal of Appr. Reasoning. Beijing: Tsinghua University Press, Springer, 2007, ISSN 0888-613X.
- NOVÁK, V., PERFILJEVA, I., DVOŘÁK, A., CHEN, Q., WEI, Q., YAN, P. *Mining pure linguistic associations from numerical data*. In International Journal of Approximate Reasoning. Beijing: Tsinghua University Press, Springer, 2007, ISSN 0888-613X.
- PERFILJEVA, I., DI NOLA, A., NOVÁK, V., LETTIERI, A. *Algebraic Analysis of Fuzzy Systems*. In Fuzzy Sets and Systems. Liptovský Jan : FSTA 2006, 2007, vol.158, no.1, p.1-22, ISSN 0165-0114.
- BARTL, D. *Farkas' Lemma, other theorems of the alternative, and linear programming in infinite-dimensional spaces: a purely linear-algebraic approach*. In Linear and Multilinear Algebra. 2007, no.55, p.327-353, ISSN 0308-1087.
- GIULIANO-ANTONINI, R., GREKOS, G., MIŠÍK, L. *On weighted densities*. In Czechoslovak Mathematical Journal. 2007, vol.57, no.3, p.947-962
- HANČL, J., ŠUSTEK, J. *Expressible Sets of Sequences with Hausdorff Dimension Zero*. In Monatshefte fur Mathematik. 4th edition. 2007, vol.152, no.4, p.315-320, ISSN 0026-9255.
- TÓTH, J., FILIP, F., CSIBA, P. *Distribution of terms of logarithmic sequences*. In Annales Mathematicae et Informaticae. 2007, vol.34, p.33-45

- TÓTH, J., MIŠÍK, L., FILIP, F. *On distribution functions of certain block sequences*. In Uniform Distribution Theory. 2nd edition. 2007, p.115-126

11 Department of Physics

- Biophysics (application of the optical spectroscopy in the analysis of structure and function of the biological systems in vivo, biophysics and ecophysiology of the photosynthesis of higher plants, the mechanisms of adaptation of assimilatory apparatus of economically and ecologically important plant species to the global climate changes).
- Theoretical Physics (non-equilibrium thermodynamics and stability, chemical physics of molecular clusters – computer modelling of structures and dynamics).
- Experimental physics (low temperature physics – transport properties of high temperature superconductors, electronics – field of temperature sensors and photodetectors).
- Theory of Education in Physics (Information and communication technology in physics teaching and learning, science teacher education, on-line learning in physics, multimedia programmes).

11.1 Staff

Head of the Department

Ladislav Sklenák, Assoc. Professor

Deputy Head of the Department

René Kalus, Assoc. Professor

Secretary to the Department

Jana Janošcová

Teaching staff

Professor

Erika Mechlová

Assoc. Professors

Ladislav Sklenák
René Kalus
Dalibor Dvořák
Jiří Kalina
Vladimír Špunda

Assistant Professors

Martin Čajánek
Daniel Hrivňák
Ivan Janeček
František Karlický
Libor Koníček

Researchers

Irena Kurasová, PhD.
 Martin Navrátil
 Jana Podolinská
 Michal Štroch, PhD.
 Aleš Vítek

Laboratory technicians

Běla Piskořová
 Zlata Skripová

PhD. students (staff)

František Karlický

Branch of study: Physical Chemistry
 Thesis: Numerical methods of solution of Schrödinger equation for bosonic systems
 Supervisor: Prof. A. Malijevský
 End: 2009 (Institute of Chemical Technology Prague)

Martin Navrátil

Branch of study: Biophysics
 Thesis: Spectral characteristics of solar radiation within plant canopies
 Supervisor: Prof. Jan Nauš
 End: 2007 (Faculty of Science UP Olomouc)

Aleš Vítek

Branch of study: Physical Chemistry
 Thesis: Monte Carlo simulations of complex microsystems
 Supervisor: Prof. Anatol Malijevský
 End: 2011 (Institute of Chemical Technology Prague)

Changes in 2007:

On 23.1. Irena Kurasová, PhD. starts maternity leave

11.2 PhD. students

Budzik Sylwia
 Caltík Samuel
 Dardová Irena
 Dragon Adam
 Fismol Tomáš
 Foltýnová Jana
 Jirkalová Pavlína

Kerlínová Věra
 Kocik Bogušlav
 Kočí Patrik
 Kubincová Libuše
 Knyclová Anna
 Maník Zdeněk
 Masná Michaela
 Mazurek Jiří
 Mazurová Veronika
 Novák Ivo
 Olšovský Pavel
 Půlkrábek Vít
 Smyček Petr
 Špetiková Perla
 Veselá Vlasta
 Zelená Soňa

11.3 Study programmes

Code of the study programme ⁴	Title of the study programme	Title of the study major ⁵	Length of the study ⁶			
			B	N,M	P	FS
B1501	Biology	Experimental Biology	3			P
B1701	Physics	Physics (two-branch study)	3			P
B1702	Applied Physics	Biophysics	3			P
B1702	Applied Physics	Measurement and Computer Presentation of Data	3			P
B1702	Applied Physics	Computer-based modelling in the physics	3			P
N1701	Physics	Teaching for Secondary Schools (two-branch study)		2		P
N1701	Physics	Teaching for Secondary Schools (one-branch study)		2		P
N1702	Applied Physics	Biophysics		2		P
N7503	Teaching for Primary Schools	Teaching for Primary Schools (two-branch study)		2		P
M7503	Teaching for Primary Schools	Teaching Physics for Primary Schools		4		P
M7504	Teaching for Secondary Schools	Teaching Physics for Secondary Schools		5		P
P7507	Specialisation - Pedagogy	Theory of Education in Physics ^{**)}			3	P,K

**) in co-operation with PdF UHK and PdF ZU in Plzen

⁴ B – bachelor study programme, N - master study programme representing a continuation of bachelor study programme, M - master study programme, P - doctoral study programme.

⁵ Study programmes marked with an asterisk can (usually) be studied only in a chosen study programme in pairs.

⁶ P – full time study, D – distance form of study, K – combined study form;

11.4 Theses

Bachelor theses

- BABICOVÁ, Monika: *Structural and functional characteristics of pigment-protein complexes: spatial distribution, thermostability and phase transitions*. Supervisor: Čajánek Martin
- DUCIUCOVÁ, Marie: *Verification of possible determination of xanthophyll cycle pigments from the extract for the enzyme Rubisco assay*. Supervisor: Kalina Jiří
- KUPKOVÁ, Veronika: *Anthocyanins in assimilation apparatus of higher plants*. Supervisor: Špunda Vladimír
- NEZVAL, Jakub: *The modification of analytical methods of photosynthetic pigments and other specific substances from assimilatory apparatus extracts*. Supervisor: Kalina Jiří
- ZELENÁ, Soňa: *UV-shielding of assimilatory apparatus in higher plants and methods of in vivo and in vitro assessment*. Supervisor: Štroch Michal

Master theses

- BOGOCZOVÁ, Veronika: *Usage of electrophoretic separation of pigment-proteins complexes for photosynthetic apparatus study of higher plants*. Supervisor: Kalina Jiří
- KARLICKÝ, Václav: *Interpretation of chlorophyll and fluorescence spectra improvement on the basis of pigment extracts and pigment-protein complexes analysis*. Supervisor: Čajánek Martin
- LABUDEK, Tomáš: *Experiments in science education at secondary schools*. Supervisor: Koniček Libor

11.5 Research projects

Research projects financed by the Faculty of Science (Internal projects)

Coordinator	Provider (agency)	Project title	Grant (ths. CZK)
V. Špunda	FPP	Start-up project of the research centre in biophysics and chemical physics	1 540

Research projects in 2007 (filed in CEP – Central evidence of projects)

Coordinator	Provider (agency)	Project title	Grant (ths.CZK)
J. Kalina	CEP_GAČR 522/06/0930	Changes in Rubisco amount and activity under the impact of elevated CO ₂ concentration	252
R. Kalus	CEP_GAAV IAA401870702	Structure and thermodynamics of molecular clusters - structural changes in water clusters	365
R. Kalus	CEP_MŠMT 1N04125	Centre of numerically demanding computations of the University of Ostrava	143
V. Špunda	CEP_GAČR 522/07/0759	Acclimation of the Norway spruce photosynthetic apparatus to changes of incident solar radiation	872
M. Štroch	CEP_GAČR 522/07/P246	Non-radiative dissipation of excitation energy in relation to organization of pigment-protein complexes in photosynthetic apparatus of higher plants	398

Development projects in 2007 (except of CEP – Central evidence of projects)

Coordinator	Provider (agency)	Project title	Grant (ths. CZK)
E. Mechlová	EU-Leonardo	SUPERCOMET2	13
E. Mechlová	EU-Leonardo	COMLAB2	183
I. Janeček	FRVŠ 1970/A/b	Laboratory for computer-based modelling in natural sciences	1 749 INV

Commercial contracts

Coordinator	Provider (agency)	Project title	Grant (ths. CZK)
V. Špunda	ISBE	Evaluation, verification and interpretation of the environmental loads of the Czech Republic	672

11.6 Equipment

- The laboratory of the heat and temperature measurement. (The Standard equipment).
- School experiments laboratory (equipment for school experiment in physics, PC – measuring system ISES, Internet).
- Computer room (11 PCs – Internet).
- Microcomputer based laboratory (10 workstations for computer aided experiments with systems: ISES, CMC-S3, IP-Coach, PC-Internet).
- Laboratory for biochemical methods (range hood, electrophoresis).
- Laboratories for biophysics (equipment for spectroscopic and analytical methods).
- Laboratory for microscopic techniques, culture room (microscopes, growing chambers).
- Laboratory of ecophysiology of photosynthesis.
- Centre for Numerically Demanding Calculations of the University of Ostrava (see <http://artemis.osu.cz/cnnv/index.html>).
- Laboratory of computer modelling in natural sciences - supported by ministry of education (server and 16 workstations with specialised software for modelling and computation on field of mathematics, physics and chemistry).
- Laboratory of Optics (lasers, standard school optical equipment, PC – internet).
- Electricity and Magnetism Laboratory (measuring instruments, IP-Coach systems).

11.7 Conferences and seminars

- 17. - 20. 9. 2007, ICTE – Information and Communication Technology in Education, 85 participants, international.

11.8 Contacts and cooperation**Cooperation with Universities and Research Institutes in the Czech Republic**

- Biological Faculty, University of Southern Bohemia, České Budějovice.
- Department of Experimental Physics, Faculty of Science, Palacky University Olomouc.
- Institute of Systems Biology and Ecology AS CR, Laboratory of Plant Ecological Physiology, Brno.

- Prague Institute of Chemical Technology, Department of Physical Chemistry.
- J. Heyrovský Institute of Physical Chemistry, Academy of Sciences of the Czech Republic (Department of Theoretical Chemistry).
- Institute of Physics of the Academy of Sciences of the Czech Republic, Prague.
- VŠB – Technical university of Ostrava.
- Charles University in Prague, Faculty of Mathematics and Physics.
- Charles University in Prague, Faculty of Science.

Cooperation with Universities and Research Institutes abroad

- Institutes of Plant Biology and Biophysics, Biological Research Centre, Hungarian Academy of Sciences, P.O. Box 521, H-6701 Szeged, Hungary (Dr. Gyöző Garab).
- Institute of Botany II (Plant Molecular Biology and Biochemistry), University of Karlsruhe, Kaiserstraße 12, D-76128 Karlsruhe, Germany (Dr. Claus Buschmann, Prof. H. Lichtenthaler).
- Centre for Geo-Information, Wageningen University, Droevendaalsesteeg 3/P.O. Box 47, 6700 AA Wageningen, The Netherlands (Dr. Zbyněk Malenovský).
- Université Paul Sabatier, Institut de Recherche sur les Systèmes Atomiques et Moléculaires Complexes, Toulouse, France (Laboratoire de Physique Quantique, Laboratoire Collisions Agrégats Réactivité).
- University of Ljubjana, (Slovenia).
- University of Udine, (Italy).
- Matej Bel University in Banska Bystrica, (Slovakia).

Visitors to the Institute

- Marian Glowacki from WSP, Czestochova, Poland, 25. - 27. 9. 2007.
- Ivo Čáp from University of Zilina, Žilina, Slovakia, 29. 8. 2007.

Visits of Staff Members

Conferences 2007

Name	Country	Place	Name of Conference	Date
Hrivňák, D.	Austria	Brand	Selected Clusters 2007	11. - 16. 3.
Kalina, J.	SR	Vys.Tatry	59 th Meeting of Chemical Societies	2. - 6. 9.
Koniček, L.	Croatia	Opatija	GIREP EPEC	25. 8. – 31. 8.
Koniček, L.	Poland	Wroclaw	MPTL 12	11. 9. – 15. 9.
Koniček, L.	Slovenia	Radovljica	ComLab 2007	28. 11. - 2. 12.
Mechlová, E.	Slovenia	Radovljica	ComLab 2007	28. 11. - 2. 12.
Navrátil, M.	UK	Glasgow	14th of Photosynthesis	22. - 27. 7.
Štroch, M.	UK	Glasgow	14th of Photosynthesis	22. - 27. 7.
Vítek, A.	Austria	Brand	Conference	11. – 16. 3.

Short stays abroad 2007 (less than 10 days)

Name	Dpt.	Country	Place	Action	Date
Kalus, R.	FY	Poland	Czestochowa	Common Mgr. programme	20. - 21. 11.
Karlický, F.	FY	Poland	Toruň	Work stay	2. - 6. 9.
Mechlová, E.	FY	Slovakia	Bratislava	Member of the Committee	5. 6.
Mechlová, E.	FY	Slovakia	B.Bystrica	Defence of PhD. theses	28. 6.

Long time stays abroad 2007(more than 10 days)

Name	Dpt.	Country	Place	Action	Date
Kalus, R.	FY	France	Toulouse	Research	9. - 24. 9.
Karlický, F.	FY	France	Toulouse	Research	10. 9. - 9.10.
Vítek, A.	FY	France	Toulouse	Research	10. 9. - 9. 10.

11.9 Student research activity

- Student scientific competition (section physics and chemistry), 10. 5. 2007, 12 students.
- Student scientific competition (chemistry and related fields of study), 6. 6. 2007, 6 students.

11.10 Membership in Professional Organisations

Assoc. Prof. Dalibor Dvořák:

- Presidium RVŠ – member,
- Advisory Committee of the Science and Technology Park Ostrava – member,
- National committee IUPAP – member.

Assoc. Prof. Jiří Kalina:

- Czech Society for Experimental Biology of Plants and Federation of European Societies of Plant Biology (FESPB - former FESPP) – member,
- Union of Czech Mathematicians and Physicists – member,
- Czech Chemical Society – member.

Assist prof. Libor Koniček:

- member of GIREP International Research Group on Physics Teaching,
- Physics Pedagogy Society – member of committee.

11.11 Publications

Monographic publication

- HRIVŇÁK, D., MASNÁ, M. *Waves, acoustics and optics. 1st issue*. Ostrava: Publishing centre CIT OU, 2007. 70 pp. ISBN 978-80-87113-03-5.

Articles in proceedings (proceedings of conferences or institutions)

- ŠPUNDA, V., NAVRÁTIL, M., ŠTROCH, M., ČAJÁNEK, M., KALINA, J., AČ, A., URBAN, O., MAREK, M. *Methods of optical spectrometry and further development of ecofyziology of photosynthesis*. In Conference on experimental biology of plants – 11th Days of Plants Physiology. 2007-07-09-2007-07-12 Olomouc, ČR. Olomouc: Czech Society for Experimental Biology of Plants, 2007. pp. 44-45. ISBN 1213-6670.
- NAVRÁTIL, M., AČ, A., ŠPUNDA, V. *Applicability of reflectant spectroscopy for determination of seasonal variability of the contents of pigments at plants in mountain meadow ecosystem*. In Conference on Experimental Biology of Plants – 11th Days of Plants Physiology. 2007-07-09-2007-07-12 Olomouc, ČR. Olomouc: Czech Society for Experimental Biology of Plants, 2007. pp. 120-120. ISBN 1213-6670.
- NAVRÁTIL, M., VAŠKOVÁ, M., AČ, A., ŠPUNDA, V. *Parameters of reflectance spectra of Norway spruce needles and their relation with photosynthetic pigment content*. In 14th International Congress of Photosynthesis. 2007-07-22-2007-07-27 Glasgow, UK. Dordrecht, NL: Springer, 2007. pp. 278-278. ISBN 0166-8595.
- ŠPUNDA, V., NAVRÁTIL, M., ŠTROCH, M., PODOLINSKÁ, J., MILITKÝ, J., ZELENÁ, S., NEZVAL, J., ČAJÁNEK, M., KALINA, J., CIMALOVÁ, Š., URBAN, O., MAREK, M. *Variability of the effectiveness of photo protective processes at selected species of mountain meadow ecosystem*. In Conference on Experimental Biology of Plants - 11th Days of Plants Physiology. 2007-07-09-2007-07-12 Olomouc, ČR. Olomouc: Czech Society for Experimental Biology of Plants, 2007. pp. 126-126. ISBN 1213-6670.
- KONÍČEK, L., MECHLOVÁ, E. *ICT in Physics - Sectional Topics and key competences*. In Modern Trends in Preparation of Teachers of Physics 3. 2007-04-26-2007-04-28 Germany. Germany: University of West Bohemia in Pilsen, 2007. pp. 55-61. ISBN 978-80-7043-603-5.
- PODOLINSKÁ, J., ŠTROCH, M., VRÁBL, D., KALINA, J., ŠPUNDA, V. *Daily Course of Photosynthetic Characteristics During Acclimatization on an Increased Exposure and Temperature at Spruce Picea abies*. In Conference on Experimental Biology of Plants - 11th Days of Plants Physiology. 2007-07-09-2007-07-12 Olomouc, ČR. Olomouc: Czech Society for Experimental Biology of Plants, 2007. pp. 122-123. ISBN 1213-6670.
- DVOŘÁK, D., DARDOVÁ, I., HOLOUŠKOVÁ, I. *The laboratory - interactive DVD*. In Information and Communication Technology in Education 2007. 2007-09-17-2007-09-20 Rožnov pod Radhoštěm. Ostrava: University of Ostrava, Faculty of Science, 2007.
- KALINA, J., DUCIUCOVÁ, M., BUKOVSKÁ, R., URBAN, O. *Use of the homogenate for determination of Rubisco enzyme activity for further analyses*. In 59th Conference of Chemists. 2007-09-02-2007-09-06 Tatranské Matliare, SK. Bratislava, Slovakia: Slovak Chemical Society, 2007. pp. 164-164. ISBN 1336-7242.
- KOŠVANCOVÁ, M., NAVRÁTIL, M., URBAN, O. *Induction of Photosynthesis of European Beech and Picea abies under the Influence of Different Spectral Composition of Radiation*. In Conference on Experimental Biology of Plants - 11th Days of Plants Physiology. 2007-07-09-2007-07-12 Olomouc, ČR. Olomouc: Czech Society for Experimental Biology of Plants, 2007. pp. 94-95. ISBN 1213-6670.
- ŠTROCH, M., PODOLINSKÁ, J., VRÁBL, D., KALINA, J., ŠPUNDA, V. *Acclimation of Norway Spruce Pphotosynthetic Apparatus to Combined Exposure to Higher Irradiance and Temperature*. In 14th International Congress of Photosynthesis. 2007-07-22-2007-07-27 Glasgow, UK. Dordrecht, NL: Springer, 2007. pp. 314-314. ISBN 0166-8595.

- MECHLOVÁ, E. *Informatics in Economy in a Distant Form of Education at Secondary Schools - Sustainability of the Project. In Evaluation of the Course and Verifying of Study Supports and Complete Outcomes of the Project.* 2007-10-02-2007-10-02 Orlová. Orlová: Business Academy Orlová, 2007.
- DVOŘÁK, D., KUBINCOVÁ, L. *Utilization of IP-Coach System for the Learning of Thermodynamics non-equilibrium Processes in the Primary School.* In Information and Communication Technology in Education 2007. 2007-09-17-2007-09-20 Rožnov pod Radhoštěm. Ostrava: University of Ostrava, Faculty of Science, 2007.
- MECHLOVÁ, E., ŠROMKOVÁ, M. *Informatics in Economy in a Distant Form of Education at Secondary Schools.* In ČADUV, Conditions for Accreditation of E-learning programmes. 15. 4. 2007 - 16. 4. 2007 Poděbrady. Poděbrady: Czech Association of Distant University education, 2007. pp. 24-28. ISBN 978-80-86710-11-2.
- KALINA, J., BUKOVSKÁ, R., DUCIUCOVÁ, M., URBAN, O., KOŠVANCOVÁ, M. *Photosynthetic characteristics of Norway spruce cultivated in atmospheric and elevated CO₂ concentration during a day.* In Conference on Experimental Biology of Plants - 11th Days of Plants Physiology. 2007-07-09-2007-07-12 Olomouc, ČR. Olomouc: Czech Society for Experimental Biology of Plants, 2007. pp. 112-112. ISBN 1213-6670.

Articles in periodical publications (newspapers, magazines)

- KARLICKÝ, F., LEPETIT, B., KALUS, R., GADÉA, F. *Calculation of argon trimer rovibrational spectrum.* In The Journal of Chemical Physics. 17th issue. 2007, vol.126, pp.174305-174305, ISSN 0021-9606.
- PAIDAROVÁ, I., POLÁK, R., PAULÍKOVÁ, B., KARLICKÝ, F., OLEKSY, K., HRIVŇÁK, D., GADÉA, F., KALUS, R. *Modeling of HeN⁺ clusters I. Ab initio and analytical potential energy surfaces for the ground state and two lowest excited states of He₃⁺.* In Chemical Physics. 2007, vol.342, pp.64-70, ISSN 0301-0104.
- KOŠVANCOVÁ, M., KALINA, J., HRSTKA, M., URBAN, O. *The change of Activity and Amount of Rubisco enzyme in young plants of European beech under the Influence of Increased CO₂ Concentration.* In Beskydy. 2007, vol.20, pp.221-226, ISSN 978-80-7375-069-5.
- MALIJEVSKÝ, A., KARLICKÝ, F., KALUS, R., MALIJEVSKÝ, A. *Third Virial Coefficients of Argon from First Principles.* In The Journal of Physical Chemistry C. 43 (Special Issue: Keith E. Gubbins Festschrift). issue 2007, vol.111, pp.15565-15568, ISSN 1932-7447.
- NAVRÁTIL, M., ŠPUNDA, V., MARKOVÁ, I., JANOUŠ, D. *Spectral composition of photosynthetically active radiation penetrating into a Norway spruce canopy: the opposite dynamics of the blue/red spectral ratio during clear and overcast days.* In Trees - Structure and Function. 2007, vol.21, vol.3, pp.311-320, ISSN 0931-1890.
- URBAN, O., AČ, A., KALINA, J., PRIWITZER, T., ŠPRTOVÁ, M., ŠPUNDA, V., MAREK, M. *Temperature dependencies of carbon assimilation processes in four dominant species from mountain grassland ecosystem.* In Photosynthetica. 2007, vol.45, no.3, pp.392-399, ISSN 0300-3604.
- URBAN, O., JANOUŠ, D., ACOSTA, M., CZERNÝ, R., MARKOVÁ, I., NAVRÁTIL, M., PAVELKA, M., POKORNÝ, R., ŠPRTOVÁ, M., ZHANG, R., ŠPUNDA, V., GRACE, J., MAREK, M. *Ecophysiological controls over the net ecosystem exchange of mountain spruce stand. Comparison of the response in direct vs. diffuse solar radiation.* In Global Change Biology. 2007, vol.13, vol.1, pp.157-168, ISSN 1354-1013.

- LICHTENTHALER, H., AČ, A., MAREK, M., KALINA, J., URBAN, O. *Differences in pigment composition, photosynthetic rates and chlorophyll fluorescence images of sun and shade leaves of four tree species*. In *Plant Physiology and Biochemistry*. 2007, vol.45, vol.8, pp.577-588, ISSN 0981-9428.
- ŠTROCH, M., KULDOVÁ, K., KALINA, J., ŠPUNDA, V. *Dynamics of the xanthophyll cycle and non-radiative dissipation of absorbed light energy during exposure of Norway spruce to high irradiance*. In *Journal of Plant Physiology*. 2007.

12 Department of Informatics and Computers

- Mathematical methods for elaboration of information subjected to indeterminacy.
- Fuzzy modelling of complicated processes.
- Adaptive personalized WebSystems.
- Evolutionary algorithms with competitive and cooperative heuristics.
- Computer simulation of anticipating systems.

12.1 Staff

Head of the Department

Cyril Klimeš, Assoc. Prof.

Deputy Head of the Department

Eva Burianová, PhD.

Secretary to the Department

Simona Polochová
Gabriela Burianová

Teaching staff

Professors

Ivan Křivý
Alena Lukasová

Associate Professors

František Huňka
Cyril Klimeš
Petr Šaloun
Josef Tvrdlík

Assistant Professors

David Bražina
Eva Burianová
Rostislav Fojtík
Hashim Habiballa
Alexej Kolcun
Miroslav Liška
Jaroslav Procházka
Vladimíra Sehnalová
Tomáš Sochor
Petr Šamánek
Zdeňka Telnarová

Eliška Treterová
 Marek Vajgl
 Eva Volná
 Petr Wagner

Technical Staff

Michal Kusýn

External Teachers

Jiří Ivánek, Assoc. Prof.
 Radim Jiroušek, Professor
 Petr Kucharčík
 Petr Lukasík
 Ivo Martiník, PhD.
 Viktor Pavliska
 Miroslav Pokorný, Professor
 Pavel Smolka
 Vladimír Vaněk

Changes carried out during the course of 2007:

- On 1. 1. Gabriela Burianová became a full-time employee.
- On 1. 3. Vladimíra Sehnalová became a full-time teacher.
- On 1. 3. Marek Vajgl became a full-time teacher.
- On 16. 4. professor Alena Lukasová was awarded the title Professor in Information Science.
- On 28. 8. Hashim Habiballa, PhD. was awarded the title PhD. in the Information Systems.
- On 28. 8. Jaroslav Procházka, Ph.D. was awarded the title PhD. in the Information Systems.
- On 1. 9. Petr Šamánek became a full-time teacher.
- On 1. 9. Petr Wagner became a full-time teacher.

12.2 PhD. Students

Bosák Rostislav
 Dvořáková Eva
 Hanzelka David
 Kahánek Petr
 Knybel Jaroslav
 Lukasík Petr
 Makula Tomáš
 Miarka Rostislav
 Smolka Pavel
 Svoboda Jiří
 Šamánek Petr
 Švec Peter
 Vajgl Marek
 Vaněk Vladimír

12.3 Study programmes

Code of the study programme ⁷⁾	Title of the study programme	Title of the study major ⁸⁾	Length of the study ⁹⁾			
			B	N,M	P	FS
B 1801	Information Science	Information Science	3			P
B1801	Information Science	Information Science (two-branch)	3			P,K
B1802	Applied Information Science	Applied Information Science	3			K,D
B1802	Applied Information Science	Information Science and Computer technology – Applied Information Science	3			P,K
N 1801	Information Science	Information systems		2		P,K
N 1801	Information Science	Information systems		3		P,K
N 1801	Information Science	Mathematical Information Science		2,3		P
N 1801	Information Science	Teaching for Secondary Schools - Information Sciences (combination of two subjects)		2		P
N 1801	Information Science	Teaching for Secondary Schools - Information Sciences (studied in one subject)		2		P
N 7503	Teaching for Primary Schools	Teaching for Primary Schools –Computer Technology (studied in a combination of two subjects)		2		P
N 7503	Teaching for Primary Schools	Teaching for Primary Schools –Computer Technology (studied in one subject)		2		P
M 1801	Information Science	Information Science and Computer Technology - Information Systems		5		P
M 1801	Information Science	Teaching for Secondary Schools - Information Sciences		5		P
M 7503	Teaching for Primary Schools	Teaching for Primary Schools –Computer Technology		4		P
M 7504	Teaching for Secondary Schools	Teaching for Secondary Schools - Information Science		5		P
P 1801	Information Science	Information systems			3	P,K

12.4 Theses

Bachelor Theses

- CHOCHOLATÝ, Jaromír: *Exercises for Logic Designed to Students of Informatics*. Supervisor: Lukášová Alena
- DŘIZGA, Zdeněk: *Audit of Information System*. Supervisor: Klimeš Cyril
- ENDL, Martin: *Complex management and service of large projects*. Supervisor: Huňka František
- FAKSA, Michal: *Comparison of render algorithms*. Supervisor: Bražina David
- FIALA, Jan: *A source code to HTML convertor*. Supervisor: Fojtík Rostislav

⁷⁾ B – bachelor study programme, N - master study programme representing a continuation of bachelor study programme, M - master study programme, P - doctoral study programme.

⁸⁾ Study programmes marked with an asterisk can (usually) be studied only in a chosen study programme in pairs.

⁹⁾ P – full time study, D – distance form of study, K – combined study form;

-
- FILIP, Miroslav: *Bild-up computer networks based on open source*. Supervisor: Kusýn Michal
 - FOJTÍK, Robert: *Implementation of CRS Algorithm in R Environment*. Supervisor: Tvrdík Josef
 - GAMROT, Daniel: *Outliners Comparison*. Supervisor: Fojtík Rostislav
 - HOLUB, Lubomír: *Eclipse SDK and graphic user-interface library SWT*. Supervisor: Huňka František
 - KAŇOK, Radek: *Recognition objects on base intelligent information technology*. Supervisor: Volná Eva
 - KLHŮFEK, Stanislav: *Information System for Registering of Parcel and Blocks of Farmland for Farmers Needs*. Supervisor: Telnarová Zdeňka
 - KLVAŇOVÁ, Lenka: *Design and creation of samples and tests set for eLearning education of the course Basic Encoding Cryptography*. Supervisor: Klimeš Cyril
 - KOČVARA, Petr: *Greylisting application to the filtering of electronic mail*. Supervisor: Sochor Tomáš
 - KOPECKÝ, Petr: *Graphics card programming*. Supervisor: Kolcun Alexej
 - KOŽELA, Lukáš: *Inner Classes and Their Possibilities in JAVA Language*. Supervisor: Huňka František
 - KRÁČMAR, Pavel: *Comparison Oracle form and MS Access like client environment for server Oracle 9*. Supervisor: Smolka Pavel
 - KRAINA, David: *Central monitoring system*. Supervisor: Klimeš Cyril
 - KUCHAR, Jiří: *Proposal and creation the collection of examples and tests for e-learning education for introduction to operating systems*. Supervisor: Klimeš Cyril
 - MACHOCZEK, Michal: *GPS navigation*. Supervisor: Fojtík Rostislav
 - MALÍK, Martin: *Linux security*. Supervisor: Knybel Jaroslav
 - MALÍŠOVÁ, Lenka: *Unit testing - method of java code testing*. Supervisor: Huňka František
 - MALYSZ, Marek: *System for accepting and checking tasks from programming projects*. Supervisor: Šaloun Petr
 - MELIŠ, Zdeněk: *Using the UML and OOP in chess program creation*. Supervisor: Vaněk Vladimír
 - MOJDL, Marek: *Visual solutions of examples in computer science – structured and object oriented programming*. Supervisor: Habiballa Hashim
 - MORAVEC, Richard: *Noncommercial software in applications for Windows*. Supervisor: Klimeš Cyril
 - NEVEĐALOVÁ, Katarína: *Suggestion and creation the file example and test for eLearning teaching Petri*. Supervisor: Klimeš Cyril
 - OGUREK, Jiří: *Employee agenda electronic planner*. Supervisor: Telnarová Zdeňka
 - OHLÍDAL, Jaroslav: *Creating web pages for blind and weak-eyed users*. Supervisor: Telnarová Zdeňka
 - PAVLORKOVÁ, Kateřina: *Efectivity of resolution strategies in system FPLGERDS on knowledge bases*. Supervisor: Habiballa Hashim
 - PETRUŠKA, Jan: *Content management system for server vlaksim.cz*. Supervisor: Klimeš Cyril
 - PIPEK, Roman: *DNA computing*. Supervisor: Volná Eva
 - SKUPNÍKOVÁ, Petra: *On-line question-forms, inquiries, tests and quizzes*. Supervisor: Telnarová Zdeňka
 - SOLDÁN, Michal: *Deterministic chaos and its applications*. Supervisor: Volná Eva

- STANČÍK, Bedřich: *Progression, technology and LCD utilization*. Supervisor: Fojtík Rostislav
- STUCHLIK, Petr: *Open source application for video-conference*. Supervisor: Dvořáková Eva
- ŠAMONIL, Karel: *Facilities for mobile internet connection*. Supervisor: Fojtík Rostislav
- ŠEVČÍK, Jaroslav: *Design and implementation of web-based information system for library*. Supervisor: Miarka Rostislav
- ŠUŠKA, Pavel: *Communications tools for mobile devices*. Supervisor: Fojtík Rostislav
- TESAŘ, Daniel: *Design and implementation of time and attendance IS*. Supervisor: Dvořáková Eva
- TURČINEK, Viktor: *Skype mobile communication solution*. Supervisor: Bražina David
- VALČUHA, Josef: *Design patterns Adapter and State - learning text processing with illustrations*. Supervisor: Huňka František
- VAŠEK, Petr: *Information system for use in accommodation*. Supervisor: Dvořáková Eva
- VAŠINA, Jiří: *Antivirus protection for school*. Supervisor: Klimeš Cyril
- VENGLOŘ, Michal: *Information system for goods purchase and sale support*. Supervisor: Telnarová Zdeňka
- WALEK, Bogdan: *Usage of XML on World Wide Web*. Supervisor: Klimeš Cyril
- ZAPLETAL, Vladislav: *Project and creating the collection of examples and tests for eLearning education theme principles operating systems*. Supervisor: Klimeš Cyril
- ŽÁČEK, Jaroslav: *Migration and integration of existing application to the Enterprise Information Portal*. Supervisor: Vaněk Vladimír

Master Theses

- BOCEK, Jan: *Effective visualisation of Bézier surfaces*. Supervisor: Kolcun Alexej
- BRANDYSOVÁ, Eva: *Development of project for IT Helpdesk for local government*. Supervisor: Procházka Jaroslav
- CACHNÍN, Michal: *Temporal databases and their implementation*. Supervisor: Huňka František
- DUCIUC, Marek: *Demonstration project of analyse, design and implementation of information system*. Supervisor: Klimeš Cyril
- DUDA, Petr: *Advanced rendering methods*. Supervisor: Bražina David
- ERNEKR, Michal: *Firewalls and their application in computer networks*. Supervisor: Sochor Tomáš
- FIBICH, Jakub: *Consolidation of services of TCP/IP based local networks into unified network environment*. Supervisor: Sochor Tomáš
- JANOŠEK, Michal: *Artificial Life Simulation*. Supervisor: Volná Eva
- JUROŠKO, Pavel: *Application of agile methodics in small and middle organizations*. Supervisor: Procházka Jaroslav
- KLOZÍK, Aleš: *Spatial database as a tool for GIS creation*. Supervisor: Telnarová Zdeňka
- KLUSKA, Vladimír: *Creation of the Java library for discrete event simulation*. Supervisor: Křivý Ivan
- LEKEŠ, Tomáš: *Modern cryptographic algorithms and their use to store data*. Supervisor: Klimeš Cyril
- LOPRAIS, Radomír: *Design and implementation of information system for service station management using postrelational database Caché*. Supervisor: Huňka František

- MAKULA, Tomáš: *Development of project for managing network infrastructure of statutory city of Ostrava*. Supervisor: Procházka Jaroslav
- MALCOVÁ, Pavlína: *Comparison of the labour market in the Czech Republic and chosen countries from EU*. Supervisor: Liška Miroslav
- MOŠKOŘ, Pavel: *Testing of program units and systems. Integrating and unit testing*. Supervisor: Vaněk Vladimír
- NAVRÁTIL, Michal: *Tracking and Analysing Operation Services On Web Server*. Supervisor: Sochor Tomáš
- NEBEL, Mojmír: *Web photo gallery with online image editing feature*. Supervisor: Klimeš Cyril
- PLANKA, Ondřej: *New methods for backing up servers in the university network*. Supervisor: Lokajová Pavla
- PRAVDA, Daniel: *Isosurface Extraction from Volumetric Data*. Supervisor: Kolcun Alexej
- PRYMUS, Roman: *Creation of content management system with specialization of the usability testing*. Supervisor: Procházka Jaroslav
- PULKRÁBEK, Roman: *Mobile devices in electronic education*. Supervisor: Fojtík Rostislav
- ROMÁNEK, Pavel: *Application of network monitoring on workstations*. Supervisor: Sochor Tomáš
- SMRŽ, Jakub: *Development of portal applications for mobile phones and PDA*. Supervisor: Šimonek Jiří
- STUDNIČKA, Karel: *Projecting type designed online store*. Supervisor: Procházka Jaroslav
- SUMEC, Stanislav: *Possibilities of photorealistic image synthesis*. Supervisor: Bražina David
- VALA, Jan: *Optimization of reserves in the construction company*. Supervisor: Liška Miroslav
- VAŘEKOVÁ, Lenka: *Difference equations and their application in economy*. Supervisor: Křivý Ivan
- VERNER, Jan: *Monitoring and evaluation of network services*. Supervisor: Sochor Tomáš
- VLACH, Lukáš: *Electronic exercise book for education at elementary school*. Supervisor: Burianová Eva

Doctoral thesis

- PROCHÁZKA, Jaroslav: *Design of Business Process Modelling and Automation Tool*. Supervisor: Klimeš Cyril
- HABIBALLA, Hashim: *Non-clausal Resolution based Formal Logical Systems*. Supervisor: Křivý Ivan

12.5 Research projects

Research projects financed by the Faculty of Science (Internal projects)

Coordinator	Provider (agency)	Project title	Grant (ths. CZK)
P. Šaloun	FPP	Information systems and technologies of semantic web	625

Research projects in 2007 (filed in CEP – Central evidence of projects)

Coordinator	Provider (agency)	Project title	Grant (ths. CZK)
J. Tvrđík	CEP_GAČR 201/05/0284	Evolutionary algorithms with competing and cooperating heuristics	325
I. Křivý	CEP_GAČR 201/06/0612	Computer simulation of anticipatory systems	265

Development projects in 2007 (except of CEP – Central evidence of projects)

Coordinator	Provider (agency)	Project title	Grant (ths. CZK)
E. Volná	EU-Grundtvig	Teaching and learning in distance/flexible education	98
Z. Telnarová	EU-Comenius	SEDEC – Science Education for the Development of European Citizenship	96
Z. Telnarová	EU-Grundtvig	Knowledge transfer on education in later life	263
E. Volná	EU-Grundtvig	Gender, Innovation and Mentoring in Mathematics and Science	140
E. Burianová	EU-ESF	Design and realization of the system of further education of teachers in the Moravian-Silesian Region	1 420
C. Klimeš	EU-ESF	System and realization of further education of research workers in the Moravian-Silesian Region	2 000

12.6 Equipment

Auditorium – Multimedia presentations

- 1x PC PIII 1GHz, 512 MB RAM, 17' CRT.
- Projector, projecting screen, audio system.

Computer classroom

- 23x PC P4 3.2GHz, 1GB RAM, 19' LCD,
- Projecting screen, colour printer.

Computer classroom

- 16x PC AMD 1.8GHz, 1GB RAM, 17' LCD,
- Projecting screen.

Computer classroom

- 17x PC P4 2.84GHz, 512 MB RAM, 17" CRT.

Computer classroom specialized to computer networks

- 14x PC AMD 1.8GHz, 1GB RAM, 17" LCD, 802.11b/g card, card 100BaseFX.
- Interactive Projecting screen StarBoard.
- Set of Cisco :
 - o 2x rack.
 - o 6x switch, 5x router, 2x IP telephone, 2x PIX Firewall.
 - o 1x WLAN packet (WLAN controller, AP).
- 1x Asterisk server with 4x BRI.
- 2x Server IBM xSeries346.
- Boson router simulator for CCNA, CCNP

Computer classroom specialized to computer graphics

- 17x PC P4 2.4GHz, 1GB RAM, 17" CRT.
- Projecting screen.

Computer classroom, Lifelong centre

- 15x PC 2.4GHz, 512MB RAM, 17" CRT.
- Projector, projecting screen, printer, audio.

Servers:

- 1x IBM xSeries 220, Windows 2003.
- 1x IBM xSeries 206, Windows 2003.
- 1x OasaComputer, Debian Linux.

Other equipment:

- 5x portable projector.
- 1x notebook for projector.
- Sonic Foundry MediaSite.
- Canon XM2 camera with camera stand Vinten.
- Wireless microphone AKG.

12.7 Conferences and seminars

- Software development 2007, 34th National Conference with International Participation (in cooperation with VSB-Technical University Ostrava, Masaryk's University Brno and Czech Society for System Integration).
- Science, Research and Development and their Trends 2007, 2nd National Conference with International Participation.
- Lifelong Education of Teachers 2007, 1st National Conference with International Participation.
- Technologies for E-education, 6th seminary in cooperation with ČVUT FEL Prague, STU FIIT Bratislava and OU Faculty of Science, Ostrava.

12.8 Contacts and cooperation

Cooperation with Universities and Research Institutes in the Czech Republic

- Charles University in Prague, Faculty of Mathematics and Physics.
- VŠB – Technical University of Ostrava, Faculty of Economics.
- VŠB – Technical University of Ostrava, Faculty of Electrical Engineering and Computer Science.
- Private Business School in Ostrava.
- Czech Technical University in Prague, Faculty of Electrical Engineering.
- Brno University of Technology, Faculty of Information Technology.
- Silesian University in Opava, Faculty of Philosophy and Science.
- University of Economics, Prague Faculty of Informatics and Statistics.

Cooperation with Universities and Research Institutes abroad

- Universidad de Cordoba (Spain).
- University of Zilina (Slovakia).
- Constantine the Philosopher University in Nitra (Slovakia).
- Technical University of Kosice, Faculty of Electrical Engineering and Informatics (Slovakia).
- Matej Bel University in Banska Bystrica, Faculty of Science (Slovakia).

Visits of Staff Members

Conferences 2007

Name	Dpt.	State	Place	Name of Conference	Date
Burianová,E.	IP	Slovakia	Nitra	Conference DIVAI	15. – 18. 5.
Burianová,E.	IP	France	Grenoble	EUNIS	24. - 30. 6.
Fojtík, R.	IP	Turkey	Istanbul	Conference	26. - 30. 8 .
Habiballa,H.	IP	Slovakia	Nitra	Mathematical Conference	6. - 7. 9.
Huňka,F.	IP	Belgium	Liege	CASSYS'07	6. - 11. 8.
Kindler, E.	IP	Belgium	Liege	CASSYS'07	4. - 12. 8.
Kindler, E.	IP	Slovenia	Ljublaň	EUROSIM	9. – 13. 9.
Kindler, E.	IP	Malta	St. Julian's	ESM'2007	21. - 25.10.
Klimeš,C.	IP	Slovakia	Nitra	Conference DIVAI	15. – 18.5.
Klimeš,C.	IP	France	Grenoble	EUNIS	24. - 30.6.
Klimeš, C.	IP	Slovakia	Dudince	ISKI	13. - 18.9.
Křivý, I.	IP	Slovakia	Bratislava	APLIMAT 2007	6. - 9. 2.
Křivý, I.	IP	Bulgaria	Rousse	CompSys Tech 07	14. - 15. 6.
Křivý,I.	IP	Belgium	Liege	CASSYS'07	6. - 11. 8.
Křivý,I.	IP	Malta	St. Julian's	ESM'2007	21. - 25. 10.
Procházka, J.	IP	USA	Florida	EISWT2007	7. - 12. 7.
Šaloun,P.	IP	Slovakia	Nitra	DIVAI	16. - 17. 5.
Šaloun,P.	IP	Italy	Como	ICWE	14. - 21. 7.
Šaloun,P.	IP	Slovakia	St. Lesná	ICETA	5. - 8. 9.
Šaloun,P.	IP	UK	Manchester	Hypertext 07	9. - 14. 9.

Šaloun, P.	IP	UK	London	SMAP07	15. - 18. 12.
Tvrđík, J.	IP	Slovakia	Bratislava	Aplimat 2007	6. - 9. 2.
Tvrđík, J.	IP	Poland	Wisla	AAIA 2006	14. - 17. 10.
Volná, E.	IP	France	Angers	ICINCO 2007	9. - 12. 5.
Volná, E.	IP	Portugal	Porto	ICANN 07	8. - 14. 9.

Short stays abroad 2007 (less than 10 days)

Name	Dpt.	State	Place	Name of Conference	Date
Habiballa, H.	IP	Slovakia	Nitra	Lecturer in residence	1. - 2. 3.
Habiballa, H.	IP	Slovakia	Nitra	Lecturer in residence	29. - 30. 3.
Habiballa, H.	IP	Slovakia	Nitra	Lecturer in residence	26. - 27. 4.
Habiballa, H.	IP	Slovakia	Nitra	Lecturer in residence	11. - 12. 10.
Habiballa, H.	IP	Slovakia	Nitra	Lecturer in residence	15. - 16. 11.
Habiballa, H.	IP	Slovakia	Nitra	Lecturer in residence	6. - 7. 12.
Klimeš, C.	IP	Slovakia	Nitra	Lecturer in residence	9. - 12. 1.
Klimeš, C.	IP	Slovakia	Nitra	Lecturer in residence	14. - 16. 2.
Klimeš, C.	IP	Slovakia	Nitra	Lecturer in residence	14. - 16. 3.
Klimeš, C.	IP	Slovakia	Nitra	Lecturer in residence	11. - 13. 4.
Klimeš, C.	IP	Slovakia	Nitra	Lecturer in residence	6. - 8. 6.
Klimeš, C.	IP	Slovakia	Nitra	Lecturer in residence	9. - 10. 7.
Klimeš, C.	IP	Slovakia	Nitra	Lecturer in residence	3. - 5. 10.
Klimeš, C.	IP	Slovakia	Nitra	Lecturer in residence	7. - 9. 11.
Klimeš, C.	IP	Slovakia	Nitra	Lecturer in residence	28. - 29. 11.
Klimeš, C.	IP	Slovakia	Nitra	Lecturer in residence	18. - 21. 12.
Křivý, I.	IP	Slovakia	Žilina	Opponent	14. 5.
Šaloun, P.	IP	Slovakia	Bratislava	Committee member	17. - 18. 1.
Šaloun, P.	IP	Slovakia	Košice	Committee member	28. - 30. 5.
Šaloun, P.	IP	Slovakia	Nitra	Negotiations at UKF	7. - 8. 6.
Telnarová, Z.	IP	Austria	Graz	Gruntvig	21. - 23. 11.
Volná, E.	IP	Ireland	Limerick	Comenius	15. - 18. 2.
Volná, E.	IP	Sweden	Kristiansland	Gruntvig 2	21. - 27. 4.
Volná, E.	IP	Danmark	Jelling	Gruntvig 2	4. - 6. 10.

12.9 Membership in Professional Organisations

Assoc. Prof. Petr Šaloun:

- ACM (Association For Computing and Machinery),
- Program Committee of international conference ISIM, workshops – WFM, TPEV,
- Coorganizer of Czech ACM Collegiate Programming Contest and ACM Student Research Competition.

Assoc. Prof. Josef Tvrđík:

- International Association for Statistical Computing,
- Czech Statistical Society,
- Czech Mathematical Society.

Assoc. Prof. František Huňka:

- Association of Simula Users – executive committee.

Prof. Ivan Křivý:

- AMS - American Mathematical Society – member,
- International Association for Statistical Computing – member,
- Board of Advisors of American Biographical Institute – member,
- Association of Simula Users – executive committee.

12.10 Publications

Monographic publications

- KLIMEŠ, C., SKALKA, J. *Informatics*. 1st edition Nitra: Enigma, 2007. 464 pp. Enigma. ISBN 80-89132-49-2.
- KLIMEŠ, C. *Principles of building computers and operating systems*. 1st edition Ostrava: KOVOSIL, 2007. 197 pp. Informatics. ISBN 978-80-903694-1-2.

Parts of monographic publications, articles

- KINDLER, E. *Simulation of Container Yards Operation*. In INFOTRANS 2007. 1st edition Pardubice: Univerzita Pardubice, Dopravní fakulta Jana Pernera, 2007. ISBN 978-80-7194-989-3. p. 9-14.
- KINDLER, E. *Super-Object-Oriented Programming and Model Nesting*. In EUROSIM 2007 Congress - Full papers on CD. 1st edition Vienna: ARGESIM, 2007. ISBN 978-3-901608-32-2.
- KINDLER, E. *Super-Object-Oriented Programming and Model Nesting*. In EUROSIM 2007. Vol. 1: Book of Abstracts. 1st. edition Vienna: ARGE, 2007. ISBN 978-3-901608-32-2. p. 9-9.

Articles in proceedings (proceedings of conferences or institutions)

- BURIANOVÁ, E. *Module System for Further Education of Teachers in Moravian-Silesian Region*. In Modulový systém celoživotního vzdělávání učitelů v Moravskoslezském kraji. Ostrava: University of Ostrava, Ostrava, 2007. p. 7-21. ISBN 978-80-7368-8.
- BURIANOVÁ, E. *Realization of lifelong teachers' education – preparation and realization of module system for Further Education of Teachers in Moravian-Silesian Region*. In Celoživotní vzdělávání učitelů. 2007-03-29-2007-03-30 Malenovice. Ostrava: University of Ostrava, Ostrava, 2007. p. 7-21. ISBN 978-80-7368-295-8.
- HABIBALLA, H., FOJTÍK, R., VOLNÁ, E., TELNAROVÁ, Z. *Integration of handicapped students into University of Ostrava*. In ISKI. 2007-09-13-2007-09-15 Pocuvadlo. Nitra, SK: KI FPV UKF Nitra, 2007. p. 50-57. ISBN 978-80-8094-167-3.
- FOJTÍK, R., HABIBALLA, H. *New trends in education of informatics at secondary school*. In ICTE 2007. 2007-09-17-2007-09-20 Rožnov pod Radhoštěm. Ostrava: University of Ostrava, Ostrava, 2007. p. 239-243. ISBN 978-80-7368-388-7.
- KLIMEŠ, C. *Application of Computer Simulation in Information System*. In 8th International Conference on Computing Anticipatory Systems. 2007-08-06-2007-08-11 Liege. Liege: CHAOS asbl, 2007. p. 49-49. ISBN 2-930396-06-7.
- KLIMEŠ, C. *Why scientific school and how to get there?* In ISKI 2007. 2007-09-13-2007-09-15 Počuvadlo. Nitra: Univerzita Konstantina Filozofa v Nitre, 2007. p. 81-88. ISBN 978-80-8094-167-3.

- KLIMEŠ, C. *Inter-processor Communication and Synchronization Using Petri Networks*. In ISKI 2007. 2007-09-13-2007-09-15 Počúvadlo. Nitra : Univerzita Konstantina Filozofa v Nitre , 2007. p. 2-13. ISBN 978-80-8094-167-3.
- SEHNALOVÁ, V. *Evaluation of Courses from the Lecturer Point of View*. In Modulový systém celoživotního vzdělávání učitelů v Moravskoslezském kraji. Ostrava: University of Ostrava, Ostrava, 2007. p. 54-63. ISBN 978-80-7368-394-8.
- TELNAROVÁ, Z., KRHUTOVÁ, L., ZEZULKOVÁ, E. *Integration of handicapped students into University of Ostrava*. In Slunečnice. 2007-11-01-2007-11-02 Čeladná. Ostrava: VŠB - TU Ostrava, 2007. p. 133-138. ISBN 978-80-248-1637-1.
- KINDLER, E. *SIMULA and 40 Years of Object-Oriented Programming*. In ESM-2007 - The 2007 European Simulation and Modelling Conference Modelling and Simulation? 2007. 2007-10-22-2007-10-24 St. JULiens, Malta. Gent: EUROSIS-ETI, 2007. p. 20-23. ISBN 978-90-77381-36-6.
- KINDLER, E., KŘIVÝ, I. *A New SIMULA Class for Simulation*. In ASIS 2007? Advanced Simulation of Systems. 2007-09-17-2007-09-20 Svatý Hostýn. Ostrava: MARQ, 2007. p. 7-12. ISBN 978-80-86840-34-5.
- KŘIVÝ, I., KINDLER, E. *New Flexible Simulation Tool in SIMULA*. In The European Simulation and Modelling Conference 2007. 2007-10-22-2007-10-24 St. Julians. St. Juliens: EUROSIS-ETI, 2007. p. 124-128. ISBN 978-90-77381-36-6.
- FOJTÍK, R. *Object oriented programming in education at secondary school*. In Objekty 2007. 2007-11-08-2007-11-09 Ostrava. Ostrava: VŠB-TU Ostrava, 2007. p. 180-184. ISBN 978-80-248-1635-7.
- PROCHÁZKA, J. *Abstract Components for Process Modelling using Information Systems*. In Abstracts of Contributions to 3rd International Workshop on Data? Algorithms? Decision Making. Prague: ÚTIA AV ČR, 2007. p. 36-36.
- SOCHOR, T., MALČÍK, M. *Managing research and development projects in the environment of a small company*. In Řízení vědy, výzkumu a vývoje a jejich trendy. 2007-09-12-2007-09-13 Hradec nad Moravicí. Ostrava: University of Ostrava, 2007. p. 112-116. ISBN 978-80-7368-396-2.
- SOCHOR, T. *Experience with teaching organizational skills using e-learning*. In Řízení vědy, výzkumu a vývoje a jejich trendy. 2007-09-12-2007-09-13 Hradec nad Moravicí. Ostrava: University of Ostrava, 2007. p. 117-120. ISBN 978-80-7368-396-2.
- BURIANOVÁ, E. *Dynamics simulation model as a decision support of management University of Ostrava*. In EUNIS 2007. 2007-06-26-2007-06-29 Grenoble. Grenoble: EUNIS, 2007. p. 122-122.
- BURIANOVÁ, E. *Simulation of dynamic models with utilization of system dynamics*. In ISKI 2007 - Využitie operačných systémov a počítačových sietí. Nitra: KI FPV UKF v Nitre, 2007. p. 19-29. ISBN 978-80-8094-167-3.
- TRETEROVÁ, E. *Utilization of Freemind application in a project education*. In Informatika v škole a v praxi. 2007-09-10-2007-09-12 Ružomberok. Ružomberok: PFKU, 2007. p. 51-54. ISBN 978-80-8084-222-2.
- TELNAROVÁ, Z. *Project EQUAL - For Full Life*. In Vysokoškolské studium bez bariér. 2007-09-20-2007-09-21 Liberec. Liberec: Technical university in Liberec, 2007.
- KŘIVÝ, I. *Contribution to Population Dynamics of Single Species Discrete Anticipatory Systems*. In 6th International Conference APLIMAT 2007. 3. 2. 2007-6. 2. 2007 Bratislava. Bratislava: Slovak University of Technology, 2007. p. 185-193. ISBN 978-80-969562-6-5.
- TVRDÍK, J., PAVLISKA, V., HABIBALLA, H. *Matlab Program Library for Box-Constrained Global Optimization*. In APLIMAT 2007. 2007-02-06-2007-02-09

- Bratislava. Bratislava: Slovak technical university, 2007. p. 463-470. ISBN 978-80-969562-8-9.
- TVRDÍK, J. *Adaptive Stochastic Algorithms - Principles and Examples*. In *Analýza dat 2006/II*. 2006-10-24-2006-10-27 Lázně Bohdaneč. Pardubice: TriloByte Statistical Software, 2007. p. 113-125. ISBN 978-80-239-8998-4.
 - TVRDÍK, J. *Evolutionary algorithms with adaptation of control parameters 23012007-24012007* Ostrava: AD@M, 2007. p. 37-38. ISBN 978-80-239-8245-9.
 - HABIBALLA, H. *Resolution strategies for fuzzy predicate logic with evaluated syntax*. In *ZNALOSTI 2007*. 2006-02-21-2006-02-23 Ostrava. Ostrava: VŠB-TUO, 2007. p. 201-212. ISBN 978-80-248-1279-3.
 - KINDLER, E. *Simulation as an aid to formulate and manage projects*. In *Seventh International Conference MOMAN 07? Modern Management? 1. 2. 2007 – 1. 2. 2007* Prague. Plzeň: Evida, 2007. p. 107-117. ISBN 80-86596-87-7.
 - KINDLER, E., KŘIVÝ, I. *Object-oriented knowledge representation*. In *Seventh International Conference MOMAB 07? Modern Management? 1.2.2007-1.2.2007* Prague. Plzeň: Evida, 2007. p. 119-129. ISBN 80-86596-87-7.
 - KINDLER, E. *Simulation as an aid to formulate and manage projects*. In *Seventh International Conference MOMAN 07? Modern Management? 1. 2. 2007 – 1. 2. 2007* Prague. Plzeň: Evida, 2007. p. 107-117. ISBN 80-86596-87-7.
 - FOJTÍK, R., HABIBALLA, H. *Education of programming at secondary school*. In *Celoživotní vzdělávání učitelů*. 29.3.2007-30.3.2007 Malenovice. Ostrava: University of Ostrava, Ostrava, 2007. p. 30-34. ISBN 978-8-7368-295-8.
 - FOJTÍK, R. *Standards in distance education*. In *Podmínky akreditace e-learningových programů*. 15.4.2007-16.4.2007 Poděbrady. Poděbrady: ČADUV, 2007. p. 1-9. ISBN 978-80-86710-11-2.
 - KINDLER, E. *40 Years of Simula*. In *Modelling and Simulation of Systems MOSIS 07*. 2007-04-23-2007-04-26 Rožnov pod Radhoštěm. Ostrava: MARQ, 2007. p. 13-16. ISBN 978-80-86840-30-7.
 - KINDLER, E. *40 Years of Simula*. In *Modelling and Simulation of Systems MOSIS 07*. 2007-04-23-2007-04-26 Rožnov pod Radhoštěm. Ostrava: MARQ, 2007. p. 13-16. ISBN 978-80-86840-30-7.
 - KINDLER, E., KLIMEŠ, C., KŘIVÝ, I. *Simulation Study with Deep Block Structuring*. In *Modelling and Simulation of Systems MOSIS 07*. 2007-04-23-2007-04-26 Rožnov pod Radhoštěm. Ostrava: MARQ, 2007. p. 26-33. ISBN 978-80-86840-30-7.
 - KLIMEŠ, C. *Education of school managers in managing development projects*. In *Celoživotní vzdělávání učitelů*. 29.3.2007-30.3.2007 Malenovice. Ostrava: University of Ostrava, 2007. p. 44-47. ISBN 978 - 80 - 7368 - 29.
 - ZEZULKOVÁ, E., TELNAROVÁ, Z., KLIMEŠ, C. *Integration of handicapped students into University of Ostrava*. In *Vysokoškolské studium bez bariér*. Liberec: Technical University in Liberec, 2007. p. 25-27. ISBN 978-80-7372-188-6.
 - KLIMEŠ, C. *Multimedia educational supports in E-learning*. In *DIVAI 2007*. 17.5.2007-17.5.2007 Nitra. Nitra : UKF Nitra, 2007. p. 130-136. ISBN 978-80-8094-123-9.
 - KLIMEŠ, C., BALOGH, Z. *Using Petri Networks in Implementation Processes*. In *DIVAI 2007*. 17.5.2007-17.5.2007 Nitra. Nitra: UKF Nitra, 2007. p. 9-16. ISBN 978-80-8094-123-9.
 - HABIBALLA, H. *Mathematical Computer Science*. In *Dva dny s didaktikou matematiky*. 14.2.07-16.2.07 Prague. Prague: Charles University, 2007. p. - . ISBN.

- JANČAŘÍK, A., HABIBALLA, H. *Algorithm in Teaching Mathematics at Primary School*. In Ani jeden matematický talent nazmar. 3.5.07-5.5.07 Hradec Králové. Prague: Charles University, 2007. p. - . ISBN.
- HABIBALLA, H., JANČAŘÍK, A. *Algorithm in Teaching Mathematics at Secondary School*. In Ani jeden matematický talent nazmar. 3.5.07-5.5.07 Hradec Králové. Prague: Charles University, 2007. p. - . ISBN.
- HABIBALLA, H., TELNAROVÁ, Z., HABIBALLA, L. *Preparation of students with gearing defect for computer science studies*. In Distačné vzdelavanie Aplikovaná Informatika. 17.5.07-17.5.07 Nitra. Nitra: UKF, 2007. p. 74-79. ISBN 978-80-8094-123-9.
- FOJTÍK, R. *Distance education of programing*. In DIVAI 2007. 17.5.2007-17.5.2007 Nitra. Nitra, Slovensko: FPV UKF v Nitre, 2007. p. - . ISBN 978-80-8094-123-9.
- HUŇKA, F., MÁCHA, F. *Abstraction Mechanisms of BETA*. In ICTE in Regional Development. Valmiera: Vidzime University College, 2007. p. 120-124. ISBN 9984-633-03-9.
- VOLNÁ, E. *Forming neural network design through evolution*. In International Workshop on Artificial Neural Networks and Intelligent Information Processing. 10.5.-11.5. Angers. France: In conjunction with ICINCO 2007, 2007. p. 13-20. ISBN 978-972-8865-86-3.
- HUŇKA, F. *Object Oriented Approach in Fuzzy Arithmetic Using Parametric Representation of Fuzzy Numbers*. In New Dimensions in Fuzzy Logic and Related Technologies. 10.9.2007-14.9.2007 Ostrava. Ostrava: University of Ostrava, 2007. p. 273-278. ISBN 978-80-7368-387-0.
- HUŇKA, F. *Object Oriented Software for Fuzzy Arithmetic*. In CASYS 07. 6.8.2007-11.8.2007 Liege - Belgium. Liege: CHAOS Centre for Hyperincursion and Anticipation, 2007. p. 31-32. ISBN 2-930396-06-7.
- KŘIVÝ, I. *Modeling and Simulation of Local Epidemics*. In International Conference on Computer Systems and Technologies. 2007-06-14-2007-06-15 Rouse: 2007.
- KŘIVÝ, I. *Anticipation of Local Epidemics Management*. In 8th International Conference CASYS'07. 2007-08-06-2007-08-11 Liege. Liege: 2007.
- KŘIVÝ, I., KINDLER, E. *New Flexible Simulation Tool in SIMULA*. In European Simulation and Modeling Conference ESM'2007. 2007-10-10-2007-10-13 St. Julian's. 2007.
- ŠALOUN, P., BOBER, M. *Adaptation of navigation by the modified results of full scan algorithm in adaptive hypermedia systems*. In Information System Implementation and Modeling. 2007-04-23-2007-04-25 Hradec nad Moravicí. Opava: Ediční středisko FPF SU, Opava, 2007. p. 111-120. ISBN 978-80-7248-006-7.
- HABIBALLA, H. *Inference methods for fuzzy predicate logic based on resolution principle*. In Aplimat 2007. 6.2.2007-9.2.2007 Bratislava. Bratislava: Slovak Technical University, 2007. p. 525-534. ISBN 80-967305-4-1.
- HABIBALLA, H. *Resolution Strategies for Fuzzy Description Logic*. In EUSFLAT. 10.9.2007-14.9.2007 Ostrava. Ostrava: 2007.
- ŠALOUN, P., BIELIKOVÁ, M. *Adaptive web-based systems for learning*. In Dištančné vzdelávanie v aplikovanej informatike. 17. 5. 2007-17. 5, 2007 Nitra, Slovensko. Nitra: Univerzita Konštantína Filozofa v Nitre, 2007. p. 10-10. ISBN 978-80-8094-123-9.
- PROCHÁZKA, J., KLIMEŠ, C. *Information System Management Using Petri Nets*. In Svět informačních systémů 2007. 16.4.2007-17.4.2007 UTB Zlín. Zlín: Akademia Centrum, 2007. p. 127-133. ISBN ISBN 80-7318-561-9.
- KLIMEŠ, C. *Portal Solutions for University Information Systems with the LMS Integration*. In EUNIS 2007. 2007-06-26-2007-06-29 Grenoble: EUNIS 2007, 2007.

- PROCHÁZKA, J., KLIMEŠ, C. *Methodical and Application Framework for Process Modeling*. In Proceedings of International Conference on Enterprise Information Systems and Web Technologies. Florida, USA:ISRST, 2007.p.204-210. ISBN 978-0-9727412-4-8.
- PROCHÁZKA, J., HRDLIČKOVÁ, J. *ITIL for small and middle business*. In Řízení informačních a komunikačních technologií ICTM. 2007-03-28-2007-03-29 Prague. Prague, ČR: ČVUT, 2007.
- KINDLER, E. *Simulation and 40 Years of Object-Oriented Programming*. In XXII International Conference on Computer, Electronical and Systems Science and Engineering. 2007-7-31-2007-7-31 Prague. Istanbul: WASET, 2007. p. 492-496. ISBN 978-975-01752-1-3.
- KINDLER, E. *40 Years of Super-Object-Oriented Programming*. In CASYS 07 - Computing anticipatory systems. 2007-8-5-2007-8-11 Liege (Belgium). Liege (Belgium): CHAOS asbl., 2007. p. 3-3. ISBN 2-930396-06-8.
- KINDLER, E., WEINBERGER, J. *Quasi-Parallel Attempt to Optimization*. In CASYS 07 - Computing anticipatory systems. 2007-8-5-2007-8-11 Liege (Belgium). Liege (Belgium): CHAOS asbl, 2007. p. 5-5. ISBN 2-930396-06-8.
- KŘIVÝ, I. *Anticipatory Systems in Population Dynamics*. In 9th International Conference on Computing Anticipatory Systems. 2007-08-06-2007-08-11 Liege. Liege: CHAOS asbl, 2007. p. 116-116. ISBN 2-930396-06-7.
- KŘIVÝ, I. *Anticipation of Local Epidemics Management*. In 8th International Conference on Computing Anticipatory Systems. 2007-08-06-2007-08-11 Liege. Liege: CHAOS asbl, 2007. p. 45-45. ISBN 2-930396-06-7.
- HABIBALLA, H., TELNAROVÁ, Z., HABIBALLA, L. *Preparation of students with hearing defect for university studies – mathematics*. In 5. Nitrianska matematicka konferencia. 2007-09-06-2007-09-07 Nitra. Nitra: UKF, 2007. p. - . ISBN.
- FOJTÍK, R., HABIBALLA, H. *Modern approaches teaching programming*. In E-learning Conference 2007. 20070827-20070828 Istanbul, Turkey. Istanbul, Turkey: Bahcesehir University, 2007. p. 24-28. ISBN 978-975-6437-75-9.
- TVRDÍK, J. *Adaptation In Differential Evolution: A Comparison On Composition Test Functions*. In MENDEL 2007, 13th International Conference on Soft Computing. 2007-09-05-2007-09-07 Prague. Brno: University of Technology, 2007. p. 1-6. ISBN 978-80-214-3473-8.
- TVRDÍK, J., KŘIVÝ, I. *Competitive Self-Adaptation in Evolutionary Algorithms*. In 5th Conference of European Society for Fuzzy Logic and Technology. 2007-09-11-2007-09-14 Ostrava. Ostrava: University of Ostrava, 2007. p. 251-258. ISBN 978-80-7368-387-0.
- FOJTÍK, R. *Software for preparation and management of project*. In Řízení vědy, výzkumu a vývoje a jejich trendy. 2007-09-12-2007-09-13 Hradec nad Moravicí. Ostrava: University of Ostrava, Ostrava, 2007. p. 21-25. ISBN 978-80-7368-396-2.
- ŠALOUN, P., BOBER, M., VELART, Z. *Knowledge mining from adaptive course*. In ICETA 2007. 2007-09-06-2007-09-07 Stara Lesna, High Tatras, Slovakia. Košice, Slovensko: elfa, s.r.o., Kosice, 2007. p. 355-360. ISBN 978-80-8086-061.
- KLIMEŠ, C. *Results and Outputs of the ESF Project " System of Further Education of Research and Development Workers in Moravian-Silesian Region and its Realization"*. In 2. konference Řízení vědy, výzkumu a vývoje a jejich trendy. 2007-09-12-2007-09-13 Hradec nad Moravicí. Ostrava : University of Ostrava, Ostrava, 2007. p. 48-57. ISBN 978-80-7368-396-2.
- VOLNÁ, E. *Designing Modular Artificial Neural Network through Evolution*. In J. Marques de Sá, L. A. Alexandre, W. Duch, and D.P.Mandic (eds.) ICANN 2007. Heidelberg: LNCS, vol. 4668, Springer, 2007. p. 299-308. ISBN 978-3-540-74689-8.

- ŠALOUN, P., VELART, Z. *Ontology based course navigation*. In Conference on Hypertext and Hypermedia. 2007-09-10-2007-09-12 Manchester, UK. Manchester, UK: ACM Press New York, NY, USA, 2007. p. 151-152. ISBN 978-1-59593-820-6.
- ŠALOUN, P., VELART, Z., KOŘENEK, P. *Ontology mining from existing course, navigation based on that*. In Technologie pro e-vzdělávání 2007. 2007-06-15-2007-06-15 Prague. Prague: ČVUT, 2007. p. 17-22. ISBN 978-80-01-03756-0.
- BURIANOVÁ, E. *Modelling the System for Decision Support Using Methods of System Dynamics*. In Řízení vědy, výzkumu a vývoje a jejich trendy. 2007-09-12-2007-09-13 Hradec nad Moravicí. Ostrava: University of Ostrava, Ostrava, 2007. p. 17-20. ISBN 978-80-7368.

Articles in periodical publications (newspapers, magazines)

- KLIMEŠ, C. *Application of Computer Simulation in Information System*. In Proceedings of 8th International Conference CASYS'07. Liege: 2007, ISSN 1373-4903.
- TVRDÍK, J. *Evolutionary algorithms and adaptation of their control parameters*. In Automatizace. 7-8. edition 2007, vol.50, p.453-457, ISSN 0005-125X.
- TVRDÍK, J. *Adaptive Differential Evolution: Application to Nonlinear Regression*. In Proceedings of the International Multi conference on Computer Science and Information Technology. Wisla: 2007, vol.2, no.1, p.193-202, ISSN 1896-7094.
- HABIBALLA, H., TELNAROVÁ, Z., HABIBALLA, L. *PREPARATION OF STUDENTS WITH HEARING DEFECT FOR COMPUTER SCIENCE STUDIES*. In Technológia vzdelávania. 8th edition Nitra: UKF, 2007, vol.15, p.6-8, ISSN 1335-003X.
- TVRDÍK, J., KŘIVÝ, I., MIŠÍK, L. *Adaptive Population-based Search: Application to Estimation of Nonlinear Regression Parameters*. In Computational Statistics and Data Analysis. 52(2)nd edition 2007, vol.52, no.52, p.713-724, ISSN 0167-9473.
- TVRDÍK, J. *Graphs and Tables in Statistics*. In Forum Statisticum Slovakum. 2007, vol.2,
- KINDLER, E. *Forty years of object-oriented programming*. In AUTOMA. 10th edition 2007, vol.13, p.42-43, ISSN 1210-9592.
- KINDLER, E. *A successful conference on computer simulation in Prague*. In AUTOMA. 10th edition 2007, vol.13, p.66-67, ISSN 1210-9592.
- HABIBALLA, H., VOLNÁ, E., FOJTÍK, R. *From the Theory of Formal Languages to a Simple Translator II.* In Matematika - fyzika - informatika I. 4th edition 2007, vol.17, no. , , ISSN 1210-1761.
- KINDLER, E. *Eight conference on anticipatory systems*. In AUTOMA. 2007, vol.13, no.11, p.79-79, ISSN 1210-9592.
- KLIMEŠ, C. *Expert system utilization for modelling the decision making processes upon indetermination*. In Acta Electrotechnica et Informatica. No.4. edition 2007, vol. 7, no.7, p.28-37, ISSN 1335-8243.
- TVRDÍK, J. *Graphs and Tables in Statistics*. In Informační Bulletin České statistické společnosti. 4th edition 2007, vol.18, p.6-20, ISSN 1210-8022.
- HABIBALLA, H., VOLNÁ, E., FOJTÍK, R. *From the Theory of Formal Languages to a Simple Translator*. In Matematika - fyzika - informatika I. 3rd edition 2007, vol.17, no. , p.171-182, ISSN 1210-1761.
- TVRDÍK, J. *Differential Evolution with Competitive Setting of its Control Parameters*. In TASK Quarterly - Scientific Bulletin of the Academic Computer Centre in Gdansk. Wisla: 2007, vol.11, no.1-2, p.169-179, ISSN 1428-6394

13 Department of Chemistry

- Texture parameters of carbonaceous materials.
- Study of interactions in heterogeneous systems (calorimetry, gas chromatography, thermal analysis, zeta potential).
- Sorption properties of solids (voltammeters on modified electrodes).
- Information and communication technology in teacher education.
- Professional didactics of chemistry aimed at multimedia educational programs.

13.1 Staff

Head of the Department

Rudolf Peter, PhD.

Deputy Head of the Department

Roman Maršálek, PhD.

Secretary to the Department

Jarmila Schmidtová

Teaching staff

Professor

Boleslav Taraba

Associate Professors

Dana Kričfaluši
Zuzana Navrátilová
Václav Slovák
Marie Solárová

Assistant Professor

Michal Haluzik

Laboratory Technician

Dagmar Ryšková

PhD. student (staff)

Michal Haluzik

Branch of study: Normal and pathological physiology
Thesis: Adipose tissue as an endocrine organ: its role in the etiopathogenesis of insulin resistance and diabetes
Supervisor: Prof. Vratislav Schreiber
End: 2008 (1st Faculty of Medicine UK Prague)

13.2 Study programmes

Code of the study programme ¹⁰⁾	Title of the study programme	Title of the study major ¹¹⁾	Length of the study ¹²⁾			
			B	N,M	P	FS
B1407	Chemistry	Chemistry	3			P
B1407	Chemistry	Chemistry (two-branch study)	3			P
N1407	Chemistry	Physical Chemistry of Surfaces		2		P
N1407	Chemistry	Teaching for Secondary Schools - Chemistry (two-branch study)		2		P
N1407	Chemistry	Teaching for Secondary Schools - Chemistry (one-branch study)		2		P
N7503	Teaching for Primary Schools	Teaching for Primary Schools - Chemistry (two-branch study)		2		P
M7503	Teaching for Primary Schools	Teaching for Primary Schools - Chemistry		4		P
M7504	Teaching for Primary Schools	Teaching for Secondary Schools - Chemistry		5		P

13.3 Theses

Bachelor Theses

- BARDOŇOVÁ, Darja: *The study of the temperature dynamics of coal oxidation with respect to values of activation energy*. Supervisor: Taraba Boleslav
- BURIANOVÁ, Gabriela: *Comparison of infrared spectroscopy technique for investigation of clay minerals*. Supervisor: Vaculíková Lenka
- CHYTILOVÁ, Markéta: *Influence of Pre-treatment to Oxidizing Reactivity of Graphite*. Supervisor: Slovák Václav
- COUFALÍK, Pavel: *Heavy Metals in Mushrooms*. Supervisor: Slovák Václav
- FALTÝNKOVÁ, Lenka: *Fe determination by means of absorption spectrophotometry*. Supervisor: Navrátilová Zuzana
- FIALOVÁ, Alena: *Determination of methanol and ethanol in Gin spirit*. Supervisor: Haluzík Michal
- KADUROVÁ, Julie: *Determination of fluorides in water samples and selected sorts of food*. Supervisor: Navrátilová Zuzana
- MACHÁČKOVÁ, Miroslava: *Resources for stripping odour*. Supervisor: Slovák Václav
- MATĚJŮ, Kateřina: *Measuring of the zeta potential of the carbonaceous particles*. Supervisor: Maršálek Roman
- NĚMCOVÁ, Markéta: *The influence of heavy metals on properties of plant materials*. Supervisor: Slovák Václav
- PAVLÍČEK, David: *Preparation and characterization of film clay electrode*. Supervisor: Navrátilová Zuzana

¹⁰⁾ B – bachelor study programme, N - master study programme representing a continuation of bachelor study programme, M - master study programme, P - doctoral study programme.

¹¹⁾ Study programmes marked with an asterisk can (usually) be studied only in a chosen study programme in pairs.

¹²⁾ P – full time study, D – distance form of study, K – combined study form;

- PRZYBYLKOVA, Barbora: *Safeguard and control quality taking of samples sewerage water in surroundings ČEZ - power station Dětmarovice*. Supervisor: Navrátilová Zuzana
- TOMČÍKOVÁ, Radka: *Determination of metals by the atomic absorption spectrometry*. Supervisor: Navrátilová Zuzana
- WOJTOWICZ, Petr: *Sorption of alkylammonium ions onto montmorillonite*. Supervisor: Navrátilová Zuzana

Master Theses

- BALÍNOVÁ, Kateřina: *Possibilities of enlistment of the chemical historical discoveries into the chemistry lessons*. Supervisor: Solárová Marie
- BELORITOVÁ, Daniela: *History of production of the selected metals and possibilities of use in the education of chemistry from the perspective of the Framing educational programme*. Supervisor: Solárová Marie
- HRANICKÁ, Zuzana: *Study of sorption properties of montmorillonite using modified carbon paste electrode*. Supervisor: Navrátilová Zuzana
- KALUSOVÁ, Michaela: *Study of sorption properties of montmorillonite by means of batch technique*. Supervisor: Navrátilová Zuzana
- KRAJCOVÁ, Zuzana: *Oxidation reactions on the skeleton of morphine and their use in synthesis of morphinans*. Supervisor: Peter Rudolf
- KRUPOVÁ, Bohuslava: *Frequency analysis of interdisciplinary elements in current chemistry textbooks*. Supervisor: Solárová Marie
- KUPKA, Jan: *Water Environment Kinetics Study of Coal Oxidation*. Supervisor: Taraba Boleslav
- MUROVÁ, Barbora: *Thermal analysis as a method of studying and characterization of plant materials*. Supervisor: Slovák Václav
- ROŽKOVÁ, Radka: *Historical development of high school textbooks with development of some chemical elements*. Supervisor: Solárová Marie

13.4 Research projects

Research projects financed by the Faculty of Science (Internal projects)

Coordinator	Provider (agency)	Project title	Grant (ths. CZK)
R. Peter	FPP	Study of the influence of electron configuration of oxygen on mechanism of oxidation of carbonaceous matters	503

Research projects in 2007 (filed in CEP – Central evidence of projects)

Coordinator	Provider (agency)	Project title	Grant (ths. CZK)
R. Maršálek	CEP-MPO 2A-1TP1/083	Immobilization of heavy metals from waste waters by using nature carbonaceous materials	538
B. Taraba	CEP-CBU ABCBU55-07	Access to the coal mine district with spontaneous combustion process and objective indicators for the safe work in these localities	1 000
B. Taraba	CEP-GAČR 105/06/0630	Modelling the distribution of the coal oxidation heat in the heterogenous porous surroundings	728
R. Maršálek	CEP-GAČR 105/07/P041	The zeta potential of carbonaceous materials - the mechanisms of collectors' adsorption	202

Development projects in 2007 (except of CEP – Central evidence of projects)

Coordinator	Provider (agency)	Project title	Grant (ths. CZK)
Z. Navrátilová	FRVŠ 17/A/a	Innovation of the analytical chemistry laboratory in the field of spectral and electrochemical analysis	1 600 INV

13.5 Equipment

- Measurement of zeta potential – DELSA 440 SX.
- Thermal analysis (NETZSCH STA 449 C, Germany).
- Calorimeter Setaram C80.
- Mercury porosimeter Carlo Erba2000.
- Sorptomatic Carlo Erba 1810 (measuring of surface area and pore distribution).
- Gas chromatographic devices Carlo Erba Mega 5120 a Chrom 5.
- Atomic absorption spectrometer Varian SPECTRAA240 FS.
- UV/VIS Spectrophotometer Cary 50 Conc.
- Electrochemical analyzer EcaFlow 150 GLP.

13.6 Conferences and seminars

- International workshop for doctoral students „Current problems in chemical education“ 22. – 24. 11. 2007, Ostrava, international. Number of participants: 60.

13.7 Contacts and cooperation**Cooperation with Universities and Research Institutes in the Czech Republic**

- Faculty of Education TU Liberec.
- Faculty of Education of Jan Evangelista Purkyně University in Ústí nad Labem.
- Faculty of Education MU Brno.
- University of Pardubice.
- VŠB – Technical University of Ostrava.
- Faculty of Chemistry VUT Brno.
- Institute of Chemical technology, Prague.
- University of Hradec Králové.
- Department of Inorganic Chemistry, Faculty of Science, Palacky University, Olomouc.
- J. Heyrovský Institute of Physical Chemistry AV ČR Prague.
- Institute of Chemical Process Fundamentals of the AS CR.
- Institute of Geonics Czech Academy of Science.
- Institute of Rock Structure and Mechanics AV ČR Prague.
- VVUU, a.s. Ostrava – Radvanice.

Cooperation with Universities and Research Institutes abroad

- Comenius University in Bratislava (Slovakia).
- Matej Bel University, Banská Bystrica (Slovakia).
- University of Mining and Metallurgy, Krakow (Poland).

- Institute of Phys.-organic and Coal Chemistry of Ukr. Academy of Sciences, Doněck (Ukrajina).

Visitors to the institute

- Prof. Miroslav Prokša, Faculty of Science UK Bratislava, Slovakia 29. 6. 2007.

Visits of Staff Members

Conferences 2007

Name	Dep	Country	Place	Name of Conference	Date
Kričfaluši, D.	CH	Slovakia	Bratislava	Conference of Didactics of Chemistry	28. - 30. 5.
Maršálek, R.	CH	Hungary	Siofok	Conference	3. - 5. 10.
Maršálek, R.	CH	Slovakia	T. Matliare	59 th Congress of chem. society	2. - 6. 9.
Slovák, V.	CH	Slovakia	T. Matliare	59 th Congress of chem. society	2. - 6. 9.
Slovák, V.	CH	France	Paris	SFC 07	15. - 20. 7.
Solárová, M.	CH	Slovakia	Bratislava	Conference of Didactics of Chemistry	28. - 30. 5.
Taraba, B.	CH	UK	Nottingham	ICCS 2007	25. 8. - 1. 9.

Short-term stays abroad 2007 (less than 10 days)

Name	Dep	Country	Place	Name of Conference	Date
Kričfaluši, D.	CH	Slovakia	Nitra	Visit at UKF	7. - 8. 6.
Kričfaluši, D.	CH	Slovakia	Trnava	Consultation	18. - 19. 11.
Navrátilová, Z.	CH	Slovakia	Bratislava	Membership in committee	13. - 15. 11.

13.8 Student research activity

- Student Research Conference (physics - chemistry), Faculty of Science OU, 10. 5. 2007, 12 participants.

13.9 Membership in Professional Organizations

Assoc. Prof. Václav Slovák:

- Czech Chemical Society (CR) – member of the executive board.

Prof. Boleslav Taraba:

- Czech Chemical Society (CR) – chairperson of the local section in Ostrava.

13.10 Publications

Monographic publications

- VYMĚTAL, J. *Introduction to practical communication*. Issue 1. Prague: LexisNexis CZ, 2007.

Articles in proceedings (conference or institution proceedings)

- KRIČFALUŠI, D. *Increase of the interest of the youth in the field of nature studies*. In ScienEdu. 28. 5. 2007 - 30. 5. 2007 Bratislava. Bratislava: Comenius University in Bratislava, 2007. pp. 35-38. ISBN 978-80-88707-90-5.
- SLOVÁK, V., MARŠÁLEK, R., KUZNĚCOVOVÁ, L., RUPPENTHALOVÁ, L., JANÍČEK, M. *Acidobasic behaviour of oxidative altered coal and sorption of metals*. In 59th Congress of chemists. 2007-09-02-2007-09-06 Tatranské Matliare. Bratislava: SCHS, 2007. pp. 79-79. ISBN 1336-7242.
- MARŠÁLEK, R., SLOVÁK, V., RUPPENTHALOVÁ, L., KUZNĚCOVOVÁ, L. *The influence of pH on the adsorption of lead and cadmium on the oxidized altered coal*. In 59th Congress of chemists. 2007 09 02-2007 09 06 Tatranske Matliare. Bratislava: SCHS, 2007. pp. 73-74. ISBN 1336-7242.
- MARŠÁLEK, R. *The influence of the SDS on the zeta potential of the carbonaceous materials*. In 11th Conference on Environment and Mineral Processing. 31. 5. 2007 - 2. 6. 2007 Ostrava. Ostrava: Publishing services department, VŠB-TU, 2007. pp. 197-201. ISBN 978-80-248-1277-9.
- TARABA, B. *Calorimetric monitoring of the coal surface oxidation degree*. In 29th International Czech and Slovak calorimetric seminary. 28. 5. 2007 - 1. 6. 2007 Medlov, Českomoravská vysočina. Pardubice: Univerzity of Pardubice, 2007. pp. 67-70. ISBN 978-80-7194-957-2.
- NAVRÁTILOVÁ, Z. *Voltammeters*. In Automatic spectrometry. 4.6.2007-8.6.2007 Žermanická přehrada. Český Těšín: 2 THETA, 2007. ISBN 978-80-86380-39-1.
- TARABA, B., PETER, R. *Triple Role of Water in View of Spontaneous Heating of Coal*. In International Conference on Coal Science and Technology 2007. 2007-08-28-2007-08-31 University of Nottingham. University of Nottingham: University of Nottingham, 2007. pp. 62-62. ISBN 92-9029-437-X.
- MARŠÁLEK, R. *Adsorption of SDS on the carbonaceous materials*. In 9th Conference on colloid chemistry. 2007-10-03-2007-10-05 Siófok. Siófok: 2007. pp. 126-126. ISBN 978-963-9319-70-7.
- MARŠÁLEK, R. *DVPP- internal demand or obligation*. In Module system of lifelong learning of teachers in Moravian-Silesian region. Ostrava: Univerzity of Ostrava Ostrava, 2007. pp. 52-54. ISBN 978-80-7368-394-8.
- NAVRÁTILOVÁ, Z., HRANICKÁ, Z., KALUSOVÁ, M., VACULÍKOVÁ, L. *Comparison of methods for study of sorptive characteristics of montmorillonit*. In 59. Congress of chemists. 2007-09-02-2007-09-06 Vysoké Tatry, Tatranské Matliare. Bratislava: Slovak society of chemistry, 2007. pp. 71-71. ISBN 1336-7242.
- ŠUGÁRKOVÁ, V., NAVRÁTILOVÁ, Z., WOJTOWICZ, P., VACULÍKOVÁ, L., PLEVOVÁ, E. *Characteristics and attributes of montmorillonit modified using alkylamon cation*. In 59th Congress of chemists. 2007-09-02-2007-09-06 Vysoké Tatry, Tatranské Matliare. Bratislava: Slovak society of chemistry, 2007. pp. 71-71. ISBN 1336-7242.
- SOLÁROVÁ, M., BÍLEK, M. *Continuity of education in natural sciences in pre gradual and post gradual teachers' preparation*. In Education in Natural Sciences. Hradec Králové. Hradec králové: Gaudeamus, 2007. pp. 41-45. ISBN 978-80-7041-058-5.
- SOLÁROVÁ, M. *Pre gradual preparation of chemistry teachers for education in natural sciences*. In Preparation of teachers for education in natural sciences. Nitra. Nitra: UKF Nitra, 2007. pp. 54-58. ISBN ISBN 978-80-8094-138.

- SOLÁROVÁ, M. *Project method and strengthening key competences of pupils*. In Modular system of further teachers' education. 29.3.2007-30.3.2007 Malenovice. Ostrava: OU, 2007. pp. 90-95. ISBN 978-80-7368-295-8.
- SLOVÁK, V., TARABA, B. *Chemistry at the Silaesian-Ostrava castle*. In New methods of propagating natural sciences among the young. 2007-11-15-2007-11-16 Olomouc. Olomouc: UP Olomouc, 2007. pp. 70-71. ISBN 978-80-244-1808-7.
- MARŠÁLEK, R., SLOVÁK, V. *Cheap sorbents for immobilization of heavy metals from waste waters*. In Waste forum. 2007-04-18-2007-04-20 Milovy. Praha: PCHP-PetroChemProgress, 2007. pp. 3391-3397. ISBN 978-80-02-01894-0.
- SOLÁROVÁ, M. *Possibilities of presentation of chemistry using optional forms of education*. In New methods of propagating natural sciences among the young. 15. 11. 2007 - 16. 11. 2007 Olomouc. Olomouc: UP, 2007. pp. 68-69. ISBN 97-80-244-1808-7.
- SLOVÁK, V., MARŠÁLEK, R. *Coal with increased content of heavy metals – how to treat it?* In Waste forum. 2007-04-18-2007-04-20 Milovy. Praha: PCHP-PetroChemProgress, 2007. pp. 3528-3531. ISBN 978-80-02-01894-0.
- SOLÁROVÁ, M. *Education to permanent progress and preparation of teachers for natural sciences education*. In Preparation of chemistry teachers for TUR. 17. 10. 2007 -19. 10. 2007 Šlapanice. Brno: MU, 2007. pp 131-136. ISBN 978-80-210-4504-0.
- SLOVÁK, V. *Chemistry as seen by children*. In Preparation of chemistry teachers for environmental education and education to permanent progress. 2007-10-17-2007-10-19 Šlapanice u Brna. Brno: Masaryk univerzity, 2007. pp. 126-130. ISBN 978-80-210-4504-0.
- SOLÁROVÁ, M. *Interdisciplinary and Introduction of Science Subjects*. In International colloquium on managing learning process. 17.5.-17.5. Brno. Brno: UO Brno, 2007. pp. 59-60. ISBN 978-80-7231-228-3.
- SOLÁROVÁ, M. *Project education from a chemistry teacher point of view*. In Current trends in education of natural sciences. 28. 5. - 30. 5. Bratislava. Bratislava: 2007. pp. 345-349. ISBN 978-80-88707-90-5.
- NAVRÁTILOVÁ, Z. *Clay electrodes for study of clay minerals*. In Modern electrochemical methods. 2007-05-21-2007-05-24 Jetřichovice. Ústí nad Labem: 2007. pp. 115-117. ISBN 978-80-86238-05-0.

Articles in periodical publications (newspapers, magazines)

- NAVRÁTILOVÁ, Z., WOJTOWICZ, P., VACULÍKOVÁ, L., ŠUGÁRKOVÁ, V. *Sorption of alkylammonium cations on montmorillonite*. In Acta Geodynamica et Geomaterialia. 2007, vol. 4, no.3, pp.59-65, ISSN 1214-9705.
- PASTOREK, R., KAMENÍČEK, J., HUSÁREK, J., SLOVÁK, V., PAVLÍČEK, M. *Ni(II) benzylbutyldithiocarbamates containing monodentate phosphines*. In Journal of Coordination Chemistry. 2007, vol. 60, no.5, pp.485-494, ISSN 0095-8972.
- TARABA, B., MARŠÁLEK, R. *Immobilization of Heavy Metals and Phenol on Altered Bituminous Coals*. In Energy Sources, Part A. 9. - 12. 2007, vol.29, pp.885-894, ISSN 1556-7036

14 Department of Physical Geography and Geoecology

- Hydrology (anthropogenic changes of hydrological regime, hydrology of urban areas, modelling of hydrological processes).
- Geomorphology and geoecology (geomorphological and geoecological mapping, morphotectonics and morphodynamics, geomorphological risks, geomorphology and geoecology of the Carpathians).
- Applied geomorphology (soil erosion research, waste and groundwater protection, recultivation and decontamination of soil, landscape planning).
- Cartography, GIS and DPZ (mapping and monitoring of physical geographic components by means of DPZ, GPS and standard geodetic methods).
- Thematic cartography and GIS (visualisation of geographical phenomena, mapping of hydrological processes, atlas of small regions, mental maps, theory of thematic maps).

14.1 Staff

Head of the Department

Monika Mulková

Deputy Head of the Department

Jana Bohdálková

Secretary to the Department

Pavλίna Balonová

Teaching staff

Professors

Vladislav Kříž
Jozef Minár

Assoc. Professor

Milan Trizna

Assistant Professors

Martin Adamec
Radka Bartošová
Jana Bohdálková
Radek Dušek
Jan Hradecký
Monika Mulková
Lubomír Müller
Tomáš Pánek
Tomáš Rozehnal

Renata Sedlářiková
Veronika Smolková
Karel Šilhán

External teachers

Libor Černíkovský
Kamil Drabina
Otakar Holuša, PhD.
Karel Hrnčíř
Karel Kirchner, PhD.
Eva Kolčáková
Jarmila Krkošková
Karel Kupec
Jan Prášek
Jaroslav Rožnovský, PhD.
Tomáš Řehánek, PhD.
Miroslav Řepka
Jan Sviták
Radim Tolasz
Jan Unucka

PhD. students (staff)

Radka Bartošová

Major subject: Engineering geology
Thesis: Landslide process and structural geology in the Moravian-Silesian Beskid Mts.
Supervisor: Assoc. Prof. Radomír Grygar
End: 2010 (TU-VŠB Ostrava)

Martin Adamec

Major subject: Geoinformatics
Thesis: Hydrological modelling in the GIS environment.
Supervisor: Assoc. Prof. Jaromír Kaňok
End: 2008 (Faculty of Mining and Geology TU-VŠB Ostrava)

Jana Bohdálková

Major subject: Environmental Geography
Thesis: Accidental situations of watercourses pollution in the Odra River Basin and the upper Morava River Basin.
Supervisor: Prof. Vladislav Kříž
End: 2007 (Faculty of Science, OU Ostrava)

Renata Sedlářiková

Major subject: Geoinformatics
Thesis: Retrospective analysis of landscape development with the use of Geoinformation technologies (GIT).
Supervisor: Assoc. Prof. Petr Rapant
End: 2007 (Faculty of Mining and Geology TU-VŠB Ostrava)

Changes carried out during the course of 2007:

1. 9. Veronika Smolková became a full-time teacher.
1. 9. Karel Šilhán became a full-time teacher.
26. 9. Monika Mulková was awarded the title of PhD. in Cartography, geoinformatics and DPZ at MU in Brno.

14.2 PhD. students

Antoš Ondřej
Bednář Marek
Bogdová Kamila
Bohdálková Jana
Drozdek Marek
Dytrtová Karolína
Ferková Lenka
Hájek Oldřich
Herot Pavel
Kadlčíková Jana
Konupčík Radim
Lažová Milada
Miartuš Michal
Navrátil Lubor
Netopil Patrik
Novosák Jiří
Opršal Zdeněk
Pachrová Stanislava
Patočková Soňa
Pelíšek Igor
Ruda Aleš
Řondíková Lenka
Smolková Veronika
Snášel David
Stojanov Robert
Svoboda Jan
Šilhán Karel
Švec Pavel
Volný Roman

14.3 Study programmes

Code of the study programme ¹³⁾	Title of the study programme	Title of the study major ¹⁴⁾	Length of the study ¹⁵⁾			
			B	N,M	P	FS
B1301	Geography	Cartography and Geoinformatics	3			P
B1301	Geography	Physical Geography and Geoecology	3			P
B1601	Ecology and Environmental Protection	Landscape Protection and Formation	3			P
N1301	Geography	Physical Geography and Geoecology		2		P
N1601	Ecology and Environmental Protection	Landscape Protection and Formation		2		P
M1601	Ecology and Environmental Protection	Landscape Protection and Formation		5		P
P1301	Geography	Environmental Geography			3	P,K

14.4 Theses

Bachelor theses

- ALTOVÁ, Viola: *The selected hydrogeological studies of the carbonates of Branná group*. Supervisor: Bartošová Radka
- AUBRECHTOVÁ, Tereza: *Renewal ecological landscape stability in cadastral territory Mokré Lazce*. Supervisor: Sedlářiková Renáta
- BARDONOVÁ, Eva: *Revitalization of small streams by an example of action in Mokre Lazce*. Supervisor: Hradecký Jan
- BUKOVJAN, Petr: *Area of Karolina in Ostrava: Mineral surroundings, building development, future*. Supervisor: Rozehnal Tomáš
- CHNÚRIK, Peter: *Comparison of landscape utilization in the first half of the 19th century with current situation via example within Mosty u Jablunkova willage cadaster*. Supervisor: Mulková Monika
- GALDIA, Richard: *Land use in the cadastral territory of Dolní Lutyně in the 19th and at the beginning of the 21th century*. Supervisor: Sedlářiková Renáta
- HABRMAN, Jan: *The possibilities of uses differential measurement GPS in physicalgeographic mapping*. Supervisor: Dušek Radek
- HLAVATÍK, Jan: *Extreme precipitation events in drainage basin Ostravice as the source of changes in landscapes*. Supervisor: Trizna Milan
- HOŘÍNKOVÁ, Michaela: *Land Use of Karvina-Doly Cadastral Territory in the 19th and at the Beginning of 21st Century*. Supervisor: Sedlářiková Renáta
- JANŠOVÁ, Alena: *The deep-seated slope deformations in the Radhošť ridge region and their expression in the Moravian-Silesian Beskydy*. Supervisor: Pánek Tomáš
- JEDELSKÁ, Adéla: *Land use in the cadastral territories of Louky nad Olší and Darkov in the 19th and at the beginning of the 21th century*. Supervisor: Sedlářiková Renáta

¹³⁾ B – bachelor study programme, N – master study programme following bachelor study programme, M – master study programme, P – doctoral study programme.

¹⁴⁾ Study programmes marked with an asterisk can (usually) be studied only in a chosen study programme in pairs

¹⁵⁾ P – full time study, D – distance form of study, K – combined study form;

- KARÁSEK, Petr: *The mapping of monumental trees in the Karviná district and creation of a project in software ArcGIS*. Supervisor: Sedlářiková Renáta
- KOSAČÍK, Tomáš: *Geomorphological analysis of an active landslide area of the Hluboče locality in the White Carpathians*. Supervisor: Pánek Tomáš
- KOUTNÁ, Iva: *Mapping of the anthropogenic sediment around the Hvězda – Ovčárna road*. Supervisor: Adamec Martin
- KUNDRATA, Filip: *The geomorphologic analysis of active slide in the area of Skalická Strážnice*. Supervisor: Pánek Tomáš
- LEINWEBEROVÁ, Lea: *Geodetic survey of manders of the Odra river – connection to the coordinate system*. Supervisor: Dušek Radek
- LONDINOVÁ, Markéta: *The Documentation and Hydrogeological Interpretation of Household Water Wells in Trnavka Village*. Supervisor: Rozehnal Tomáš
- LUKÁŠOVÁ, Jana: *Data for creation of DMT in inundation areas*. Supervisor: Adamec Martin
- MEDUŇOVÁ, Kateřina: *Comparison of land use in the first half of the 19th century with current situation via example within Písek u Jablunkova village cadaster*. Supervisor: Sedlářiková Renáta
- PALEČEK, Martin: *Mapping of the anthropogenic sediment around the Hvězda – Ovčárna road*. Supervisor: Adamec Martin
- PAVLÍKOVÁ, Alexandra: *Phytogeografic analysis of the slope deformation in the valley of Jestřábí potok Brook*. Supervisor: Hradecký Jan
- PFEFFEROVÁ, Jana: *The hydrological survey of the Slavič river basin*. Supervisor: Bohdálková Jana
- PŘIBYLA, Zdeněk: *Geomorphological analysis of the channel reach Tyra and selected tributaries*. Supervisor: Hradecký Jan
- ŠINDLEROVÁ, Hana: *The hydrological survey of the Skalka river basin*. Supervisor: Bohdálková Jana
- ŠTÍHLOVÁ, Tereza: *The Digital Terrain model of a specific area*. Supervisor: Sedlářiková Renáta
- ŠULCOVÁ, Monika: *Geodetic survey and detailed geomorphological map of active landslide under Skalická Strážnice Mt. (The Podbeskydská pahorkatina Upland)*. Supervisor: Pánek Tomáš
- TROJÁČKOVÁ, Lenka: *Geomorphological assessment of real state of the Řička brook*. Supervisor: Hradecký Jan
- URBÁŠEK, Pavel: *Collecting data for DTM creation in inundation areas*. Supervisor: Adamec Martin
- VAŘECHOVÁ, Petra: *The ongoing effects of air and water pollution using specifically chosen indicators in connection with the economic development of the Jan Šverma coking plant*. Supervisor: Müller Lubomír
- VAŠÍČKOVÁ, Šárka: *Hladnov fault in the Carboniferous rocks in Ostrava and its impact on the development*. Supervisor: Rozehnal Tomáš
- ZDRÁHALOVÁ, Darina: *The hydrological survey of the Smradlava river*. Supervisor: Bohdálková Jana

Master theses

- BRUS, Jan: *Monitoring anthropogenic changes of landscape in mining territory quarry Heřmanice with using GIT*. Supervisor: Mulková Monika
- BURŠOVÁ, Veronika: *Cartographic processing of geomorphological locality*. Supervisor: Dušek Radek
- DĚD, Martin: *Geomorphological assessment of the river Mohelnice headwaters..* Supervisor: Hradecký Jan
- DOLÁKOVÁ, Petra: *Geomorphological analysis of potential and real state of the Lučina river*. Supervisor: Hradecký Jan
- DVORNÍK, Richard: *The geodiversity of selected slope deformations in western Beskydy, Czech republic*. Supervisor: Hradecký Jan
- FIŠER, Oto: *Assessment of erosion processes in the Praděd national protected landscape area*. Supervisor: Hradecký Jan
- GLEMBOVÁ, Andrea: *Analysis of changes of landscape cover regarding to acceleration processes of slope and fluvial in area of Moravskoslezské Beskydy MTS*. Supervisor: Hradecký Jan
- HEFNER, Radim: *Utilize aerial photograph at following antropogenic changes of landscape in mining territory quarry Darkov*. Supervisor: Mulková Monika
- HORŇANSKÁ, Andrea: *Place names as characteristic of horizontal structure landscape Moravskoslezské Beskydy*. Supervisor: Dušek Radek
- KOZIELKOVÁ, Jana: *The survey of geomorphological locality*. Supervisor: Dušek Radek
- KUBEŠOVÁ, Stanislava: *Geomorphological analysis of potential and real state of the tributaries of the Mohelnice river*. Supervisor: Hradecký Jan
- LARYŠOVÁ, Ivana: *Assuring of the Moravská Brána territory's migratory transmittance for big mammals – concept of the chosen elements specification of the regional Úses*. Supervisor: Dušek Radek
- MIŘIJOVSKÝ, Jakub: *Survey of conditions about the utility of a GPS system as a source of geographical data in the České Švýcarsko National Park*. Supervisor: Dušek Radek
- MRAVCOVÁ, Romana: *Progress of ecological impacts in connection with economic growth of the company in CR*. Supervisor: Müller Lubomír
- PLAČKOVÁ, Kateřina: *Monitoring antropogenic changes of landscape in the mining territory quarry ČSA with using geoinformational technologies*. Supervisor: Mulková Monika
- RAŠKOVÁ, Pavla: *Hydrogeological conditions in Hranice karst with focus on Zbrašov Aragonite Caves and Hranická Chasm*. Supervisor: Bartošová Radka
- RONČKOVÁ, Eva: *Atlas of Natural Sites of UNESCO World Heritage list - Part 1 (Europe and Russia)*. Supervisor: Dušek Radek
- SKŘIVÁNKOVÁ, Marta: *Cartographic processing of the geomorphological locality*. Supervisor: Dušek Radek
- STODŮLKOVÁ, Hana: *The expansion of the chosen invasive kinds of plants in pla Poodří*. Supervisor: Adamec Martin
- STÖHROVÁ, Barbora: *Environmental effects of antropogenic activities in selected basin in Czech Republic*. Supervisor: Müller Lubomír
- ŠÍR, Boris: *Morphometric and Statistical Analysis of DEM of Moravskoslezské Beskydy Mts..* Supervisor: Pánek Tomáš
- ŠVARC, Jiří: *The geodiversity of selected slope deformations in Radhošťská hornatina Mts., Czech Republic*. Supervisor: Hradecký Jan

- TÁBORÍK, Petr: *Geomorphological analysis of the slope deformations on the Čertův mlýn Mt. (Moravskoslezské Beskydy Mts.)*. Supervisor: Pánek Tomáš
- VÁLKOVÁ, Jitka: *Detailed survey of geomorphological locality*. Supervisor: Dušek Radek
- VEČEŘOVÁ, Martina: *Landfill Monitoring*. Supervisor: Mulková Monika

14.5 Research projects

Research projects financed by the Faculty of Science (Internal projects)

Coordinator	Provider (agency)	Project title	Grant (ths. CZK)
T. Pánek	FPP	Geomorphological and geoecological aspects of slope deformations in the young orogenic areas	590

Research projects in 2007 (filed in CEP – Central evidence of projects)

Coordinator	Provider (agency)	Project title	Grant (ths. CZK)
T. Pánek	CEP-GAAV KJB301870501	Quaternary geochronology of slope deformations of the culmination part of the Western Beskydy Mts: absolute and relative dating of landforms	156
J. Hradecký	CEP-GAČR 205/06/P131	Geomorphic response of water streams to human disturbance in the area of Western Beskydy Mts	196
T. Pánek	CEP-GAČR 205/06/P185	Comparison of morphotectonics and geomorphic effect of surface uplift in the culmination part of flysch Western Carpathians and the Crimean Mountains	210

Commercial contracts

Coordinator	Provider (agency)	Project title	Grant (ths. CZK)
M. Adamec	MENV	Analysis of anthropic influences in the most valued parts of CHKO Jeseníky	140

14.6 Equipment

- L003 Geologic laboratory (Electric water-stage indicator, sensor PH, sensor for conductivity measurement, sensor for temperature measurement).
- L 203 Dendrogeomorphology laboratory (Dendrochronological TimeTable for measurement, binocular microscope, light device, software Bundled).
- L 204 13 pedologieGranulometry and sedimentology laboratory, (Impact hammer - Schmidt Hammer type L, Schmidt Hammer type N, complete granulometric set FRITSCH – shaking apparatus Analysette 3 and for, set of 9 granulometric sieve, ultrasonic purifier, electronic scales OHAUS, software AUTOSIEB, 1 PC).
- L 205 4 Photogrammetry and dynamic geomorphology laboratory (1 PC, software MicroStation, Z/I Imaging, drilling rig, geophysical set).

- L 303 2 Digital cartography laboratory (Plotter HP DesignJet 800 ps A1, printer HP DeskJet 1220C, digitizer Summagraphics A0-Mikrogrid III, 2 PC, ArcInfo 9.0).
- L 304 - Map archive (Hand held laser rangefinder, theodolite, geodetic GPS instruments, GTS 212 total station, hand held GPS Garmin).
- L 305 16 GIS laboratory (16 PC, dataprojector, software ArcGis 9.2, MicroStation v. 8 – 5 licences, Gramis 56).
- L 403 19 DPZ laboratory (21 PC, dataprojector BENQ, PCI Geomatica 9.1, TopoL Remote Sensing 5.5).
- L 404 1 Preparatory room DPZ (Scanner Umax PowerLock 2100 XL, printer Brother 1870, 1 PC, software PCI Geomatica 9.1, TopoL Remote Sensing 5.5).

14.7 Conferences and seminars

- State of Geomorphological Research in 2007, 2. – 4. 4. 2007, Malenovice, international conference, 80 participants.
- GIS Day, 22050 participants (students and teachers from secondary schools), on 12. 11. 2007, Ostrava region and its neighbourhood.

14.8 Contacts and Cooperation

Cooperation with Universities and Research Institutes in the Czech Republic

- Faculty of Science, Charles University in Prague.
- Faculty of Forestry and Wood Technology, Mendel University of Agriculture and Forestry in Brno.
- Faculty of Science, Masaryk University in Brno.
- Faculty of Science, Palacky University in Olomouc.
- VŠB - Technical University of Ostrava VŠB-TU Ostrava.
- T.G. Masaryk Water Research Institute, branch office Ostrava.
- Czech Technical University in Prague.
- Czech hydrometeorological institute, branch office Ostrava.
- University of Defence in Brno.
- University of West Bohemia in Plzeň.
- University of South Bohemia in České Budějovice.
- Technical University of Liberec.
- Institute of Geonics AS CR, branch office Brno.

Cooperation with Universities and Research Institutes abroad

- Comenius University in Bratislava (Slovakia).
- Matej Bel University in Banska Bystrica (Slovakia).
- Institute of Geography, Slovak Academy of Science, Bratislava (Slovakia).
- Faculty of Earth Sciences, University of Silesia - Sosnowiec (Poland).
- Lviv State Ivan Franko University (Ukraine).
- University of Wroclaw, Wroclaw (Poland).
- University of British Columbia, Vancouver, (Canada).
- University of Tübingen, Tübingen (Germany).

Visits of Staff Members

Conferences 2007

Name	Dpt.	State	Place	Name of Conference	Date
Bohdálková, J.	FGG	Slovakia	Nitra	Conference	18. - 19. 4.
Hradecký, J.	FGG	China	Chengdo	Conference	3. - 13. 9.
Hradecký, J.	FGG	Hungary	PÉCS	Conference	24. - 27. 10.
Pánek, T.	FGG	China	Chengdo	Conference	3. - 13. 9.
Pánek, T.	FGG	Hungary	PÉCS	Conference	24. - 27. 10.
Sedlářiková, R.	FGG	Slovakia	Bratislava	17th Cartographic Conference	6. - 7. 9.
Sedlářiková, R-	FGG	the Netherlands	Wageningen	IALE World Congress	6. - 12. 7.
Smolková, V.	FGG	Hungary	PÉCS	Conference	24. - 27. 10.
Šilhán, K.	FGG	Hungary	PÉCS	Conference	24. - 27. 10.

Short stays abroad 2007 (less than 10 days)

Jméno	Odd.	Stát	Místo	Název akce	Datum
Hradecký, J.	FGG	Poland	Wroclaw	Výzkum	24. - 28. 4.
Hradecký, J.	FGG	Slovakia	Oščadnica	Výzkum	7. 6.
Hradecký, J.	FGG	Poland	Góry Suche	Výzkum	8. - 12. 10.
Pánek, T.	FGG	Poland	Wroclaw	Výzkum	24. - 28. 4.
Pánek, T.	FGG	Slovakia	Oščadnica	Výzkum	7. 6.
Pánek, T.	FGG	Poland	Góry Suche	Výzkum	8. - 12. 10.
Smolková, V.	FGG	Poland	Sosnowiec	odborná konzultace	12. 9.
Šilhán, K.	FGG	Poland	Sosnowiec	odborná konzultace	12. 9.

Long stays abroad (more than 10 days)

Name	Dpt.	State	Place	Name of Conference	Date
Hradecký, J.	FGG	The Ukraine	Balaklava	Research	6. - 26. 5.
Pánek, T.	FGG	The Ukraine	Balaklava	Research	6. - 26. 5.
Smolková, V.	FGG	The Ukraine	Balaklava	Research	6. - 26. 5.
Smolková, V.	FGG	Kyrgyzstan	Biškeek	Research Fellowship	21.6. - 6. 7.
Šilhán, K.	FGG	The Ukraine	Balaklava	Research	6. - 26. 5.

14.9 Membership in Professional Organisation

Jan Hradecký, PhD.:

- Czech Association of Geomorphologists,
- Czech Geographic Society,
- Czech Regional Organization of the International Association for Landscape Ecology,
- Regional Advisory Board of Agency for Nature Conservation and Landscape Protection of the Czech Republic (Moravian-Silesian Region).

Prof. Vladislav Kříž:

- Czech Geographic Society.

Monika Mulková, PhD.:

- Czech Society for Photogrammetry and Remote Sensing.

Lubomír Müller, PhD.:

- Česká geografická společnost,
- Česká statistická společnost,
- Česká společnost pro operační výzkum.

Tomáš Pánek, PhD.:

- Czech Association of Geomorphologists,
- Czech Geographical Society.

Tomáš Rozehnal:

- Czech Geological Society,
- Czech Geographical Society,
- Czech Hydrogeologic Association.

Veronika Smolková

- Czech Geographical Society
- Czech Association of Geomorphologists

14.10 Publications

Parts of monographic publications, articles

- PÁNEK, T., SMOLKOVÁ, V., HRADECKÝ, J., KIRCHNER, K. *Landslide dams in the northern part of Czech Flysch Carpathians: geomorphic evidence and imprints*. In Recent geomorphological hazards in Carpatho-Balakan-Dinaric region. 41st edition Kraków: Wydawnictwo Pandit, 2007. 20 pp. ISBN 83-88549-56-1. p. 77-96.

Articles in proceedings (proceedings of conferences or institutions)

- ŠILHÁN, K., PÁNEK, T. *Geomorphology of the Bučací brook basin (the Moravskoslezské Beskydy Mts.)*. In Stav geomorfologických výzkumů v roce 2007. 2007-04-02-2007-04-04 Malenovice. Ostrava: University of Ostrava, Ostrava, 2007. p. 52-52. ISBN 978-80-7368-296-5.
- ŠILHÁN, K., PÁNEK, T. *Basin morphometry as predispositional factor of debris flows genesis*. In Svahové deformace a pseudokras. 2007-05-29-2007-05-31 Vsetín. Vsetín: Česká geologická služba a Ústav struktury a mechaniky hornin AV ČR, 2007.
- PÁNEK, T., HRADECKÝ, J., SMOLKOVÁ, V., ŠILHÁN, K. *Large landslides in the Crimean Mountains: case studies from the main ridge and northeast foothills*. In Carpatho-Balkan-Dinaric Conference on Geomorphology. 2007-10-24-2007-10-28 Pecs. Pecs: University of Pecs, 2007. p. 51-51. ISBN 979-963-9632-13-4.
- HRADECKÝ, J., PŘIBYLA, Z. *Sources and parameters of river-bed sediments of torrent streams in the area of Moravskoslezské Beskydy Mts (case study Tyra Brook)*. In Stav

- geomorfologických výzkumů v roce 2007. 2007-04-02-2007-04-04 Malenovice. Ostrava: University of Ostrava, Ostrava, 2007. p. 18-19. ISBN 978-80-7368-296-5.
- HRADECKÝ, J. *Morávka River - Gravel-bed river: development trends of river bed morphology and restoration*. In Stav geomorfologických výzkumů v roce 2007. 2007-04-02-2007-04-04 Malenovice. Ostrava: University of Ostrava, Ostrava, 2007. p. 65-67. ISBN 978-80-7368-296-5.
 - BARTOŠOVÁ, R. *General knowledge on slide movement in Moravskoslezské Beskydy Mts GIS application*. In *Svahové deformace a pseudokras*. Vsetín. Vsetín: ČGS & ÚSMH AV ČR, 2007.
 - MULKOVÁ, M., SEDLÁRIKOVÁ, R. *Different changes and methods to evaluate developments in cultural and mining landscapes*. In IALE World Congress 2007. 2007-07-06-2007-07-12 Wageningen, Nizozemské království. Wageningen: IALE, 2007. p. 892-892. ISBN 978-90-78514-02-2.
 - HRADECKÝ, J. *(Non-) Sustained Management of Water Streams - Problems of Gravel-Bed Rivers (Czech Republic)*. In *Ekologie krajiny v ČR - výsledky, aplikace a perspektivy*. 2.2.2007-3.2.2007 Brno. Brno: CZ-IALE a LDF MZLU, 2007. p. 10-10. ISBN 978-80-7375-025-1.
 - SEDLÁRIKOVÁ, R. *Selected landscape - ecological characteristics of a part of Olše basin and their development in time*. In *Venkovská krajina 2007 (5. ročník mezinárodní mezioborové konference)*. 18. 5. 2007 - 20. 5. 2007 Hostětín, Bílé Karpaty, Česká republika. Kostelec nad Černými lesy: Česká společnost pro krajinnou ekologii, regionální organizace CZ-IALE, 2007. p. 137-141. ISBN 80-86386-88-0.
 - BOHDÁLKOVÁ, J. *Emergency conditions in pollution of water course in Odra basin*. In VIII. Vedecká konferencia doktorandov a mladých vedeckých pracovníkov. 18.4.-19.4. Nitra. Nitra: FPV UKF in Nitra, 2007. p. 449-454. ISBN 978-80-8094-106-2.
 - ŠILHÁN, K. *Morphometry*. In *Fyzická geografie - výzkum, vzdělávání, aplikace*. 2007-02-13-2007-02-14 Brno. Brno: Masaryk University, 2007. p. 167-171. ISBN 978-80-210-4508-8.
 - SMOLKOVÁ, V. *Real and potential changes in a ground plan of valley network in a region of Váh – Morava divide, the Slovak-Moravian Carpathians*. In *Fyzická geografie - teorie a aplikace, Výroční konference Fyzickogeografické sekce České geografické společnosti*. 2006-02-14-2006-02-15 Brno. Brno: Masaryk University in Brno, 2007. p. 115-120. ISBN 978-80-210-4323-7.
 - SMOLKOVÁ, V., PÁNEK, T., HRADECKÝ, J. *Landslide Dams in a Czech part of the Flysch Carpathians: basic types, geomorphometry, sedimentology and dating*. In *Stav geomorfologických výzkumů v roce 2007, Mezinárodní geomorfologická konference*. 2007-04-02-2007-04-04 Malenovice. Ostrava: University of Ostrava, Ostrava, 2007. p. 51-52. ISBN 978-80-7368-296-5.
 - PÁNEK, T., HRADECKÝ, J., SMOLKOVÁ, V., ŠILHÁN, K. *Quaternary development of the relief on the outer cuesta of the Crimean Mountains (Ukraine)*. In *Česká geografie v evropském prostoru, XXI. sjezd České geografické společnosti*. 2006-08-30-2006-09-02 České Budějovice. České Budějovice: Jihočeská univerzita v Českých Budějovicích, 2007. p. 467-473. ISBN 978-80-7040-986-2.
 - SMOLKOVÁ, V., PÁNEK, T., HRADECKÝ, J. *Sedimentary filling of spaces blocked by slides in a Czech part of the Flysch Carpathians and possibilities of their dating*. In *Svahové deformace a pseudokras*. 2007-05-29-2007-05-31 Vsetín. Vsetín: Česká geologická služba a Ústav struktury a mechaniky hornin AV ČR, 2007.
 - BOHDÁLKOVÁ, J. *Emergency deterioration of the quality of surface water in Odra basin*. In 24. výroční konference Fyzickogeografické sekce České geografické

- společnosti. Brno. Brno: Masaryk University in Brno, 2007. p. 51-56. ISBN 978-80-210-4508-8.
- SMOLKOVÁ, V., PÁNEK, T., HRADECKÝ, J. *Landslide Dams in the Czech Part of the Flysch Carpathians*. In Carpatho-Balkan-Dinaric Regional Working Group of the IAG Conference on Geomorphology. 2007-10-24-2007-10-28 Pécs. Pécs: University of Pécs, 2007. p. 66-66. ISBN 978-963-9632-13-4.
 - DUŠEK, R. *Application of error model to resolve configurations of spatial distance intersection*. In Technical Computing Prag 2007. 2007-11-14-2007-11-14 Prague. Prague: Humusoft, 2007. p. 39-39. ISBN 978-80-7080-658-6.
 - ADAMEC, M., HANZLOVÁ, M., HORÁK, J., UNUCKA, J., ŽÍDEK, D. *Modelling hydrologic extremes with DPZ and GIS support*. In Povodně a změny v krajině. 2007-6-5-2007-6-5 Prague. Prague: UK Prague, 2007.
 - UNUCKA, J., ADAMEC, M. *Modelling the influence of land use on erosive processes with GIS support*. In Říční krajina. 2007-10-17-2007-10-17 Olomouc. Olomouc: UP Olomouc, 2007. p. 2007-10-1
 - DUŠEK, R., SEDLÁRIKOVÁ, R. *The perception of the pie charts in the thematic maps*. In 17. kartografická konferencia. 2007-09-06-2007-09-07 Bratislava, Slovenská republika. Bratislava : Kartografická spoločnosť Slovenskej republiky, 2007. p. 63-68. ISBN 978-80-89060-11-5.
 - BARTOŠOVÁ, R. *Creation of special-purpose engineering - geological maps of persistent conditions and maps of susceptibility to breaking stability of hillside in ArcGis application*. In 3. sjezd České geologické společnosti. 19.9.2007-22.9.2007 Volary. Prague: Česká geologická společnost, 2007. p. 8-8. ISBN 978-80-87139-11-0.
 - DUŠEK, R., DROZDEK, M. *Terrestrial digital fotogrammetry as a possible tool for monitoring the lateral erosion of water course*. In Mezinárodní geomorfologická konference. 2. 4. 2007-4. 4. 2007 Malenovice. Ostrava: University of Ostrava, 2007. p. 12-13. ISBN 978-80-7368-296-5.
 - DUŠEK, R., MACH, J. *Substitution of Křovák projection for geographical purposes*. In 17. kartografická konferencia. 6. 9. 2007-7. 9. 2007 Bratislava. Bratislava : Kartografická spoločnosť SR, 2007. p. 58-62. ISBN 978-80-89060-11-5.
 - HRADECKÝ, J. *Changes in sediment distribution of gravel-bed Carpathian rivers due to human impact*. In Carpatho-Balkan-Dinaric Conference on Geomorphology. 2007-10-24-2007-10-28 Pécs. Pécs: Carpatho-Balkan-Dinaric Conference on Geomorphology, 2007. p. 27-27. ISBN 978-963-9632-13-4.
 - HRADECKÝ, J., PÁNEK, T., ADAMEC, M. *Deep-seated slope deformations - hazard factor of the culmination part of the Czech Carpathians*. In 23. výroční konference Fyzikogeografické sekce ČGS: Fyzická geografie - teorie a aplikace. 2006-02-14-2006-02-15 Brno. Brno: Masaryk University in Brno, 2007. p. 127-133. ISBN 978-80-210-4323-7.
 - ŠILHÁN, K., PÁNEK, T. *Debris flows in the culmination part of the Czech Flysch Carpathians*. In Carpatho-Balkan-Dinaric conference on geomorphology. 2007-10-24-2007-28-10 Pécs. Pécs: University of Pécs, 2007. p. 64-64. ISBN 978-963-9632-13-4.

Articles in periodical publications (newspapers, magazines)

- HRADECKÝ, J., PÁNEK, T. *Deep-seated gravitational slope deformations and their influence on landslide hazard progression (case studies from the culmination part of the Czech Carpathians)*. In Natural Hazards. 2007, p.1-19, ISSN 0921-030X .

- HRADECKÝ, J., PÁNEK, T., KLIMOVÁ, R. *Landslide complex in the northern part of the Silesian Beskydy Mountains (Czech Republic)*. In *Landslides*; Springer. 1. edition 2007, vol.4, p.53-62, ISSN 1612-510X .
- TRIZNA, M. *Runoff modelling and its spatial variability in dependence on land use*. In *Moravian geographical report*. 1st edition 2007, vol.15, no.3, p.41-57, ISSN 1210-8812.
- ŠILHÁN, K. *Ao Nang - Southern Thailand*. In *Země a cesty*. 108. edition 2007, no.2, p.10-11
- GÁBA, Z., VAŠIČKOVÁ, J., MATÝSEK, D., ROZEHNAL, T. *Field and laboratory documentation of a building site exposure on western edge of Běloutín, Moravian Gate*. In *Geologické výzkumy na Moravě a ve Slezsku*. 1st edition 2007, vol. XIV., p.17-21, ISSN 1212-6209.
- ŠILHÁN, K., PÁNEK, T. *Application of electrical resistivity tomography (ERT) in geomorphology*. In *Miscellanea Geographica*. 13. edition 2007, p.53-58
- PÁNEK, T., HRADECKÝ, J., SMOLKOVÁ, V., ŠILHÁN, K. *Gigantic low-gradient landslides in the northern periphery of the Crimean Mountains (Ukraine)*. In *Geomorphology*, Elsevier. doi:10.1016/j.geomorph.2007.07.007. edition 2007, vol.doi:10.1016/j.geomorph.2007.07.007, no.doi:10.1016/j.geomorph.2007.07.007, p.55-85, ISSN 0169-555X.
- ŠILHÁN, K., PÁNEK, T. *Debris flows in the massive of the Smrk Mt. (The Moravskoslezské Beskydy Mts.; Czech Republic)*. In *Geomorphologia Slovaca et Bohemica*. 1st edition 2007, p.56-64
- DUŠEK, R., SKOŘEPA, Z. *Intersection of a Survey Line with a Circle (Quasipolar Method)*. In *Geodetický a kartografický obzor*. 2007, vol.53(95), no.4, p.67-72, ISSN 0016-7096.
- HRADECKÝ, J. *Cerrado brasileiro? Endangered biome of the Southern America*. In *Geografia*. 1st edition 2007, vol.15, p.25-29, ISSN 1335-9258.
- HRADECKÝ, J., PÁNEK, T. *Ouro Preto - metropolis of the Brazilian ore mountains*. In *Geografia*. 1st edition 2007, vol.15, p.30-32, ISSN 1335-9258.
- HRADECKÝ, J., PÁNEK, T. *Autonomous Republic of Crimea*. In *Geografické rozhledy*. 5th edition 2007, no.16, vol.2006/2007, p.26-27, ISSN 1210-3004.
- PÁNEK, T., SMOLKOVÁ, V., HRADECKÝ, J., KIRCHNER, K. *Landslide dams in the northern part of Czech Flysch Carpathians: geomorphic evidence and imprints*. In *Recent geomorphological hazards in Carpatho-Balkan-Dinaric region*. 41st edition Kraków: Wydawnictwo Pandit, 2007. 20 p. ISBN 83-88549-56-1. p. 77-96.

15 Department of Biology and Ecology

- Complex investigation of the environment with focus on anthropogenic factors in industrial region.
- Evaluation of mutagenic and carcinogenic effects of contaminants using specific bacterial detecting systems, methods of genetic analysis.
- Chorology and ecology of mosses.
- Ecology of herbivorous insect.
- Bioindication and biomonitoring of anthropogenic impact using invertebrate groups (Aranea, Odonata, Coleoptera).
- Population characteristics of ichthyocenosis of water streams and reservoir in Odra basin, anthropogenic influences on water ecosystems.
- Ecology and biology of original and invasive crayfish; systematic and ecology of crustacean.

15.1 Staff

Head of the Department

Kateřina Malachov, Assoc. Professor

Deputy Head of the Department

Pavel Drozd, PhD.

Secretary to the Department

Petra Greplov

Teaching staff

Professors

Jn Gper

Assoc. Professors

Zdeněk Āuriš
Vclav Krpeš
Bohumr Lojksek
Kateřina Malachov

Assistant Professors

Šrka Cimalov
Aleš Dolny
Pavel Drozd
Petr Kočrek
Svatava Kubicov
Zdeněk Majkus

Zuzana Pavlíčková
 Petr Pečínka
 Vítězslav Plášek
 Hana Sezimová
 Jan Ševčík
 Tomáš Tureček
 Michal Živný

Others:

Ludmila Drobíková
 Ivona Horká
 Eva Martinkovská

Changes carried out during the course of 2007:

On 1. 9. Jan Ševčík, PhD. became a full-time teacher with 75% teaching duty.

On 10. 9. Hana Sezimová, PhD. became a full-time teacher.

15.2 Study programmes

Code of the study programme ¹⁶	Title of the study programme	Title of the study major ¹⁷⁾	Length of the study ¹⁸⁾			
			B	N,M	P	FS
B1501	Biology	Systematic Biology and Ecology	3			P
B1501	Biology	Applied ecology	3			P
B1501	Biology	Biology (studied in a combination of two subjects)	3			P
N1501	Biology	Systematic biology and ecology		2		P
N1501	Biology	Teaching for Secondary Schools - Biology(studied in a combination of two subjects)		2		P
N1501	Biology	Teaching for Secondary Schools - Biology		2		P
N7503	Teaching for Primary Schools	Teaching for Primary Schools – Biology (studied in a combination of two subjects)		2		P
M7503	Teaching for Primary Schools	Teaching for Primary Schools - Biology		4		P
M7504	Teaching for Secondary Schools	Teaching for Secondary Schools - Biology		5		P

¹⁶⁾ B – bachelor study programme, N - master study programme following bachelof study programme, M - Master study programme, P – doctoral study programme.

¹⁷⁾ Study programmes marked with an asterisk can (ordinarily) be studied only in a chosen study programme in pairs.

¹⁸⁾ P – full time study, K – combined study form, D – distance form of study;

15.3 Theses

Bachelor theses

- BAŇASOVÁ, Zuzana: *The downhill courses in the territory of Protected area of the Slovak paradise in relation to nature protection*. Supervisor: Lojkásek Bohumír
- CAJSBERGEROVÁ, Hana: *The influence of Slezská Harta water reservoir on the water quality of the Kružberk water reservoir*. Supervisor: Lojkásek Bohumír
- CZERNEROVÁ, Dana: *The interactions between epiphytic bryophytes and bark of trees*. Supervisor: Plášek Vítězslav
- DOBEŠ, Antonín: *Contribution to the foraging behaviour of the marsh harrier (CIRCUS AERUGINOSUS) over the selected patches in PLA Poodří*. Supervisor: Lojkásek Bohumír
- DOČKALOVÁ, Zuzana: *Research of genetic stability of selected pea (Pisum sativum L.) genotypes*. Supervisor: Pečinka Petr
- DOHNALOVÁ, Táňa: *Inactivation of FAD2 desaturase gene in flax (Linum usitatissimum L.) through the use of transgenic technology RNA interference*. Supervisor: Pečinka Petr
- DOMANSKÁ, Soňa: *Pieces of knowledge to distribution of water frogs Rana*. Supervisor: Lojkásek Bohumír
- EGRIOVÁ, Sabina: *Cultivars of Tagetes erecta L. suitable for cut*. Supervisor: Tureček Tomáš
- FRANKOVÁ, Hana: *Epiphytic bryophytes in the Central Europe - the first analysis of ecological dates*. Supervisor: Plášek Vítězslav
- GALLOVÁ, Barbora: *Passableness of landscape for mammals in the area of Rožnov trough*. Supervisor: Lojkásek Bohumír
- HAJDUKOVÁ, Lenka: *Functional morphology of mandibles in grasshoppers (Orthoptera: Caelifera)*. Supervisor: Kočárek Petr
- HEDÉNEC, Petr: *Damage of woody plants by wooddestroying fungi in ZOO Ostrava*. Supervisor: Gáper Jan
- JUŘICA, Jan: *Mapping populations of the Dactylorhiza majalis (Rchb.) Hunt et Summerhayes subsp. majalis in the Odersko microregion*. Supervisor: Cimalová Šárka
- LUPTOVCOVÁ, Terézia: *The air pollution in Žilina region*. Supervisor: Lojkásek Bohumír
- LYSKOVÁ, Martina: *The occurrence of Staphylococcus aureus resistant to an oxacilin in nosocomial infection*. Supervisor: Malachová Kateřina
- MATOCHOVÁ, Mirka: *Utilization of a phytohormone auxin for reproducing of Citrus genus*. Supervisor: Tureček Tomáš
- MEDZIHORSKÝ, Vladimír: *Microhabitat selection for forest small mammals (Apodemus flavicollis, Clethrionomys glareolus, Sorex araneus)*. Supervisor: Lojkásek Bohumír
- MIKOLÁŠOVÁ, Eva: *Bird community in field area in Podbeskydí Hills*. Supervisor: Lojkásek Bohumír
- MOTÁKOVÁ, Natálie: *Screening of mutagenicity in tar asphalt substances*. Supervisor: Malachová Kateřina
- MRLINOVÁ, Vendula: *Evaluation of natura biotop (NATURA 2000) distribution in present small protected areas of Moravia-Silesia region*. Supervisor: Drozd Pavel
- NEČASOVÁ, Barbora: *The recapitulation of management activities in small protected areas in the surroundings of the village of Kurdějov, with attention to occurrence of Polyommatus Damonn*. Supervisor: Dolný Aleš

- NOCIAROVÁ, Dominika: *Bryoecological study of the species within Orthotrichaceae family in Beskydy Mts.*. Supervisor: Plášek Vítězslav
- NOWAKOVÁ, Hana: *The resurgence of activated sludge in choice sewage works.* Supervisor: Malachová Kateřina
- PLÁTEK, Michal: *Rove beetles (Coleoptera: Staphylinidae) of the Beskydy mountains meadow ecosystem.* Supervisor: Drozd Pavel
- PODSTAWKOVÁ, Daniela: *Bryoecological research of epiphytical bryophytes in Olše stream valley (Karvinsko region).* Supervisor: Plášek Vítězslav
- RYŠÁN, Michal: *Proposal for habit protection and management of tiger beetles from genus Cicindela in settling basin of František mine.* Supervisor: Kočárek Petr
- SEDLÁČKOVÁ, Jana: *Evaluate mutagenicity of dust and sludge producing by iron and steel industry by Ames test.* Supervisor: Malachová Kateřina
- SLOVÁČKOVÁ, Hana: *Biometry of Pontastacus leptodactylus in Karvina District.* Supervisor: Ďuriš Zdeněk
- SPÁČILOVÁ, Kateřina: *Evaluate mutagenicity of dust and sludge producing by iron and steel industry by SOS Chromotest.* Supervisor: Malachová Kateřina
- STIPPEROVÁ, Jana: *Microbiological Evaluation of Water Quality.* Supervisor: Malachová Kateřina
- SZKANDEROVÁ, Kateřina: *The river Lomná as a biocoridor for aquatic animals.* Supervisor: Lojkásek Bohumír
- ŠEBESTOVÁ, Šárka: *Bird society in an agricultural area of Hlucin.* Supervisor: Lojkásek Bohumír
- ŠIGUTOVÁ, Lucie: *Evaluation of condition of the Morávka river bank vegetation.* Supervisor: Cimalová Šárka
- ŠKUTOVÁ, Martina: *Prions infections and their detection.* Supervisor: Malachová Kateřina
- TAURKOVÁ, Eva: *Polypores on wood in selected parks in Ostrava.* Supervisor: Gáper Jan
- TOMAN, Marek: *Use of Poncirus trifoliata in vegetative reproduction of citrus plants.* Supervisor: Tureček Tomáš
- TROMBIKOVÁ, Karolina: *Habitat preferences of Buring Beetles (Silphidae) in Industrial Area of Ostrava.* Supervisor: Kočárek Petr
- VALASOVÁ, Aneta: *Organic Farming in the Czech Republic: Environmental Consequences, Present Situation, Outlooks.* Supervisor: Dolný Aleš
- VÁLOVÁ, Petra: *Water birds of some ponds in Olomouc and Prostějov district.* Supervisor: Lojkásek Bohumír
- VAŠÍČKOVÁ, Jana: *Biological assessment of toxic soil contaminators.* Supervisor: Malachová Kateřina
- VOJKOVSKÁ, Renata: *Freshwater mussels unionoida (MOLLUSCA: BIVALVIA) in Moravia-Silesian region.* Supervisor: Ďuriš Zdeněk
- VOLNÁ, Lenka: *Bird community in field area in Ostrava.* Supervisor: Lojkásek Bohumír
- WATZLAWIKOVÁ, Terezie: *Waterfowls of the river Opava and its surroundings.* Supervisor: Lojkásek Bohumír

Master theses

- ANTOŠ, Petr: *Local species diversity and the abundance of herbivorous insects on Populus tremula in natural and anthropogenic ecosystem.* Supervisor: Drozd Pavel

- CHRUDINA, Robert: *Population of the European river otter (Lutra lutra) in longitudinal profile of the Oder River*. Supervisor: Lojkásek Bohumír
- GAWLOVÁ, Zuzana: *Evaluate mutagenicity of frettings of road surfaces by Ames test*. Supervisor: Malachová Kateřina
- HANÁKOVÁ, Hana: *Pereskiopsis BrittonaRose as rootstock in vegetative reproduction some selected species of the tribe Cactaceae*. Supervisor: Tureček Tomáš
- HARABIŠ, Filip: *Occurrence, ecology and protection of Dragonfly Leucorrhinia Pectoralis (ODONATA) in mine subsidence in Karviná region*. Supervisor: Dolný Aleš
- HEJDUKOVÁ, Romana: *The hummingbirds (FAMILY TROCHILIDAE) in collections of Silesian Museum*. Supervisor: Lojkásek Bohumír
- HORKÁ, Ivona: *Shrimps (Crustacea: Decapoda) associated with sponges (Porifera: Demospongia) of the Caribbean Sea*. Supervisor: Ďuriš Zdeněk
- JANOŠKOVÁ, Lucie: *Ornithocenoses of the Komenského Sady Park in Ostrava*. Supervisor: Lojkásek Bohumír
- KAWULOKOVÁ, Jana: *Aquatic birds on ponds in Jistebník*. Supervisor: Lojkásek Bohumír
- KOLONIČNÁ, Táňa: *A Comparison of Methods for the Spatial Analysis in Plant Ecology*. Supervisor: Cimalová Šárka
- KRISTIAN, Jiří: *Analysis of biometric data of noble crayfish (Astacus astacus) in selected localities of the Moravian-Silesian region*. Supervisor: Ďuriš Zdeněk
- KUBAČÁKOVÁ, Vendula: *Water-fleas (Cladocera) taxocoenoses comparison at selected water reservoirs*. Supervisor: Drozd Pavel
- KŮDELOVÁ, Martina: *Sensitivity of luminescent bacteria affected by the incubation time*. Supervisor: Malachová Kateřina
- LUKAVSKÁ, Gabriela: *Bio monitoring of fens in Vsetím region with concentration on nature and introduced dragonflies (ODONATA) species*. Supervisor: Dolný Aleš
- MAREK, Ivan: *Wood-Destroying Fungi of Wood in Ostrava-Poruba Region*. Supervisor: Gáper Jan
- MIČANÍKOVÁ, Lucie: *Sex education at secondary school*. Supervisor: Kubicová Svatava
- PAVLÍKOVÁ, Kateřina: *Selected paramaters in population of dace Leuciscus leuciscus (Linnaeus, 1758) in the river Ondřejnice*. Supervisor: Lojkásek Bohumír
- PROCHÁZKOVÁ, Lenka: *Monitoring of occurrence of symptoms of Rhytisma acerinum on the maple trees in the chosen localities of the North Moravia*. Supervisor: Gáper Jan
- SVOBODOVÁ, Renáta: *The impact of soil humidity on palatability of leaves Corylus avellana*. Supervisor: Drozd Pavel
- ŠIGUTOVÁ, Miroslava: *Changes in zoocoenoses of benthic invertebrates in longitudinal profile of the Moravice River*. Supervisor: Ďuriš Zdeněk
- ŠIMKOVÁ, Šárka: *Carabid beetles (Coleoptera: Carabidae) at the steppe habitats of Štramberk town*. Supervisor: Drozd Pavel
- ŠIPOŠ, Jan: *Diurnal activity of predators on insects through vegetative period*. Supervisor: Drozd Pavel
- TRÁČÍK, Štěpán: *The bryological-ecology studies of Potštátská vrchovina and near surroundings*. Supervisor: Plášek Vítězslav
- VALOVÁ, Michaela: *Taxocoenose of Ostracods (OSTRACODA) of selected parts of the Moravian-Silesian region*. Supervisor: Drozd Pavel
- VALOVÁ, Olga: *Chosen ecological characteristics of population of the chub Leuciscus cephalus (Linnaeus, 1758) in the Ondřejnice River*. Supervisor: Lojkásek Bohumír

- VAŠIČKOVÁ, Lucie: *Characteristics of carabid beetles (Coleoptera, Carabidae) taxocoenosis with different management preserved forest habitats*. Supervisor: Drozd Pavel
- VERNEROVÁ, Petra: *Occurrence and ecology of dragonflies in a system of settling basin in Lazy mines (Silesia, Havířov)*. Supervisor: Dolný Aleš
- ŽÁKOVÁ, Vladana: *Differences in palatability of damaged and undamaged leaves of selected woody species*. Supervisor: Drozd Pavel

15.4 Research projects

Research projects financed by the Faculty of Science (Internal projects)

Coordinator	Provider (agency)	Project title	Grant (ths. CZK)
P. Pečinka	FPP	Investigation of the molecular genetic mechanisms effect of genotoxic substances	320

Research projects in 2007 (filed in CEP – Central evidence of projects)

Coordinator	Provider (agency)	Project title	Grant (ths. CZK)
K. Malachová	CEP-GAČR 106/07/1436	Friction materials based on polymer matrix containing metals and their impact on environment	383
Z. Ďuriš	CEP-GAAV IAA601870701	Factors influencing negative impact of invasive crayfish in the Czech Republic: migratory capability, reproduction, and pathogen transmission	182
P. Pečinka	CEP-GAAV IAA500040701	Interactions of wild type and mutant p53 proteins with damaged DNA and their roles in cellular response to anticancer chemotherapy	255
B. Lojkásek	CEP-MENV VaV- SPII2d1/9/07	The biological and ecological requirements of fishes: factors determining the function of fish ladders	82
P. Drozd	CEP-GAČR 206/07/0811	Host specificity and species diversity of bryophagous insect communities - key factors analysis	620

Development projects in 2007 (except of CEP – Central evidence of projects)

Coordinator	Provider (agency)	Project title	Grant (ths. CZK)
P. Kočárek	FRVŠ 1292/F4/a	Innovation and improving teaching: Laboratory experiments in physiology of animals and men.	234
Z. Pavlíčková	FRVŠ 1846/F4/a	Innovation of optional Laboratory experiments in Microbiology.	170
A. Dolný	FRVŠ 1887/F4/a	Innovation of teaching the subject: Determining Laboratory experiments in – invertebrate.	103

Z. Majkus	FRVŠ 1910/F4/b	Comparative embryology of vertebrate.	125
P. Pečinka	FRVŠ 1845/A/a	Establishing the laboratory of molecular biology at the Department of Biology and Ecology at the Faculty of Science, University of Ostrava, Ostrava.	1 694 INV

Commercial contracts

Coordinator	Provider (agency)	Project title	Grant (ths. CZK)
K. Malachová	Krásná Toun	Regeneration of forest ecosystem.	10
B. Lojkásek	GAAV	Ichthyological researches.	50
V. Krpeš	Ekotoxa Brno	Decrease of social functions of the forest as an effect of potential influence of ground ozone in a context of climatic changes.	23

15.5 Equipment

- C 608 Laboratory for Ecological Physiology and Anatomy of Plants including a Preparatory Room (Electrophoresis unit Biometry, Powerspply ELFO 200t and Cooling Set Heto CBN 8-30, Muffle furnace, Drying boxes HS62A, Thermostats, Analytical balances Sartorius, Dryer TS200, Microscope Zeiss, Rotation Mikrotome HS325, Sledge Mikrotome, Centrifuge, Rotation vacuum evaporator, Exhauster, Heating nests).
- C705, C705a Laboratory of Microbiology and Molecular Biology - (Incubators, sterilizers, centrifuges, shaking devices, microscopes, scales, stirrers, water bath, distilling apparatus).
- C 706 Laboratory of Toxicology and Genotoxicology (Lumistox 300, thermostat, water bath, Analytical balances, sterilizer, redistillation apparatus, spectrophotometer, vacuum evaporator, stirrer RZR 2020).
- L 338 Laboratory of Invertebrate Zoology (Local fume chamber for all workplaces, Microscopes and binocular magnifying glasses, photostereomicroscope, project video-stereomicroscope, equipment for underwater video- and photo documentation, field multi meter).
- L 244 – Classroom - 24 PC, data projector.
- L 429 - Classroom – data projector, PC, loudspeakers.

15.6 Conferences and seminars

- Oceanography afternoon, 17. 5. 2007 – FS OU, responsible person: Z. Ďuriš, 40 participants.
- Shrimps and sea anemone in the Red Sea. Oceanography afternoon “The Czech Republic and sea exploration”. České Budějovice, 23. 11. 2007. Lecturer: Z. Ďuriš.

Workshops

- International Bryological Days, Vyškov region, 20. - 24. 4. 2007 co-host: V. Plášek.
- Evolutionary anthropology, 10. 10. 2007, 12 participants, lecturer: Michal Živný.
- Formation of multicellularity in a process of evolution 31. 10. 2007, 13 participants, lecturer: Z. Majkus.
- Micro organisms and immunity, 22. 10. 2007, 12 participants, lecturer: Assoc. Professor Kateřina Malachová.
- Biologic education at primary and secondary schools in a programme “Creative school”, 31. 10., 12. 11., 4. 12., 12 participants, lecturer: Svatava Kubicová, place: BZ PřF OU.
- How to increase students’ interest in the study of sciences (seminar for secondary school teachers. at Moravia-Silesia Region), 20 participants, responsible persons: Svatava Kubicová, Marie Solárová.
- Seminar for teachers of science 1st grade ZŠ-Půda, 9. 10., 23. 10., 15 participants, lecturer: Svatava Kubicová.
- Ecology – science or ideology? 11. 5. 2007, Cultural centre Poruba, 35 participants, lecturer: Pavel Drozd.
- Crayfish in the world and in the ČR. Centre for ecological education for fauna protection in Votice. 29. 3. 2007 lecturer: Z. Ďuriš.
- For secondary school pupils within the project MŠMT no. 901449 in 2007: Support of the interest of pupils in studying natural sciences – work with pupils at secondary schools, lecturers Šárka Cimalová, Petr Kočárek, 20 participants, 12. 12. 2007.

15.7 Contacts and cooperation

Cooperation with Universities and Research Institutions in the Czech Republic

- Institute of Vertebrate Biology, v.v.i., Brno.
- Institute of Entomology, České Budějovice.
- Institute of Microbiology, AS CR, v.v.i.
- Institute of Biophysics, AS CR, v.v.i.
- National Museum in Prague.
- Museum of Beskydy in Frýdek-Místek.
- Silesian Provincial Museum in Opava (membership in Advisory board: Journal of Silesian Provincial Museum).
- ZOO Ostrava.
- Silesian Regional Museum - Arboretum Nový Dvůr.
- The Forestry and Game Management Research Institute, Frýdek-Místek.
- Masaryk University, Faculty of Science and Faculty of Social Studies.
- Palacký University Olomouc Olomouc, Faculty of Science.
- Czech Botanical Society (membership in committee of Moravian-Silesian branch).
- T. G. Masaryk Water Research Institute, Prague, Ostrava.
- VŠB-Technical University of Ostrava.
- Charles University in Prague – Faculty of Science.
- Ostrava Museum.
- Institute of botany and zoology, biological section, FS, Masaryk University, Brno.
- Department of Biology, Ped.F., Masaryk University, Brno.

- Centre for young people interested in natural sciences: Stanice přírodovědců-Zařízení volného času Korunka, Ostrava.

Cooperation with Universities and Research Institutions abroad

- Faculty of Natural Sciences, Comenius University, Bratislava (Slovakia).
- Slovak University of Agriculture in Nitra, Horticulture and Landscape Engineering Faculty, Botanic garden (Slovakia).
- University in Lodž (Poland).
- Gdańsk University (Poland).
- University of Agriculture, Poznań (Poland).
- Medical Institute Sosnowiec (Poland).
- Univerzitet Slaski Katowice (Poland).
- Maria Curie-Skłodowska University, Lublin. (Poland).
- US Nature Heritage Centre, Katowice (Poland).
- Scientific Board of the journal: ATH, Bielsko Biala (Poland).
- Edition Board of the journal: Silesia Natura (Poland).
- Coe College, Cedar Rapids, Iowa, (USA).
- Knox College, Galesburg, Illinois, (USA).
- Institute of Oceanography, Vietnamese Academy of Sciences and Technology, Nha Trang, (Vietnam).
- Institute of Evolutionary Biology, Russian Academy of Sciences, Moscow, Russia.
- University of Sofia (Bulgaria).
- Bryological Centre in Vierves sur Viroin (Belgium).
- University in Wroclaw (Poland).
- Warminsko-Mazirska University in Olštyn (Poland).
- Durham University, (USA).
- Natural History Museum (London).

Visitors to the institute

- Prof. Edgar Wagner, University of Freiburg, 23. 3. – 1. 4. 2007.
- Dr. Marco Vervliet-Scheebaum, University of Freiburg, 23. 3. – 1. 4. 2007.
- Dr. Ivan N. Marin, Laboratory of Ecology and Morphology of Marine Invertebrates, A.N.Severtzov Institute of Ecology and Evolution, Russian Academy of Sciences, Mosckva, Rusko, 2. 8. – 10. 12. 2007.
- Dr. Alisa Kosyan, Laboratory of Ecology and Morphology of Marine Invertebrates, A.N.Severtzov Institute of Ecology and Evolution, Russian Academy of Sciences, Prospect Lenina, 33, Moscow, 2. 8. – 10. 8.2007.
- Prof. Jan Zarnowiec, University in Bielsko-Biala, 18. – 20. 2007.
- Prof. Henryk Klama, University in Bielsko-Biala, 18. – 20. 2007.
- Prof. Henryk Kasza, University in Bielsko-Biala, 18. – 20. 2007.

Visits of Staff Members

- Ďuriš Z., Horká I., 4. 8. – 19. 9.2007. Research work, Institute of Oceanography, Vietnamese Academy of Sciences and Technology, Nha Trang, Vietnam.
- Malachová K., 11. – 14.12. 2007, Univerzitet Slaski Katowice, (Erasmus)

- Pavlíčková Z., Pečinka P. - University of Freiburg , Faculty of Biology 3. 6. - 10. 6. 2007, Germany.
- Plášek V., 9. - 15. 9. 2007. University of Barcelona (Erasmus).
- Ševčík J.: 13. – 16.11. 2007, Natural History Museum, London.

Conferences 2007

Name	Dpt.	Country	Place	Name of the Conference	Date
Dolný, A.	BE	Namibia	Swakopmund	Conference	15. - 26. 4.
Drozd,P.	BE	Poland	Opole	Conference	5. - 7. 12.
Majkus, Z.	BE	Slovakia	Východná	Conference	13. - 16. 9.
Malachová, K.	BE	Slovakia	T.Matliare	Conference	3. - 6. 9.
Pavlíčková, Z.	BE	Slovakia	T.Matliare	Conference	3. - 6. 9.
Plášek, V.	BE	Poland	Opole	Conference	5. - 7. 12.
Plášek, V.	BE	Belgium	Vierves	Conference	5. - 9. 6.
Ševčík, J.	BE	Poland	Opole	Conference	5. - 7. 12.

Short-term stays abroad 2007 (less than 10 days)

Name	Dpt.	Country	Place	Name of the Conference	Date
Drozd, P.	BE	Slovakia	Runina	Field excursion	9. - 15. 7.
Đuriš, Z.	BE	Poland	Hel	Biological practice	19. - 26. 7.
Lojkásek, B.	BE	Slovakia	Runina	Field excursion	9. - 15. 7.
Majkus, Z.	BE	Slovakia	Martin	Arachnology section	14. - 15. 3.
Tureček, T.	BE	Slovakia	Nitra	Doctoral study	27. 9.
Tureček, T.	BE	Slovakia	Nitra	Consultation	29. 10.
Tureček, T.	BE	Slovakia	Nitra	Consultation	22. - 23. 11.

Long-term stays abroad 2007 (more than 10 days)

Name	Dpt.	Country	Place	Name of the Conference	Date
Horká,I.	BE	Vietnam	Nha Trang	Research – grant KÚ-MSK	2.8. – 21.9.

15.8 Student research activities

- Ivona Horká, Project of Mobility: Study of diversity and ecology of selected groups of organisms of intertidal water in Vietnam.

15.9 Membership in Professional Organizations

Šárka Cimalová:

- Czech botanic society, member of the committee in Moravian-Silesian branch,
- Member of editing committee: Čas. the Silesian regional museum.

Aleš Dolný, PhD.:

- IALE (International Association for Landscape Ecology),
- P.I.O. - Societas Internationalis Odonatologica.

Assoc. Prof. Zdeněk Ďuriš:

- International Association of Astacology,
- Czech National Committee for cooperation with Intergovernmental Oceanographic Committee, UNESCO,
- Consultative committee for specialized program Crayfish by Czech Union of Conservators of the Nature,
- Advisory committee of a specialized programme Rak at ÚVV ČSOP.

Petr Kočárek, PhD.:

- Czech entomologic association, Prague,
- The Orthopterists Society, Wyoming, USA.

Assoc. Prof. Kateřina Malachová:

- J.G. Mendel Genetic Society,
- Czechoslovak Biological Society,
- European Environmental Mutagenesis Society,
- Biotechnological Society,
- International Biodeterioration and Biodegradation Society,
- Council for the European Conference for Molecular Biology,
- Editorial Board of the journal AUXILIUM SOCIALE-WSPARCIE SPOLECZNE.

Vítězslav Plášek, PhD.:

- American Bryological Society (ABLS),
- British Bryological Society,
- BASEE (Bryological Association of SE Europe),
- Slovak Botanical Society,
- Edition Board of the journal: Magazine: Silesian Museum Opava,
- IAB (International Association of Bryologists).

Tomáš Tureček:

- Association of Botanic Gardens in the Czech Republic.

15.10 Publications

Monographic publications

- PLÁŠEK, V., CIMALOVÁ, Š. *Regional botany*. 2007. 64 pp.
- ŠEVČÍK, J., KOČÁREK, P. *Fauna National natural landmarks of Landek*. 1st issue. Ostrava: BEK, Ostrava, 2007. 56 pp. ISBN 978-80-254-1048-6.

Parts of monographic publications, articles

- ĎURIŠ, Z. *Mantis shrimps (Crustacea, Stomatopoda) of Nhatrang Bay*. In Benthic Fauna of the Bay of Nhatrang, Southern Vietnam. 1. vyd. Moscow: KMK Scientific Press Ltd., 2007. p. 124-127, 2 pls.
- MAJKUS, Z. *Spiders of Landek*. In Fauna National natural landmarks of Landek. Ostrava: Biologicko-ekologický klub (BEK), občanské sdružení, 2007. ISBN 978-80-254-1048-6. p. 7-10.

- PLÁŠEK, V., FILIPOVÁ, K. *Bryophyta and Tracheophyta Natural landmarks Věřňovice*. In *Przyrodnicze wartości Poland-Czeskiego pogranicza jako wspólne dziedzictwo Unii Europejskiej*. Opole: Lis, J.A. & Mazur, M., 2007. p. 99-111.

Articles in proceedings (proceedings of conferences or institutions)

- PÁNEK, P., MALACHOVÁ, K., LACNÝ, Z., PAVLÍČKOVÁ, Z., GAZURKOVÁ, L. *Detection of tar in pavement asphalt*. In 59th Meeting of Chemists. 2007-09-02-2007-09-06 Tatranské Matliare. Bratislava: Slovak Chemical Society, 2007. p. 137-137. ISBN 1336-7242.
- MALACHOVÁ, K., PAVLÍČKOVÁ, Z., LEŠKOVÁ, J. *Mutagenicity bioassays for genotoxicity assessment of pyrometallurgical wastes*. In 24th Congress of the Czechoslovak Society for Microbiology. 2007-10-02-2007-10-05 Liberec. Prague: Czechoslovak Society for Microbiology, 2007. p. 204-204. ISBN 0009-0646.
- PIVOŇKOVÁ, H., PEČINKA, P., TICHÁ, O., FOJTA, M. *Recognition of negatively or positively supercoiled DNA topoisomers by the p53 protein*. In 32nd FEBS Congress - Molecular machines. 2007-07-07-2007-07-12 Vienna. 2007. p. 153-153.
- MALACHOVÁ, K., PAVLÍČKOVÁ, Z., PRAUS, P., TURICOVÁ, M. *Evaluation of antibacterial effects of intercalated montmorillonite*. In 24 th Congress of Czechoslovak Society for Microbiology. 2007-10-02-2007-10-05 Liberec. Prague: Czechoslovak Society for Microbiology, 2007. p. 40-40. ISBN 0009-0646.
- ŽIVNÝ, M. *Coins in graves and their interpretation in a context of social and spiritual changes in 11th and 12th centuries*. In 6th Anthropologic symposium. 29.6.2007-Plzeň. Plzeň: 2007. p. In press
- ŽIVNÝ, M. *Orientation of graves of Slavic graveyard in Moravia and its development in a Central-European context*. In I. Olomouc days of anthropology a biology. 5.9.2007-6.9.2007 Olomouc. Olomouc: 2007. p. In press.
- CIMALOVÁ, Š. *Landscape cover effects on weed vegetation composition (METHODOLOGY BASED ON USING GIS)*. In Threatened weedy plant species/ Ohrozené druhy burín. 2005-09-20-2005-09-21 Nitra. Nitra: Slovak University of Agriculture in Nitra, 2007. p. 15-17. ISBN 978-80-8069-949-9.
- CIMALOVÁ, Š. *Alien and invasive species of the Odra watershed river bank vegetation*. In *Przyrodnicze wartości Poland-Czeskiego pogranicza jako wspólne dziedzictwo Unii Europejskiej*. Opole, Poland. Opole: Lis, J.A. & Mazur, M., 2007. p. 221-221.
- KUBICOVÁ, P. *Educational trends in education of biology teachers*. In *Modulový systém celoživotního vzdělávání učitelů v Moravskoslezském kraji*. 26.9.2007-26.9.2007 Ostrava. Ostrava: OU in Ostrava, 2007. p. 41-44. ISBN 978-80-7368-394-8.
- KOČÁREK, P., HOLUŠA, J., VLK, R., MARHOUL, P. *Eumodicogryllus bordigallensis (Orthoptera: Gryllidae) in the Czech Republic*. In *Zoologické dny*. Brno. Brno: Masaryk University, 2007. p. 72-73. ISBN 978-80-903329-7-3.
- HOLUŠA, J., KOČÁREK, P., MATUŠKA, J., MARHOUL, P., MOUREK, J. *Saga pedo-opening the monitoring in the Czech Republic*. In *Zoologické dny*. Brno. Brno: Masaryk University, 2007. p. 68-68. ISBN 978-80-903329-7-3.
- BÁRTA, D., DOLNÝ, A. *Aeshna juncea in pictures - some methods of displaying the dragonflies*. In 26. Jahrestagung. Gesellschaft deutschsprachiger Odonatologen (GdO e. V.). 9.3.2007-11.3.2007 Dresden, Germany. Dresden: der Akademie der Sächsischen Landesstiftung Natur und Umwelt, 2007. p. 10-10.
- BULÁNKOVÁ, E., DOLNÝ, A., BÁRTA, D. *River Habitat Survey - a suitable method for the assessment of habitat requirements of rheophilous Odonata*. In 26th Jahrestagung.

- Gesellschaft deutschsprachiger Odonatologen (GdO e. V.). 9.3.2007-11.3.2007 Dresden, Germany. Dresden: der Akademie der Sächsischen Landesstiftung Natur und Umwelt, 2007. p. 15-16.
- DOLNÝ, A., HANEL, L. *Present knowledge on the Odonata of the Czech Republic, and ways and means of their protection.* In 26th Jahrestagung. Gesellschaft deutschsprachiger Odonatologen (GdO e. V.). 9.3.2007-11.3.2007 Dresden, Germany. . Dresden: der Akademie der Sächsischen Landesstiftung Natur und Umwelt, 2007. p. 20-21.
 - HARABIŠ, F., DOLNÝ, A. *Red list of dragonflies in the Czech part of Silesia.* In Zoologické dny Brno. 8.2.2007-9.2.2007 Brno. Brno: Institute of biology of vertebrates AV ČR, Brno, 2007. p. 63-63. ISBN 978-80-903329-7-3.
 - DROZD, P., DOLNÝ, A. *Insect ecology and magic diversity indices.* In Zoologické dny Brno. 8.2.2007-9.2.2007 Brno. Brno: Institute of biology of vertebrates AV ČR, Brno, 2007. p. 59-59. ISBN 978-80-903329-7-3.
 - DROZD, P., DOLNÝ, A. *Shannon, where is the highest species diversity in the world?.* In Kostecké inspirování. 1.2.2007-2.2.2007 Kostelec nad Černými lesy. Prague: ČZU Faculty of Forestry and Environment, 2007. p. 10-10. ISBN 978-80-213-1624-9.
 - HARABIŠ, F., DOLNÝ, A. *Leucorrhinia pectoralis: a new view on its requirements and (meta)population dynamics of "natural" species.* In Kostecké inspirování. 1.2.2007-2.2.2007 Kostelec nad Černými lesy. Prague: ČZU Faculty of Forestry and Environment, 2007. p. 14-14. ISBN 978-80-213-1624-9.
 - KUBICOVÁ, P. *Current state and perspectives of postgradual education of biology teachers at PřF OU.* In Celoživotní vzdělávání učitelů. 29.3.2007-30.3.2007 Malenovice. Ostrava: PřF OU, 2007. p. 64-68. ISBN 978-80-7368-295-8.
 - HORKÁ, I. *Biodiversity of river and litoral ecosystems of Khanh Hoa province Vietnam – partial study.* In Den tvůrčích činností Moravskoslezského kraje. 15.2.2007-15.2.2007 Ostrava. Ostrava: VŠB - Technical University of Ostrava, 2007. p. 23-26. ISBN 978-80-248-1327-1.
 - MAJKUS, Z., ŠEBEK, P. *Comparison of araneocenosis at Nížkého and Hrubý Jeseník.* In Arachnologický výzkum v strednej Európe so zameraním na bioindikačný význam pavúkovcov. Východná. Bratislava: Institute of zoology SAV, 2007. p. 24-26.
 - HUTYROVÁ, B., HORKÁ, I., ĎURIŠ, Z. *Gonadosomatic and hepatopancreatic indexes in crayfish *Orconectes limosus* in the Czech Republic.* In Zoologické dny. 2007-02-08-2007-02-09 Brno. Brno: Institute of Biology of Vertebrates AV ČR, 2007. p. 38-39. ISBN 978-80-903329-7-3.
 - DOLNÝ, A., DROZD, P., BUCZYŃSKI, P., VESELÝ, M., BULÁNKOVÁ, E. *Distribution and habitat preferences of peat-bog and fen dragonfly species in Central Europe.* In 5th WDA International Symposium of Odonatology, April 2007, Swakopmund, Namibia. 16.4.2007-20.4.2007 Swakopmund, Namibia. Swakopmund, Namibia: WDA, 2007. p. 19-19.
 - PLÁŠEK, V., FRANKOVÁ, H., NOCIAROVÁ, D., PODSTAWKOVÁ, D. *Distribution and ecological requirements of mosses in Moravská brána gate.* In Przyrodnicze wartości Poland-Czeskiego pogranicza jako wspólne dziedzictwo Unii Europejskiej. Opole, Poland. Opole: Lis, J.A. & Mazur, M. , 2007. p. 221-221.
 - ŠIPOŠ, J., DROZD, P. *Predation risk for entomocoenoses: key factors analysis.* In Zoologické dny Brno. 8.2.2007-9.2.2007 Brno. Brno: Institute of Biology of Vertebrates AV ČR, Brno, 2007. p. 96-97. ISBN 978-80-903329-7-3.
 - JAŠÍK, M., DROZD, P. *Influence of moss layer presence on the composition of epigeic beetles entomocoenosis.* In Zoologické dny Brno. 8.2.2007-9.2.2007 Brno. Brno: Institute of Biology of Vertebrates AV ČR, Brno, 2007. p. 70-71. ISBN 978-80-903329-7-3.

- JAŠÍK, M., DROZD, P. *Do the bryobionts prefer mosses?* In Kostecké inspirování. 1.2.2007-2.2.2007 Kostelec nad Černými lesy. Prague: ČZU Faculty of Forestry and Environment, 2007. p. 16-16. ISBN 978-80-213-1624-9.
- SVOBODOVÁ, R., DROZD, P. *Influence of soil water content on palatability of leaves of *Corylus avellana*.* In Kostecké inspirování. 1.2.2007-2.2.2007 Kostelec nad Černými lesy. Prague: ČZU Faculty of Forestry and Environment, 2007. p. 32-32. ISBN 978-80-213-1624-9jav.
- ŠIPOŠ, J., DROZD, P. *Diurnal changes of predation stress on entomocenózy.* In Kostecké inspirování. 1.2.2007-2.2.2007 Kostelec nad Černými lesy. Prague: ČZU Faculty of Forestry and Environment, 2007. p. 31-31. ISBN 978-80-213-1624-9.
- FRANKOVÁ, H., NOCIAROVÁ, D., PODSTAWKOVÁ, D., PLÁŠEK, V., DROZD, P. *Chorology, ecology & host specificity of epiphytic bryophytes in Central Europe.* In Kostecké inspirování. 2007-02-01-2007-02-02 Kostelec nad Černými lesy. Prague: ČZU Faculty of Forestry and Environment, 2007. p. 11-11. ISBN 978-80-213-1624-9.
- DROZD, P. *Analysis of generic diversity of insect HKO Poodří.* In Przyrodnicze wartości Poland-Czeskiego pogranicza jako wspólne dziedzictwo Unii Europejskiej. 2007-12-06-2007-12-06 Opole, Poland. Opole : Lis, J.A. & Mazur, M. , 2007. p. 217-217. ISBN 978-83-7395-269-0.
- ČERVENĚ, J., PAVLÍČKOVÁ, Z., MALACHOVÁ, K., PEČINKA, P. *Usage of DNA repair enzymes for detection of DNA base damage induced by mutagenic and genotoxic compounds.* In 59th Meeting of Chemists. 2007-09-02-2007-09-06 Tatranské Matliare. Bratislava : Slovak Chemical Society, 2007. p. 136-136. ISBN 1336-7242.
- PAVLÍČKOVÁ, Z., ČERVENĚ, J., MALACHOVÁ, K., PEČINKA, P. *Detection of genotoxicity of chemical compounds using direct cleavage of sugar-phosphate backbone in supercoiled plasmid DNA.* In 59th Meeting of Chemists. 2007-09-02-2007-09-06 Tatranské Matliare. Bratislava : Slovak Chemical Society, 2007. p. 217-217. ISBN 1336-7242.
- LEŠKOVÁ, J., MALACHOVÁ, K., PAVLÍČKOVÁ, Z. *Genotoxicity of pyrometallurgical waste materials.* In 59th Meeting of Chemists. 2007-09-02-2007-09-06 Tatranské Matliare. Bratislava : Slovak Chemical Society, 2007. p. 227-227. ISBN 1336-7242.
- PRAUS, P., MALACHOVÁ, K., TURICOVÁ, M., PAVLÍČKOVÁ, Z. *Montmorillonite modified with silver: Preparation and testing of antibacterial activity.* In 59th Meeting of Chemists. 2007-09-02-2007-09-06 Tatranské Matliare. Bratislava: Slovak Chemical Society, 2007. p. 178-178. ISBN 1336-7242.

Articles in periodical publications (newspapers, magazines)

- KRPEŠ, V. *Current experimental biology and jubilee of prof. Bohumil Němec.* In Bulletin Společnosti experimentální biologie rostlin. 2007, p.18-19
- PLÁŠEK, V. *Proving the existence of moss *Orthotrichum alpestre* Hornsch. ex Bruch & Schimp.* In Bryonora. 40th issue. 2007, p.14-18, ISSN 0862-8904.
- KOČÁREK, P., HOLUŠA, J. *Nomen nudum *Isophya tatriva* Mařan, 1957, belongs to *I. camptoxypha* Fieber, 1853 (Orthoptera: Tettigoniidae).* In ACTA ENTOMOLOGICA MUSEI NATIONALIS PRAGAE. 2007, vol. 47, p.1-2, ISSN 0374-1036.
- HÁJKOVÁ, P., PLÁŠEK, V., HÁJEK, M. *A contribution to the Bulgarian bryoflora.* In Phytol. Balcan. . 2007, vol. 13, p.141-145
- ŽIVNÝ, M. *Position of coins in Moravian graves and its reconstruction.* In Ve službách archeologie. 2007, vol. 2, p.138-147, ISSN 1802-5463.

- PLÁŠEK, V., DROZD, P., WIERZCHOLSKA, P. *The chorology, ecology & population biology of the genus Orthotrichum, Ulota & Zygodon in the central Europe. Part I. Methods & first results.* In *Nowellia Bryologica*. 2007, vol. 33, p.39-47, ISSN 1377-8412.
- KUČERA, J., KUBEŠOVÁ, P., HÁJEK, M., PLÁŠEK, V. *Nová bryologická literatura XVIII.* In *Bryonora*. 2007, vol. 40, p.53-65, ISSN 0862-8904.
- PLÁŠEK, V., WIERZCHOLSKA, P., MIKULÁŠKOVÁ, E. *Occurrence of the vegetative propagules in the moss Orthotrichum stramineum Hornsch. - a new piece of knowledge.* In *Čas. Slez. Muz. Opava (A)*. 2007, vol.56, p.43-47, ISSN 1211-3026.
- PIECUCH, J., LOJKÁSEK, B., LUSK, P., MAREK, T. *Spawning migration of brown trout, Salmo trutta in the Morávka Reservoir.* In *Folia Zoologica*. 1st issue. 2007, vol. 56, no.2, p.201 -212, ISSN 0139-7893.
- HÁJKOVÁ, P., SHAW, B., HÁJEK, M., HINTERLANG, D., PLÁŠEK, V. *The role of base saturation and altitude in habitat differentiation within Philonotis in springs and mires of three different European regions.* In *The Bryologist*. 110th issue. 2007, no. 4, p.776-787
- FOJCIK, B., STEBEL, A., FUDALI, E., PLÁŠEK, V., RUSINSKA, A., ZARNOWIEC, J. *Materialy do Brioflory Ojcowskiego Parku Narodowego.* In *Pradnik*, Krakow. 2007, vol. 17, p.79-94
- PLÁŠEK, V., WIERZCHOLSKA, P. *Orthotrichum, Ulota & Zygodon in the Central Europe - their chorology, ecology & conservation problems.* In *Nowellia bryologica*. 34th issue. *Vierves sur Viroin*: 2007, p.11-12, ISSN 1377-8412.
- PLÁŠEK, V., WIERZCHOLSKA, P. *Bryophytes collected during Bryological Meeting in Vierves-sur-Viroin.* In *Nowellia bryologica*. 34 issue. 2007, p.84-85
- DOLNÝ, A., MATĚJKA, P. *A contribution to population biology of Libellula fulva (Odonata: Libellulidae) on coal sludge sedimentation pond (Karviná? The Czech Republic).* In *Ekológia (Bratislava)*. 2007, vol. 26, no.4, p.341-351, ISSN 1335-342X.
- MISZTA, A., BOROŇ, M., CUBER, P., DOLNÝ, A. *Pojawienie się Aeshna affinis Vander Linden, 1820 i Crocothemis erythraea (BRULLE, 1832) w 2006 roku na zbiornikach pokopalnianych województwa śląskiego (Odonata: Aeshnidae, Libellulidae).* In *Odonatrix*. 2007, vol.3, no.2, p.42-46
- DROZD, P., PLÁŠEK, V., DOLNÝ, A., KOČÁREK, P., JAŠÍK, M. *Factors or mosses - what the bryobionts prefer?* In *Nowellia bryologica*. 34th issue. 2007, vol. 2007, p.9-10
- HÁJKOVÁ, P., PLÁŠEK, V., HÁJEK, M., SHAW, B., HRADÍLEK, Z. *New bryophyte records in the Balkans, 2.* In *Phytologica Balcanica*. 2007, vol.13, no.2, p.277-289
- PLÁŠEK, V. *Mechorosty zaznamenané během 14. jarního setkání Bryologicko lichenologické sekce v Ruprechtově na Drahanské vrchovině.-.* In *Bryonora*. 39. vyd. 2007, vol. 2007, p.25-38
- KOČÁREK, P. *Tetrix tuerki.* In *Ochrana přírody*. 2007, vol. 62, no. 3, p.36-36, ISSN 1210-258X.
- KOZUBÍKOVÁ, E., PETRUSEK, A., ĎURIŠ, Z., OIDTMANN, B. *Aphanomyces astaci, the crayfish plague pathogen, may be a common cause of crayfish mass mortalities in the Czech Republic.* In *Bulletin of the European Association of Fish Pathologists*. 2007, vol. 27, no. 2, p.79-82, ISSN 0108-0288.
- ĎURIŠ, Z., HORKÁ, I. *First finding of invasive Orconectes limosus (Rafinesque) in the region of Moravia and Silesia in the Czech Republic.* In *Časopis Slezského Muzea, Opava*. 2007, vol. 56, p.49-52, ISSN 0323-0627.
- HOLUŠA, J., KOČÁREK, P., VLK, R., MARHOUL, P. *Southern Cricket Eumodicogryllus bordigalensis (Orthoptera: Gryllidae) in the Czech Republic: new*

- records and notes on the biology and stridulation*. In Polish Journal of Entomology. 2007, vol. 76, p.47-55, ISSN 0032-3780.
- HOLUŠA, J., KOČÁREK, P., MARHOUL, P. *Recent expansion of Euchorthippus declivus (Orthoptera: Acrididae) in the Czech Republic*. In Čas. Slez. Muz. Opava (A). 2007, vol. 56, p.59-62, ISSN 0323-0627.
 - NOVOTNÝ, V., DROZD, P., MILLER, P., KULFÁN, M., JANDA, M., BASSET, Y., WEIBLEN, G. *RESPONSE TO COMMENT ON? Why Are There So Many Species of Herbivorous Insects in Tropical Rainforests*. In Science. 2007, vol. 315, p.1666-1666, ISSN 0036-8075.
 - DOLNÝ, A., PAVLÍK, P. *A phenologically interesting record of Sympetrum striolatum (Chorp.) (Anisoptera: Libellulidae)*. In Notulae Odonatologicae. 9th issue. 2007, vol. 6, p.108-108, ISSN 0166-6584.
 - HOLUŠA, J., KOČÁREK, P. *Saga – opening the monitoring in the Czech Republic*. In Živa. 2007, vol. 55, no. 3, p.124-125, ISSN 0044-4812.
 - KOČÁREK, P., HOLUŠA, J., MARHOUL, P. *First sightings of Ruspolia nitidula (Orthoptera: Tetigoniidae) and Mecostethus parapleurus (Orthoptera: Acrididae) after fifty years in the Czech Republic*. In Articulata. 2007, vol. 22, p.47-51, ISSN 0942-7066.
 - KOČÁREK, P. *Guanchia brignolii Vigna Taglianti, 1974 in Turkey (Dermaptera: Forficulidae)*. In Acta Entomologica Slovenica. 2007, vol. 15, p.91-94, ISSN 1318-1998.
 - KOČÁREK, P., GHAHARI, H., OSTOVAN, H. *Dermaptera of Iran - preliminary list of species*. In Klapalekiana. 2007, vol. 43, p.191-199, ISSN 1210-6100.
 - ĎURIŠ, Z., HORKÁ, I., PETRUSEK, A. *Invasive zebra mussel colonisation of invasive crayfish: a case study*. In Hydrobiologia. 590th issue. 2007, p.43-46
 - MISZTA, A., DOLNÝ, A. *Stanowiska chronionych i rzadkich gatunków ważek w województwie śląskim stwierdzone poza rezerwatami wodno-torfowiskowymi w latach 2003-2005 (Localities of protected and rare dragonfly species in the Silesian)*. In Odonatrix. 2007, vol. 3, no. 1, p.9-14
 - STEBEL, A., WIERZCHOLSKA, P., PLÁŠEK, V., STANIASZEK, M. *New localities of Orthodontium linare (Orthodontiaceae, Bryopsida) in the south-western Poland*. In Acta Botanica Silesiaca, Wrocław. Wrocław: University in Wrocław, 2007, vol.2005, p.167-172
 - ĎURIŠ, Z. *New Occurrence of Vercoia socotrana ĎURIŠ, 1992 (Crustacea, Decapoda, Crangonidae) in the Gulf of Aden, Western Indian Ocean*. In Senckenbergiana maritima. 2007, vol. 37, no. 1, p.1-4, ISSN 0080-889X.
 - PLÁŠEK, V., MARKOVÁ, I. *Orthotrichum pulchellum (Orthotrichaceae, Musci), new to the Czech Republic*. In Acta Musei Moraviae, Scientiae biologicae. 2007, vol.92, p.223-228, ISSN 1211-8788.

16 Department of Human Geography and Regional Development

Research activities

a) Human Geography and Regional Development

- The research of the Ostrava and Moravian-Silesian Region as the industrial and border region in the context of the development of the Czech Republic and the EU: Focus on restructuring; institutions and subjects of regional development; urbanization and suburbanization; deindustrialization and reindustrialization; environmental changes; labour migration and transborder labour market development; development of tourism.
- Innovative concepts and approaches to the territorial development and the role of institutions in the local and regional development: focus on marketing management in the development and restructuring of towns and regions; regional innovative systems, role of the soft localization factors in the development of industrial regions.

b) Political and Cultural Geography

- Geopolitical, Geocultural and Geoeconomic Processes Across the World with Specialization on the Post-Communist Area of Eurasia: Nations and Nationalism; Religions, Migrations, Multiculturalism and Pluralism; Politics and Geopolitical Conceptions; Conflicts and International Relations; Economic Integrations and Development.

c) Teaching geography

- Didactic Problems in Geography, Application of the European Dimension in All Types of Schools.

16.1 Staff

Head of the Department

Petr Rumpel, PhD.

Deputy Head of the Department

Monika Šumberová

Secretary to the Department

Jiřina Kučerová

Teaching staff

Professors

Jaroslav Vencálek
Arnošt Wahla

Associated Professors

Vladimír Baar
Jan Havrlant
Robert Ištok
Tadeusz Siwek
Petr Šindler

Assistant Professors

Pavel Bednář
Tomáš Drobík
Martin Kovář
Luděk Krtička
Kateřina Sidiropulu Janků
Monika Šumberová
Petr Wilam
Petr Žufan

Research project managers

Tomáš Boruta
Ondřej Slach

External teachers

Irena Eibenová
Klaudia Eibenová
Tomáš Hoch
Hana Chlebečková
Jiří Kern, Professor
Vincenc Kopeček
Jiří Krhut
Jan Malinovský, PhD.
Václav Lednický, Assoc. Professor
Petra Psíková
Jiří Novosák
Svatava Rumpelová
Lenka Říhová
Robert Stojanov
Marcela Šimíčková, PhD.
Eva Šmídáková
Lubor Tvrdý, PhD.
Petra Žižlavská

PhD. students (staff)

Tomáš Drobík

Branch of study: Politics specialization: political geography
These: Islamistic resistance as a form of anti-geopolitics
Supervisor: Assoc. Prof. Bořivoj Hnízdo
End: 2009 ((Faculty of Social Sciences UK Prague)

Pavel Bednář

Branch of study: Socio-economic geography and regional development
These: Transformation of retailing in Ostrava: a geographical approach
Supervisor: Assoc. Prof. Luděk Sýkora
End: 2008 (Faculty of Science UK Prague)

Kateřina Sidiropulu Janků, PhD.

Branch of study: Sociology
These: Better Life: Migration in Czech-Canadian Roma Families.
Supervisor: Csaba Szaló, PhD.
End: 26. 9. 2007 (FSS MU Brno)

Martin Kovář

Branch of study: Pedagogy
These: eLernings portals in profession preparation of geography teachers
Supervisor: Prof. Arnoš Wahla
End: 2009 (Faculty of Education MU Brno)

Monika Šumberová

Branch of study: International economic relations; specialization: International political relations
These: Diplomatic culture
Supervisor: Prof. Zuzana Lehmannová
End: 2009 (University of Economics in Pratur)

Petr Wilam

Branch of study: Regional geography and regional planning
These: Transborder labour market in czech border regions
Supervisor: Assoc. Prof. Vladimír Baar
End: 2008 (Fakulty of Science MU Brno)

Petr Žufan, PhD.

Branch of study: Regional geography and regional development
 These: Czech organic farming in the context of the European Union 's
 Common Agricultural Policy (regional-geographic analysis)
 Supervisor: Assoc. Prof. Vladimír Baar
 End: 13. 11. 2007 (Fakulty of Science, Masaryk's University, Brno)

Tomáš Boruta

Branch of study: Regional geography and regional planning
 These: Innovative concepts of development of integrated transportation
 systems (ITS) in polycentric regions, given on example of the
 Moravian-Silesian Region
 Supervisor: Assoc. Prof. Vladimír Baar
 End: 2009 ((Faculty of Sciences MU Brno)

Ondřej Slach

Branch of study: Socio-economic geography and regional development
 These: The role of soft localization factors in the revitalization of old
 industrial regions: Ostrava agglomeration a Ruhr area
 comparison.
 Supervisor: Assoc. Prof. Jiří Blažek
 End: 2009 (Faculty of Science UK Praha)

16.2 PhD. Students

Hoch Tomáš
 Jiránek Jan
 Kopeček Vincenc
 Madlenám Tibor
 Mečiar Jozef

16.3 Study programmes

Code of the study programme ¹⁹⁾	Title of the study programme	Title of the study major ²⁰⁾	Length of the study ²¹⁾			
			B	N,M	P	FS
B1301	Geography	Political and Cultural Geography	3			P
B1301	Geography	Social Geography and Regional Development	3			P
B1301	Geography	Geography and Regional Development	3			P,K
B1301	Geography	Geography (two-branch study)	3			P
N1301	Geography	Political and Cultural Geography		2		P

¹⁹⁾ B – bachelor study programme, N - master study programme following bachelor study programme,
 M - master study programme, P - doctoral study programme.

²⁰⁾ Study programmes marked with an asterisk can (ordinarily) be studied only in a chosen study programme in pairs.

²¹⁾ P – full time study, D – distance form of study, K – combined study form;

N1301	Geography	Social Geography and Regional Development		2		P
N1301	Geography	Geography and Regional Development		2		P
N1301	Geography	Teaching Geography for Secondary Schools (two-branch study)		2		P
N1301	Geography	Teaching Geography for Secondary Schools (one-branch study)		2		P
N7503	Teaching for Primary Schools	Teaching Geography for Primary Schools (two-branch study)		2		P
M1301	Geography	Geography		5		P
M1301	Geography	Political and Cultural Geography		5		P
M1301	Geography	Teaching Geography for Secondary Schools		5		P
M7503	Teaching for Primary Schools	Teaching Geography for Primary Schools		4		P
M7504	Teaching for Secondary Schools	Teaching Geography for Secondary Schools		5		P
P1301	Geography	Political and cultural Geography			3	P,K

16.4 Theses

Bachelor theses

- BAČOVÁ, Miroslava: *Territorial progress of Scandinavian countries*. Supervisor: Kovář Martin
- BAJER, Michal: *The development of integrated transport system of the city of Brno by way of example of the region Šlapanicko*. Supervisor: Bednář Pavel
- BAJER, Michal: *The influence of Islamic extremist movements on multicultural policy of France and the United Kingdom*. Supervisor: Kovář Martin
- BARTOŇ, Antonín: *Religious map of contemporary Europe*. Supervisor: Siwek Tadeusz
- BARTOŠOVÁ, Jana: *The characteristic of agrarian sector in the district of Frýdek-Místek*. Supervisor: Žufan Petr
- BAZGIEROVÁ, Dagmar: *External contacts of municipality Bystřice*. Supervisor: Siwek Tadeusz
- BENEŠ, Jan: *Geographical analysis of the producer services in Ostrava*. Supervisor: Bednář Pavel
- BĚŤÁKOVÁ, Martina: *The Non-governmental Non-profit Organisation and its Part on the Development of the Micro region of Vsetín*. Supervisor: Rumpel Petr
- CHLOPČÍKOVÁ, Kateřina: *Political process in Uganda in years 1986 to 2006*. Supervisor: Kovář Martin
- DAŇHELOVÁ, Michaela: *Segregation of Ethic minorities in London*. Supervisor: Bednář Pavel
- DOHNÁLKOVÁ, Miroslava: *Socioeconomical analysis of micro region Lipensko*. Supervisor: Wilam Petr
- DRÍMALOVÁ, Dita: *Foreign Politics of Communist Czechoslovakia Towards African Countries*. Supervisor: Siwek Tadeusz
- FIKER, Viktor: *New face of Karolina brownfield site and new face of the city of Ostrava*. Supervisor: Bednář Pavel
- GALAJDA, Jiří: *Chiapas, fight for independency?* Supervisor: Wilam Petr

-
- GALUSZKOVÁ, Lucie: *Muslim Minority in the Czech Republic*. Supervisor: Drobík Tomáš
 - GLOVAŤÁK, Marián: *Trends of demographical development of Latin America*. Supervisor: Wilam Petr
 - GORZOLKOVÁ, Renata: *Cuba on the international scene during the reign of Fidel Castro*. Supervisor: Siwek Tadeusz
 - HUŇKA, Miroslav: *Recent situation of the automobile industry in the Czech Republic*. Supervisor: Wilam Petr
 - HYLASOVÁ, Dagmar: *Urban retail structure of Frydek-Mistek*. Supervisor: Bednář Pavel
 - INSPEKTOR, Pavel: *Geography of industrial object Optys GmpH*. Supervisor: Wilam Petr
 - JANÍČEK, Dominik: *Comparison of Canadian and Australian policies of multiculturalism*. Supervisor: Siwek Tadeusz
 - JELÍNEK, Jan: *Political-Geographical analysis of Uzbekistan*. Supervisor: Siwek Tadeusz
 - KADERKOVÁ, Jana: *Racial and ethnic segregation in San Francisco bay area*. Supervisor: Bednář Pavel
 - KADLEC, Pavel: *Analysis of elections in Havířov in relation to the social structure of inhabitants*. Supervisor: Šumberová Monika
 - KIELAR, Jan: *The Arabian peninsula delimitation 1918 - 2006*. Supervisor: Kovář Martin
 - KLIMENTOVÁ, Eva: *Civil missions within the frame of the Common Foreign and Security Policy of EU*. Supervisor: Šumberová Monika
 - KNEJP, Jan: *Islamic Political Subjects and their Influence on Egyptian Policy*. Supervisor: Drobík Tomáš
 - KOPECKÁ, Lenka: *The Progress of the Population in District Břeclav*. Supervisor: Siwek Tadeusz
 - KORNFEILOVÁ, Lucie: *Development and forming of Belarusian nation*. Supervisor: Žufan Petr
 - KOŘÍNKOVÁ, Lucie: *Geography of the industrial plant Meopta Optika s.r.o.* Supervisor: Wilam Petr
 - KOZUBALOVÁ, Alena: *Socially - spatial structure of town Třinec*. Supervisor: Bednář Pavel
 - KRČKOVÁ, Lucie: *Jezidism and its position in the contemporary world*. Supervisor: Baar Vladimír
 - KRULOVÁ, Jana: *Characteristic of the Znojmo winegrowing sub-region*. Supervisor: Žufan Petr
 - KUBÍKOVÁ, Liběna: *Energy policy of European Union*. Supervisor: Šumberová Monika
 - KUBINCOVÁ, Jarmila: *Geography of industrial plant ZEVETA Bojkovice, joint-stock company*. Supervisor: Wilam Petr
 - KUPSKÝ, Adam: *The Comparison of separatist and autonomous movements of Indonesia*. Supervisor: Kovář Martin
 - KURSA, Filip: *The voting system changes in the Czech Republic and preference of political parties in dependence on residence size*. Supervisor: Šumberová Monika
 - MÁCHOVÁ, Ivana: *Case study of the development of municipality Kravaře*. Supervisor: Rumpel Petr
 - MARKOVÁ, Lenka: *Geography of the Salm s.r.o.* Supervisor: Wilam Petr
 - MARKOVÁ, Natálie: *Analysis of wine tourism in Slovakia*. Supervisor: Havrlant Jan

- MARTINÍK, Ladislav: *Industrial clusters and their exercise in regional development (and exercises of clusters in Czech Republic)*. Supervisor: Wilam Petr
- MARYNIOK, Tomáš: *Structural changing process of chosen industrial branches in Třinec Region*. Supervisor: Havrlant Jan
- MIČKOVÁ, Barbora: *Comparison of religious situation in Poland and Czech Republic in communist period*. Supervisor: Siwek Tadeusz
- MILOTOVÁ, Kateřina: *Slums in Cairo*. Supervisor: Bednář Pavel
- MLČÁK, Ondřej: *Bahatism – Cultural geographical Analysis*. Supervisor: Baar Vladimír
- MRKVICOVÁ, Iva: *Technical monuments of Ostrava*. Supervisor: Wilam Petr
- NĚMEC, Michal: *Brownfields in Prague*. Supervisor: Bednář Pavel
- NEPUSTIL, Miroslav: *The local struggle for territories in CR: The case study of the construction of the dam in Nové Heřminovy*. Supervisor: Šumberová Monika
- NESTROJOVÁ, Zuzana: *Internally displaced people - genesis of concept and current trends*. Supervisor: Sidiropulu Janků Kateřina
- PALICOVÁ, Helena: *Comparing of Reception Systems for Asylum Seekers*. Supervisor: Sidiropulu Janků Kateřina
- PAVLÍČKOVÁ, Šárka: *Analysis of industry in microregion Prostějov*. Supervisor: Havrlant Jan
- PĚNČÍK, Jaromír: *Case study of mikroregion Kroměřížsko*. Supervisor: Rumpel Petr
- PIPA, Radek: *Preconditions for tourist trade in tourist region Vysočina*. Supervisor: Havrlant Jan
- PLACHTOVÁ, Michaela: *Present language situation and language policy in Italy*. Supervisor: Siwek Tadeusz
- PLEVA, Martin: *Transnistria and Gagauzia - Separation or coexistence within Moldova?* Supervisor: Kovář Martin
- RUSINSKÁ, Kateřina: *The transformation of political structures of Armenia after the declaration of independency*. Supervisor: Baar Vladimír
- RUSKOVÁ, Eva: *Analysis of industry in Nový Jičín Region*. Supervisor: Havrlant Jan
- SIKOROVÁ, Pavla: *External contacts of village Mosty u Jablunkova*. Supervisor: Siwek Tadeusz
- SNOPKOVÁ, Kateřina: *Analysis of Election in Lower Saxony*. Supervisor: Šumberová Monika
- STRÍBRNSKÁ, Eva: *Development of industrial zones in Olomouc region*. Supervisor: Wilam Petr
- SVOBODA, Tomáš: *Islamist organizations in politics of Turkey*. Supervisor: Drobík Tomáš
- ŠNAJDROVÁ, Michaela: *Arab culture influence on Andalus society*. Supervisor: Sidiropulu Janků Kateřina
- ŠTEBEL, Jan: *The Place of Czechoslovakia in the Strategic Plans of Warsaw Treaty Organization in the Cold War*. Supervisor: Siwek Tadeusz
- TLAŠKOVÁ, Eva: *Internal labour migration of population in Moravian-Silesian region in 1980-2006*. Supervisor: Sidiropulu Janků Kateřina
- VATERKA, Anton: *Language policy in Slovakia*. Supervisor: Siwek Tadeusz
- VEČEŘ, Ondřej: *Brownfields in Olomouc*. Supervisor: Bednář Pavel
- VOSTŘELOVÁ, Ilona: *Ethnic Question in Spain and its Contemporary Solution*. Supervisor: Siwek Tadeusz
- ZELINKA, Lukáš: *Forming of political system in Turkey during 20th century and tokens of political islam today*. Supervisor: Drobík Tomáš

- ZETKOVÁ, Eliška: *Geography of the Moravian glassworks in Květná*. Supervisor: Wilam Petr

Diploma theses

- BEDNÁŘOVÁ, Karolina: *Territorial identity of pupils of the basic school in Město Albrechtice*. Supervisor: Vencálek Jaroslav
- BORÝSKOVÁ, Eva: *The role of a global metropolis in the life of a state: Paris versus the regional centres of France*. Supervisor: Šindler Petr
- CHARBULÁK, Jakub: *Specific position of the DPRK in the World Politics*. Supervisor: Baar Vladimír
- CHLEBIŠ, Filip: *Innovative approaches to the development in chosen municipalities in the Czech Republic*. Supervisor: Rumpel Petr
- DOBROVOLNÝ, Jan: *Teaching of planetary geography curriculum using the internet*. Supervisor: Wahla Arnošt
- GUŘANOVÁ, Lucie: *Comparison of the transformation of the housing policy in the Visegrád group*. Supervisor: Bednář Pavel
- HECZKO, Petr: *Innovative approaches to the development in chosen German cities and regions*. Supervisor: Rumpel Petr
- HLAVICOVÁ, Milena: *Perception of the regional merits by inhabitants of the microregion Valašskokloboucko*. Supervisor: Vencálek Jaroslav
- HLÁVKOVÁ, Ladislava: *Territorial identity of elementary school pupils in Podivín*. Supervisor: Vencálek Jaroslav
- HÝBLOVÁ, Marie: *The Model solution of a thematic field of the Framework educational programme "Basic life conditions"*. Supervisor: Vencálek Jaroslav
- JIRÁNEK, Jan: *Serbs in Croatia*. Supervisor: Siwek Tadeusz
- KÍŠA, Tomáš: *Analysis of migrants flow and migrants' behavior and catchment areas in Karviná district event study for border town of Český Těšín*. Supervisor: Wilam Petr
- KLESLO, Tomáš: *The specific features of Ruthenian ethnic and the region of Carpathian Ruthenia*. Supervisor: Siwek Tadeusz
- KOLLÁROVÁ, Nina: *Latin American Model of Socialism - the Development of Cuba under Fidel Castro's regime*. Supervisor: Wilam Petr
- KORECKÁ, Jaroslava: *The image of microregion of Vítkov*. Supervisor: Vencálek Jaroslav
- KORZEC, Roman: *Evaluation of impact of regional development agencies in Třinec region*. Supervisor: Rumpel Petr
- KRAKOVKA, Filip: *Problems of characterization authoritarian regimes in Subsaharan Africa*. Supervisor: Kovář Martin
- KUDĚLA, Jaroslav: *Image of town Ostravice*. Supervisor: Havrlant Jan
- ĽALÍK, Michal: *Transport Infrastructure and Service in the Moravian-Silesian Region and the Region of Ostrava. Transport Infrastructure in the Czech Republic during the Process of Transformation*. Supervisor: Wahla Arnošt
- LÁNSKÁ, Natálie: *Analysis of Geographical, cartographic and geo-informative education in educational programmes for basic school in the Czech Republic and France*. Supervisor: Wahla Arnošt
- LAŠTUVKOVÁ, Lucie: *The Maghreb countries from the viewpoint of cultural differences important for tourism*. Supervisor: Siwek Tadeusz
- MAZGAJ, Jakub: *Mutual Greek-Turkish Relations*. Supervisor: Baar Vladimír

- MELICHAR, Slavomír: *Regional Marketing in Regions of Pelhřimov, Třešť and Telč*. Supervisor: Rumpel Petr
- MIKULOVÁ, Veronika: *Territorial development of France*. Supervisor: Kovář Martin
- NOVOSADOVÁ, Jana: *Development of the road transportation in the Czech Republic since 1918*. Supervisor: Šindler Petr
- OBRACAJ, Janusz: *Selected aspects of the political and economic development of Turkmenistan after 1991*. Supervisor: Kovář Martin
- OŽANOVÁ, Lenka: *Political development in Haiti since 1957 until today*. Supervisor: Wilam Petr
- PATOČKA, Petr: *Development countries typology and their differentiation*. Supervisor: Wilam Petr
- POKOROVÁ, Lada: *Fair Trade - Beginning of a new phenomenon*. Supervisor: Šumberová Monika
- PRUDIL, Otakar: *Evaluation of strategic planning by selected towns and microregions*. Supervisor: Rumpel Petr
- SMOLNÍKOVÁ, Alexandra: *Territorial development of the Ottoman Empire*. Supervisor: Kovář Martin
- STRÁŽNICKÁ, Barbora: *Ecological agriculture in Bavaria*. Supervisor: Žufan Petr
- SVĚCHOVSKÝ, Adam: *A forgotten city: The urban district Slezská Ostrava as a city of decline or idle potential?*. Supervisor: Bednář Pavel
- ŠÁMALOVÁ, Alena: *Revitalization of uranium mining area in Česká Lípa district*. Supervisor: Havrlant Jan
- ŠÍN, Tomáš: *Environmental migration*. Supervisor: Šindler Petr
- ŠPAČEK, Martin: *Foreign policy of the Czech Republic since 1998*. Supervisor: Šumberová Monika
- ŠULÁK, Petr: *Innovative municipalities in the Czech Republic. Case studies - Čeladná and Jindřichovice pod Smrkem*. Supervisor: Rumpel Petr
- ŠVADLENKOVÁ, Veronika: *Safe City? Threats of International Terrorism in World Cities*. Supervisor: Bednář Pavel
- ŤAPTÍKOVÁ, Petra: *Territorial development of Palnd and Lithuania*. Supervisor: Kovář Martin
- TICHÝ, Václav: *Special Economic Zones in the People's Republic of China*. Supervisor: Baar Vladimír
- VALIŠOVÁ, Kateřina: *The development of the railway service in the Czech republic after the year 1918*. Supervisor: Šindler Petr
- ŽLEBEK, David: *Local identity of Pupils of the Elementary School in Nový Jičín*. Supervisor: Vencálek Jaroslav

16.5 Research projects

Research projects financed by the Faculty of Science (Internal projects)

Coordinator	Provider (agency)	Project title	Grant (ths. CZK)
V. Baar	FPP	Centre of political and cultural geography	620

Research projects in 2007 (filed in CEP – Central evidence of projects)

Coordinator	Provider (agency)	Project title	Grant (ths. CZK)
P. Rumpel	CEP-GAČR CRP/07/E005	Constructing Regional Advantage: Towards State-of-the-Art Regional Innovation System Policies in Europe?	112
P. Rumpel	CEP-MRD WD-35-07-1	Complex regional marketing as concept of the development of the rural peripheral region Jeseníky	1 263
P. Rumpel	CEP-MRD WD-61-07-1	The role of soft localizing factors within eliminating regional disparities in two structurally affected regions - Ostrava and Ústí nad Labem region	792

Running projects:**1) The role of soft localization factors in the elimination of regional disparities in old industrial regions of Ostrava and Usti nad Labem:**

- This research project financed by the Ministry of regional development in the period 2007-2010, Czech Republic, deals with the problematic of the role of soft localization factors in regional development. Interest areas defined for the needs of the project implementation are predominantly urban zones of structurally weak regions of Ostrava and Usti nad Labem.

2) Regional marketing as a new development concept for rural peripheral region Jeseníky:

- The objective of this research project financed in the period 2007-2010 by the Ministry of regional development, Czech Republic, is to elaborate a development strategy for the Jeseníky rural peripheral region, based on the theoretical concept of regional marketing. This project has two main aspects: theoretical and research oriented (the theme is an analysis of causal determinants of regional disparities) and application (the theme is a development concept and methodology for practice).

3) Constructing Regional Advantage. Towards state-of-the-art regional innovation system policies in EUROPE?

- EUROCORES European Science Foundation, Coordinator: Prof. Bjorn Asheim CIRCLE University of Lund, Czech coordinator: UK Praha Assoc. Prof. Jiří Blažek; Petr Rumpel, PhD., University of Ostrava, Department of Human Geography and Regional Development.

Development projects in 2007 (except of CEP – Central evidence of projects)

Coordinator	Provider (agency)	Project title	Grant (ths. CZK)
P. Rumpel	EU-Jean Monnet	European Module: Geographical Aspects of European Integration	137
M. Šumberová	EU-ESF	Innovation and internationalization of selected study programmes at University of Ostrava	2 398

16.6 Equipment

For study purposes:

- one fully equipped multimedia showroom (data projector, video recorder, TV, document camera),
- 3 classrooms equipped with data projector and loud-speakers,
- portable data projector,
- high speed Wi-Fi internet connection covering the whole building,
- study library equipped with down-to-date publications (monographic and periodical) lounges for students.

For research purposes:

- Software equipment (SPSS, ArcView, Corell, OCAD),
- company car for field research,
- camera,
- dictaphones,
- access to specialized research databases.

16.7 Conferences and seminars

- International conference: „Innovation in the development of urban districts and regions with the emphasis on the marketing management“, 29. - 31. 5. 2007.
- Conference venue: Ostrava, Scientific and technological park - Ostrava-Poruba, 70 participants.
- Workshop, 31. 5. 2007, Workshop organized within the conference, 10 participants.
- 12th Annual Tutorial for geography teachers, 19. 4. 2007, Tutorial venue: Department premises, 80 participants.

16.8 Contacts and Cooperation**Cooperation with Universities and Research Institutes in the Czech Republic**

- West Bohemian University Plzeň, Faculty of Economics, Centre of Regional Development (Jiří Ježek).
- Technical University Ostrava, Faculty of Economics, Department of European Integration (Assoc. Prof. Karel Skokan), Department of Regional Economics (Jan Malinovský).
- Silesian Institute Opava (Assoc. Prof. Radim Prokop).

- Charles University, Faculty of Science, Department of Human Geography and Regional Development (Assoc. Prof. Jiří Blažek).
- Regional Development Agency Ostrava (Pavla Břusková).
- Institute of Geonics Brno (Antonín Vaishar, Assoc. Prof. Karel Kirchner).

Cooperation with Universities and Research Institutes abroad

- CIMA Österreich, Austria – Ried im Innkreis (Roland Murauer).
- Leibniz Institute of Regional Geography Leipzig, Germany - Leibniz Institut für Länderkunde Leipzig (Prof. Sebastian Lentz, Prof. Joachim Burdack, Christoph Waack, Judith Miggelbrink).
- Matej Bel University Banská Bystrica, Slovakia, Faculty of Economics, Institute of Development of Municipalities and Regions (Anna Vaňová, PhD.).
- Matej Bel University Banská Bystrica, Slovakia, Faculty of Science, Institute of Geography.
- Regional Association Ruhrgebiet – Regionalverband Ruhr (Sabine Lange, Wilfried Dege).
- Prešov University, Slovakia, Faculty of Humanities and Natural Sciences, Department of Geography.
- Helmholtz-Zentrum für Umweltforschung GmbH Leipzig – UFZ, Department Stadt- und Umweltsoziologie Prof. Dr. Dieter Rink, Permoserstraße 15, 04318 Leipzig.

Visitors to the institute

Within the project „Lectures of foreign professors“ two very successful visits were realized and lectures of seven prominent professors of geography and sociology were organized.

- Noel Castree, University of Manchester, UK
- James W. Russell, Eastern Connecticut State University, USA
- Klaus Dodds, Royal Holloway, University of London, UK
- Sean Carter, University of Exeter, UK
- Kristian Stokke, University of Oslo, Norway
- Wojciech Janicki, University of Lublin, Poland
- Vladimir Kolossov, Institute of Geography, Russian Academy of Sciences, Russian Federation

Erasmus:

In 2007 number of students staying at foreign partner universities reached the level of 36 students (February 2007 – December 2007). In comparison to previous years the number of students studying at KSGRR raised rapidly. We prepared program and tutorship for 12 students who came from Romania, Turkey, Poland, and Spain. Last year four members of the faculty gave lectures at foreign partner universities within the programme LLP (Erasmus).

New contacts apart from Erasmus:

FM EHP and Norway –1 student at University of Telemark

Synchronization of interests between OECD and KSGRR, talks about possible future cooperation in Central Europe. Negotiation has not been finished yet.

Conferences 2007

Name	Dept.	Country	Place	Conference	Date
Drobík, T.	SGR	Poland	Lublin	Conference	9. - 12. 9.
Drobík, T.	SGR	Italy	Turin	Conference	13. - 15. 9.
Havrlant, J.	SGR	Slovakia	Košice	Conference	7. - 10. 11.
Novosák, J.	SGR	Slovakia	Bratislava	Developing help 2007	27. 6.
Rumpel, P.	SGR	Austria	Stockerau	Stadtmarketin und Citymanag.	4. - 6. 11.
Sidropulu, K.	SGR	Slovakia	Lipt.Mikuláš	Conference	6. 10.
Sidropulu, K.	SGR	Poland	Lublin	Conference	9. - 12. 9.
Siwek, T.	SGR	Germany	Drážďany	Teschen eine geteilte Stadt	13. - 15. 5.
Siwek, T.	SGR	Poland	Kruklanki	Seminary	10. - 15. 6.
Siwek, T.	SGR	Poland	Krakow	SGS Congress	25. 6.
Siwek, T.	SGR	Poland	Kielce	Meeting of Polish geograph. society	29. - 31. 8.
Siwek, T.	SGR	Poland	Lublin	Conference	9. - 13. 9.
Siwek, T.	SGR	Poland	Warsaw	Conference	18. -21.10.
Slach, O.	SGR	Austria	Stockerau	Stadtmarketin und City manag.	4. - 6. 11.
Stojanov, R.	SGR	Slovakia	Bratislava	Developing help 2007	27. 6.
Šumberová,M.	SGR	Italy	Turin	Conference	13. - 15. 9.
Šumberová,M.	SGR	Poland	Lublin	Conference	9. - 12. 9.
Vencálek, J.	SGR	Poland	Olsztyn	Conference	25. - 29. 4.
Vencálek, J.	SGR	Poland	Toruň	Conference	14. - 17. 10.
Wahla, A.	SGR	Slovakia	Bratislava	Conference	6. - 8. 9.

Short stays abroad 2007 (less than 10 days)

Name	Dpt.	Country	Place	Action	Date
Baar, V.	SGRR	Slovakia	Prešov	Negotiation at FHPV	22. 6.
Bednář, P.	SGRR	Slovakia	Ljubljana	CONTACT MZV	16. - 20. 12.
Boruta, T.	SGRR	Ireland	Dublin	Research	10. - 14. 12.
Drobík, T.	SGRR	Poland	Krakow	Working meeting	15. 3.
Havrlant, J.	SGRR	Slovakia	B.Bystrica	Negotiation	18. 10.
Kovář, M.	SGRR	Slovakia	B.Bystrica	Negotiation	18. 10.
Krtička, L.	SGRR	Poland	Krakow	Working meeting	15. 3.
Novák, D.	SGRR	Ireland	Dublin	Research	10. - 14. 12.
Rumpel, P.	SGRR	Germany	Leipzig	Research	17. - 20. 6.
Rumpel, P.	SGRR	Austria	Vienna	Research	15. - 16. 5.
Rumpel, P.	SGRR	Germany	Essen	Research	10. - 18. 11.
Rumpel, P.	SGRR	Sweden	Lund	Research	2. - 6. 10.
Slach, O.	SGRR	Germany	Essen	Research	10. - 18. 11.
Siwek, T.	SGRR	Slovakia	Prešov	Habilitation Procedure	12. - 13. 3.
Siwek, T.	SGRR	Slovakia	Prešov	Member of opponent commission	21. 9.
Siwek, T.	SGRR	Slovakia	Bratislava	Member of a committee	3. 10.
Siwek, T.	SGRR	Slovakia	Bratislava	Habilitation Procedure	19. 11.
Siwek, T.	SGRR	Slovakia	Bratislava	Member of a committee	5. 12.
Šindler, P.	SGRR	Slovakia	Bratislava	Member of opponent commission	3. 10.
Šindler, P.	SGRR	Slovakia	B.Bystrica	Negotiation	18. 10.

Šindler, P.	SGRR	Slovakia	Bratislava	Habilitation Procedure	19. 11.
Vencálek, J.	SGRR	Slovakia	Trenčínsko	Field practice	18. 5.
Vencálek, J.	SGRR	Slovakia	Púchovsko	Field practice	15. 5.
Vencálek, J.	SGRR	Austria	Hardegg	Excursion	13. 6.
Vencálek, J.	SGRR	Slovakia	Bratislava	Cooperation	19. 6.
Vencálek, J.	SGRR	Slovakia	Púchovsko	Field practice	15. 5.
Vencálek, J.	SGRR	Slovakia	Púchovsko	Field practice	11. 4.
Vencálek, J.	SGRR	Slovakia	Trenčín	Consultation	21. 3.
Vencálek, J.	SGRR	Slovakia	Trenčín	Consultation	22. 2.
Wahla, A.	SGRR	Slovakia	B.Bystrica	Negotiation	18. 9.
Žufan, P.	SGRR	Slovakia	Ljubljana	CONTACT	16. - 20. 12.

Long time stays abroad 2007 (more than 10 days)

Name	Dpt.	Country	Place	Conference	Date
Drobík, T.	SGRR	Spain	Barcelona	Summer School	25. 6. - 6. 7.
Drobík, T.	SGRR	UK	Newcastle	Summer School	23. 7. - 12. 8.
Rumpel, P.	SGRR	UK	London	Study stay	30. 6. - 28. 7.

16.9 Membership in Professional Organisations

Assoc. Prof. Tadeusz Siwek:

- President of the Czech Geographical Society.

Martin Kovář:

- Member of the Executive Committee of the North Moravian Branch of the Czech Geographical Society.

Kateřina S. Janků:

- Magazine FSS MU Brno - Social studies – member of the board for editing the magazine,
- Multifunctional centre Prague – member of the board for the internet portal.

16.10 Publications

Monographic publications

- VENCÁLEK, J. *The South Moravian Region - genius loci*. 1st issue. Opava: OPTYS, 2007. 296 pp. ISBN 978-80-85819-64-9.
- RUMPEL, P. *Geographical Aspects of European Integration*. 1st issue. Ostrava: Oftis Ostrava, 2007. 262 pp. Jean Monnet European Module. ISBN 978-80-7368-264-4.

Parts of monographic publications, articles

- SIWEK, T. *Enlargement of European Union*. In *Geografické aspekty evropské integrace*. Ostrava: University of Ostrava, 2007. ISBN 978-80-7368-264-4. p. 91-103.
- ŠINDLER, P., BIČÍK, I. *The Africa*. In *Regionální zeměpis světadílů*. 2nd issue. Prague: Nakladatelství České geografické společnosti, 2007. ISBN 978-80-86034-71-3. p. 94-103.

- BAAR, V. *Outer Relations of the European Union*. In Geografické aspekty evropské integrace. Ostrava: University of Ostrava, 2007. ISBN 978-80-7368-264-4. p. 157-178.
- ŽUFAN, P. *Joint agricultural policy of the European Union*. In Geografické aspekty evropské integrace. 1st issue. Ostrava: University of Ostrava in Ostrava, Department of Human Geography and Regional Development, 2007. ISBN 978-80-7368-264-4. p. 129-139.
- BAAR, V., KOVÁŘ, M. *Geocultural, geopolitical and geoeconomical aspects of the European Integration*. In Geografické aspekty evropské integrace. 1st issue. Ostrava: University of Ostrava in Ostrava, 2007. ISBN 978-80-7368-264-4. p. 201-230.
- VENCÁLEK, J. *Perception of genius loci of the landscape as a basis for the development of regional identity*. In Trendy regionálneho a miestneho rozvoja na Slovensku. Bratislava: Ústav etnológie SAV Bratislava, Centrum pre európsku politiku Bratislava, Department of ethnology and musicology Nitra, 2007. ISBN 978-80-88997-35-1. p. 53-62.
- ŽUFAN, P., WILAM, P. *Basic socioeconomic characteristics of the European Union*. In Geografické aspekty evropské integrace. 1st issue. Ostrava: University of Ostrava in Ostrava, Department of Human Geography and Regional Development, 2007. ISBN 978-80-7368-264-4. p. 43-55.
- ŠUMBEROVÁ, M. *European Law*. In Geografické aspekty evropské integrace. 1st issue. Ostrava: University of Ostrava in Ostrava, 2007. ISBN 978-80-7368-264-4. p. 71-90.
- ŠUMBEROVÁ, M., ŠURMAN, J. *European Security and Defence Policy in the frame of Common Foreign Security Policy of the EU*. In Geografické aspekty evropské integrace. 1st issue. Ostrava: University of Ostrava in Ostrava, 2007. ISBN 978-80-7368-264-4. p. 179-190.

Articles in proceedings (proceedings from conferences or institutions)

- BAAR, V. *Processes of revitalisation of extinct and disappearing European languages*. In Člověk-Dějiny-Hodnoty III. Ostrava. Ostrava: VŠB-TU, 2007. p. 193-199. ISBN 80-7368-273-7.
- SIWEK, T. *Multiculturalism from Minority Perspective: the Case of Poles in Czechia 1989-2007*. In European Multiculturalism as a challenge: policies, successes and failures. 2007-09-10-2007-09-13 Lublin. Lublin: Uniwersytet Marii Curie-Skłodowskiej, Polskie Towarzystwo Geograficzne, 2007. p. 127-136. ISBN 978-83-7270-556-9.
- NOVAK, D. *Innovative potential of rural regions - theory and practical examples*. In Inovace v rozvoji obcí, měst a regionů s důrazem na marketingové řízení. 2006-05-29-2006-05-31 Ostrava. Ostrava: University of Ostrava, 2007. p. 89-93. ISBN 80-7368-262-1.
- HAVRLANT, J. *Curiosities in the Development of the Tourist Recreational Structures in the Region of the Beskydy Mountains*. In Osobitosti vývoja geografických štruktúr v kotlinách Karpát. 2007-11-07-2007-11-09 Košice, Danišovce. Košice: ÚG PrF Univerzity of PJS, 2007. p. 41-48. ISBN 978-80-7097-700-2.
- ŠINDLER, P. *Image of the select cities of the Northern Moravia and Czech Silesia*. In Slezský sborník. Opava: Slezský ústav SZM, 2007. p. 61-65. ISBN 80-86224-56-2.
- NOVAK, D. *MAS LAG The Beskydy Region*. In Konference k programu LEADER. 2007-06-14-2007-06-16 Prague. Prague: European Commission and Ministry of agriculture ČR, 2007.
- NOVAK, D. *Marketing management of localities and regions - opportunity for rural development*. In Konference k rozvoji venkova. 2007-06-07-2007-06-07 Soběšovice. Třanovice : Třanovice služby, o.p.s., 2007.

- HAVRLANT, J. *New trends in the development of tourism and holiday activities in the Beskydy region*. In Sborník z konference W. Kurek, M. Mika (red.) *Studia nad turystyką. Tradycje, stan obecny i perspektywy badawcze. Geograficzne, społeczne i ekonomiczne aspekty turystyki*, Instytut Geografii i Gospodarki Przestrzennej, Uniwersytet Jagielloński. Krakow: Uniwersytet Jagielloński Kraków, 2007. p. 9 ISBN 978-83-88424-34-2.
- BEDNÁŘ, P. *Internationalization of Retailing: new trends and research approaches*. In ČESKÁ GEOGRAFIE V EVROPSKÉM PROSTORU. České Budějovice: Univerzity of South Bohemia, 2007. p. 22-28. ISBN 978-80-7040-986-2.
- HAVRLANT, J. *Changes in the second housing in recreational areas in Beskydy*. In *Zeszyty naukowe GWSH 30*. Katowice: KGER GWSH, 2007. p. 74-91. ISBN 1428-9520.
- SIWEK, T., KOVÁŘ, M. *Elements of multiculturalism and interculturalism in the programmes of University of Ostrava*. In *Edukacja międzykulturowa na pograniczach*. Ustroń. Katowice: Gnome, 2007. p. 72-76.
- BAAR, V. *Multicultural system of Dagestan*. In *Rubikova kostka - multikulturalismus*. Prague. Prague: MHMP, 2007. p. 133-143. ISBN 80-7262-422-5.
- SIWEK, T. *From minorities' visibility to their perception by majority*. In XXI. sjezd České geografické společnosti. České Budějovice. České Budějovice: University of South Bohemia, 2007. p. 235-238. ISBN 978-80-7040-986-2.
- SLACH, O. *North American Concept of The Business Improvement District (BID) within the city marketing and management framework*. In *Inovace v rozvoji měst, obcí a regionů s důrazem na marketingové řízení*. 29.5 2006-31.5 2006 VTPO Ostrava. Ostrava: Oftis, 2007. p. 101-108. ISBN 80-7368-262-1.
- RUMPEL, P., SLACH, O., BORUTA, T. *The Innovation Process of the Regional Development with an Emphasis on Marketing Management*. In *Inovace v rozvoji obcí, měst a regionů s důrazem na marketingové řízení*. 29.5.2006-31.5.2006 VTPO Ostrava. Ostrava: Oftis, 2007. p. 7-22. ISBN 80-7368-262-1.
- IŠTOK, R. *Perspectives of the development of global spatial-political structure (selected problems)*. In *Česká geografie v evropském prostoru*. České Budějovice. České Budějovice: University of South Bohemia, 2007. p. 97-103.
- VENCÁLEK, J. *Not to understand genius loci, means not to understand the life of man in the landscape*. In *Geografické informácie 11 /Problémy geografického výskumu Česka a Slovenska*. Nitra: Constantine the Philosopher University in Nitra, 2007. p. 213-217. ISBN 978-80-8094-137-6.
- BORUTA, T. *Integrated transport system - factor of regional development*. In *Zvyšování konkurenceschopnosti aneb Nové výzvy pro rozvoj regionů, států a mezinárodních trhů*. Ostrava. Ostrava: VŠB-TUO, 2007. p. 361-368. ISBN 978-80-248-1554-1.
- ŠINDLER, P. *Role of town in the regional development (Perception of Karviná by its inhabitants)*. In *Territory, Knowledge and Development at the Beginning of the 21 Century*. 2007-09-04-2007-09-06 Ostrava. Ostrava: VŠB-TUO, 2007. p. 114-114. ISBN 978-80-248-1458-2.
- ŠINDLER, P. *Globalization processes - not only regional problem*. In *Česká geografie v evropském prostoru*. 2006-08-30-2006-09-02 České Budějovice. České Budějovice: Czech geographical society and University of South Bohemia, 2007. p. 259-264. ISBN 978-80-7040-986_2.
- SLACH, O. *The Innovative Concepts in the City Development*. In *Česká geografie ve Středoevropském protoru XXI. Sjezd České geografické společnosti*. 30. 8.2006-2.9.2006 30. 8. - 2. 9. 2006. České Budějovice: University of South Bohemia in Česke Budějovice, 2007. p. 239-245. ISBN 978-80-7040-986-2.

- SLACH, O., KOUTSKÝ, J. *Selected theoretical aspects of restructuring of old industrial regions (with emphasis on stimulation of innovation potential)*. In X. MEZINÁRODNÍ KOLOKVIUM O REGIONÁLNÍCH VĚDÁCH. 20.5.2007-22.5.2007 Pavlov. Brno: Masaryk university, 2007. p. 20-27. ISBN 978-80-210-4325-1.
- BAAR, V. *Centre of Political and Cultural Geography*. Plzen: Vydavatelství a nakladatelství Aleš Čeněk, s.r.o., 2007. p. 17-21. ISBN 978-807380-056.
- SIWEK, T. *Possible influence of census method in 2001 to ethnic structure of Czechia*. In XXXVII. výroční demografická konference. 23.5.2007-24.5.2007 Olomouc. Olomouc: Česká demografická společnost, 2007. p. 181-187. ISBN 80-86746-04-6.
- SLACH, O., RUMPEL, P., BORUTA, T. *INNER CITIES DEVELOPMENT PERSPECTIVES*. In Systémový pohled na problémy rozvoje současných měst a jejich reflexe ve výuce urbanismu. 22.5.2007-23.5.2007 Brno. Brno: Department of architecture VUT in Brno, 2007. p. 97-104. ISBN 978-80-214-3478-3.
- SIWEK, T. *Moravians and Silesians in the Czech Republic: less than nation, more than region*. In Józef Chlebowczyk - badacz procesów narodotwórczych Europy XIX i XX wieku. Katowice. Katowice: Uniwersytet Śląski, 2007. p. 145-155. ISBN 978-83-226-1624-6.
- ŠINDLER, P. *Role of town in the regional development (perception of Karviná by its inhabitants)*. In Zvyšování konkurenceschopnosti aneb Nové výzvy pro rozvoj regionů, států a mezinárodních trhů. 2007-09-04-2007-09-06 Ostrava. Ostrava: VŠB-TUO, 2007. p. 337-341. ISBN 978-80-248-1554-1.
- VENCÁLEK, J., KRAJČOVÁ, J. *Regional demographic aspects of dynamics of inhabitants in Moravian-Silesian Region (1971-2000)*. In XXXVII. výroční (květnová) demografická konference. 2007-05-23-2007-05-24 Olomouc. Olomouc: ČDS, 2007. p. 286-295. ISBN 80-86746-04-6.

Articles in periodical publications (newspapers, magazines)

- SIWEK, T., BOGDOVÁ, K. *Czech Cultural-Historical Regions in the Minds of Their Inhabitants*. In Sociologický časopis - Czech Sociological Review. Vol. 5 (2007): p.1039-1053, ISSN 0038-0288.
- BAAR, V. *Transformation of National Identity in the Republic of Dagestan*. In Hawaii International Conference on Arts and Humanities. Vol. 6 (2007), p.209-220, ISSN 1541-5899.
- SLACH, O., BORUTA, T. *City as a Product*. In Trend Marketing. Vol. 3 (2007): p.22-22, ISSN 1214-9594.

17 Financial results for the year 2007

Total income of the faculty in 2007 was 121.072 (in ths. CZK)

- Principal activity: 91.749 (in ths.CZK),
- Funding for specific research: 2.212 (in ths.CZK),
- Operating funding for OP RLZ: 7.821 (in ths.CZK),
- Operating funding for grants activities: 2.416 (in ths.CZK),
- Operating funding for projects LEONARDO, PHARE etc.: 1.176 (in ths.CZK),
- Operating funding from GACR: 4.516 (in ths.CZK),
- Operating funding for other projects: 4.721 (in ths.CZK),
- Income from supplementary activities: 883 (in ths.CZK),
- Income from lifelong learning: 943 (in ths.CZK),
- Other income: 2.328 (in ths.CZK),
- Received monetary contribution: 796 (in ths.CZK),
- Scholarship fund: 1.511 (in ths.CZK).

Total expenditure of the faculty in 2007 was: 119.307 (in ths.CZK).

- Consumption of material: 7.351 (in ths.CZK),
- Consumption of books and magazines: 893 (in ths.CZK),
- Repairs and maintenance: 1.648 (in ths.CZK),
- Travel expense: 3.218 (in ths.CZK),
- Other services: 9.368 (in ths.CZK),
- Wages and salaries: 67.271 (in ths.CZK),
- Mandatory social insurance: 22.141 (in ths.CZK),
- Graduate scholarships: 2.303 (in ths.CZK),
- Scholarships for other students: 1.611 (in ths.CZK),
- Other costs: 3.503 (in ths.CZK).

At the end of the year 2007 1.765 (in ths.CZK) were transferred to the fund of operating costs at disposal in the year 2008.

Elaborated by: Iveta Nevludová

18 Faculty of Science Personnel (by 31. 12. 2007)

Surname	Firstname	Title
Adamec	Martin	Mgr.
Baar	Vladimír	doc. RNDr., CSc.
Balonová	Pavčina	
Bartl	David	RNDr., Ph.D.
Bartošová	Radka	Mgr.
Bednář	Pavel	Mgr.
Bohdálková	Jana	Mgr.
Boruta	Tomáš	Mgr.
Bouřová	Eva	
Bražina	David	Ing.
Bulava	Petr	Mgr., Ph.D.
Burian	Květoslav	doc. RNDr., CSc.
Burianová	Eva	Ing., Ph.D.
Burianová	Gabriela	Bc.
Bystroň	Josef	
Címalová	Šárka	Mgr.
Čajánek	Martin	RNDr., Ph.D.
Dolný	Aleš	RNDr., Ph.D.
Drobík	Tomáš	Mgr.
Drobíková	Ludmila	Mgr.
Drozd	Pavel	Mgr., Ph.D.
Ďuriš	Zdeněk	doc. RNDr., CSc.
Dušek	Radek	Ing., Ph.D.
Dvořák	Dalibor	doc. RNDr., CSc.
Filipczyková	Hana	doc. Dr. Ing.,
Fojtík	Rostislav	Mgr., Ph.D.
Gáper	Ján	prof. RNDr., CSc.
Gazdová	Šárka	
Goralová	Jana	Ing.
Greplová	Petra	
Habiballa	Hashim	RNDr. PaedDr., PhD, Ph.D.
Haluzík	Michal	Mgr.
Hančl	Jaroslav	doc. RNDr., CSc.
Havelková	Martina	
Havrlant	Jan	doc. RNDr., CSc.
Horká	Ivona	Mgr.
Hradecký	Jan	RNDr., Ph.D.
Hrivňák	Daniel	Mgr., Ph.D.
Huňka	František	doc. Ing., CSc.
Ištok	Robert	doc. RNDr., CSc.
Jandová	Věra	
Janeček	Ivan	Ing., CSc.
Janek	Jiří	
Janíková	Pavla	
Janoschová	Pavla	
Janošcová	Jana	

Javorská	Monika	
Kabieszová	Kateřina	Mgr.
Kalina	Jiří	doc. RNDr., Ph.D.
Kalus	René	doc. RNDr., Ph.D.
Káňová	Lenka	Ing.
Karlický	František	Mgr.
Klimánková	Jana	RNDr.
Klimeš	Cyril	doc. Ing., CSc.
Kočárek	Petr	RNDr., Ph.D.
Kolcun	Alexej	Mgr., CSc.
Konečná	Petra	RNDr., Ph.D.
Koníček	Libor	Mgr., PhD.
Kovář	Martin	Mgr.
Kožušník	David	Mgr.
Kričfaluši	Dana	doc. PaedDr., CSc.
Krpeš	Václav	doc. Ing., Ph.D.
Krtička	Luděk	Mgr.
Krupková	Olga	prof. RNDr., DrSc.
Křivý	Ivan	prof. RNDr. Ing., CSc.
Kříž	Vladislav	prof. RNDr. Ing., DrSc.
Kubicová	Svatava	PaedDr., CSc.
Kučerová	Jiřina	
Kurasová	Irena	Mgr., Ph.D.
Kusýn	Michal	Mgr.
Kyjovský	Jan	
Liška	Miroslav	RNDr., CSc.
Lojkásek	Bohumír	doc. RNDr., CSc.
Lukasová	Alena	prof. RNDr., CSc.
Majkus	Zdeněk	RNDr., CSc.
Malachová	Kateřina	doc. RNDr., CSc.
Maršálek	Roman	Mgr., Ph.D.
Martinkovská	Eva	
Mechlová	Erika	prof. RNDr., CSc.
Minár	Jozef	prof. RNDr., CSc.
Mišík	Ladislav	doc. RNDr., CSc.
Mulková	Monika	Mgr., Ph.D.
Navrátil	Martin	Mgr.
Navrátilová	Zuzana	doc. Ing., CSc.
Nevludová	Iveta	Ing.
Novák	David Walter	RNDr., Ph.D.
Novotná	Blanka	Mgr.
Pánek	Tomáš	RNDr., PhD.
Paulík	Tibor	prof. Ing., CSc.
Pavličková	Zuzana	Mgr.
Pečinka	Petr	RNDr., CSc.
Perfiljeva	Irina	prof., CSc.
Peter	Rudolf	Ing., CSc.
Piskořová	Běla	
Placková	Marie	
Plášek	Vítězslav	RNDr., Ph.D.

Podolinská	Jana	Mgr.
Polochová	Simona	Bc.
Procházka	Jaroslav	RNDr., Ph.D.
Rozehnal	Tomáš	Mgr.,
Rumpel	Petr	RNDr., Ph.D.
Ryšková	Dagmar	
Sedlářiková	Renata	Mgr.
Sehnalová	Vladimíra	Mgr.
Sezimová	Hana	Mgr., Ph.D.
Schmidtová	Jarmila	
Sidiropulu		
Janků	Kateřina	Mgr., Ph.D.
Siwek	Tadeusz	doc. RNDr., CSc.
Sklenák	Ladislav	doc. RNDr., CSc.
Skripová	Zlata	
Slach	Ondřej	Mgr.
Slovák	Václav	doc. RNDr., Ph.D.
Smolková	Veronika	Mgr.
Sochor	Tomáš	RNDr., CSc.
Solárová	Marie	doc. RNDr., Ph.D.
Straňák	Lukáš	Bc.
Swaczyna	Martin	RNDr., Ph.D.
Šaloun	Petr	doc. RNDr., Ph.D.
Šamánek	Petr	Mgr.
Ševčík	Jan	RNDr., Ph.D.
Šilhán	Karel	RNDr.
Šimonková	Natálie	
Šindler	Petr	doc. RNDr., CSc.
Špunda	Vladimír	doc. RNDr., CSc.
Štroch	Michal	Mgr., Ph.D.
Šumberová	Monika	Mgr.
Taraba	Boleslav	prof. Ing., CSc.
Telnarová	Zdeňka	Ing., Ph.D.
Tóth	János	doc. RNDr., Ph.D.
Treterová	Eliška	Ing.
Trizna	Milan	doc. RNDr., Ph.D.
Tureček	Tomáš	Ing.
Tvrdík	Josef	doc. Ing., CSc.
Václavíková	Zuzana	RNDr., Ph.D.
Vajgl	Marek	Mgr.
Vencálek	Jaroslav	prof. PaedDr., CSc.
Vítek	Aleš	Mgr.
Volná	Eva	RNDr. PaedDr., Ph.D.
Wagner	Petr	PhDr.
Wahla	Arnošt	prof. RNDr., CSc.
Wilam	Petr	Mgr.
Závorková	Dana	Bc.
Živný	Michal	RNDr., Ph.D.
Žufan	Petr	Mgr., Ph.D.