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FACULTY OF CIVIL ENGINEERING

ANNUAL REPORT 2008

**SLOVAK UNIVERSITY OF TECHNOLOGY
BRATISLAVA**

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1. FOREWORD

The Presidium of the Faculty is submitting an evaluation of the Faculty's activities for the year 2008 in accordance with Act No. 131/2002 Coll., on universities dated 21 February, 2002, and on the changes to and amendments of other related acts in conformity with the valid Statute of the Slovak University of Technology (STU) and the Faculty of Civil Engineering (FCE). The structure of the Report is determined by the structure of the Annual Report of STU, which was made obligatory for all the bodies of STU by Resolution No. 2/8/2007 dated 19 November, 2007, of the Rector's Council.

The Annual Report assesses the accomplishment of the objectives formulated in the Long-Term Goals for the development of FCE for the years 2007-2011, including its precise formulation for the year 2008, which was developed and approved by a session of the Academic Senate of FCE on February 22, 2008, by Resolution No.10/08.

At the end of the year 2008, the overall accreditation of STU was commenced and will be completed early in the year 2009. The Presidium of the Faculty, in cooperation with the study program guarantors, has improved the structure of the study programs. The new structure of the study programs reflects new opportunities and the interests of the Faculty, as well as the needs of civil engineering and geodesy practice. Due to the relatively good qualification structure, the Faculty does not have any problems with the guarantors for the study programs that are in the process of preparation.

The self-reflection and self-assessment of the Faculty form an important part in its overall accreditation in all the areas of its activities. In addition, the performance parameters in the fields of science and research activities and the education of PhD students are of great importance and have come to the forefront at FCE. In accordance with the rules of the Accreditation Commission of the Government of the SR, the indicators are evaluated in the individual study branches or research fields for which the Faculty is applying for the accreditation of habilitation and inauguration procedures. We can state that there has been a significant improvement in this field, and it is highly probable that the Faculty as a whole will be ranked in the upgraded category.

A process of quality management implemented in the teaching process was launched last year. The first versions of the basic documents have been drawn up – the quality manual and the quality policy. The documents were submitted to the academic community for open discussion via the Dean's Council and the Academic Senate of the Faculty.

We assume that the formation of the basic program documents on quality management will be completed in the first quarter of the year 2009. Consequently, the system will be introduced into practice, that is, from the academic year 2009/2010. The system is expected to substantially improve monitoring of the teaching process and effectively mobilize feedback, to define the competences and authority of all the levels of management of the teaching process, to develop effective tools in order to eliminate any identified deficiencies and thus to improve the quality of the teaching process.

In accordance with the acts on higher education, the main goal of universities is to provide a university education and engage in creative scientific research. The results of the scientific and research activities of the universities are reflected in the amount of subsidies from the Ministry of Education SR.

This form of evaluation is expected to be more important year after year. Systematic research activity documented by publications is fundamental to the Faculty's success and the growth in the qualifications of its employees. It is vitally important to pay attention to the appropriate conditions for creative work at each management level. We can state that there has been a considerable degree of advancement in the activities of the Faculty's creative employees. The number of new applied-for projects and grants obtained has increased. Financial support for the projects has not been insignificant. In 2008, the financial allocation to the Faculty consisted of SKK 76 million. Nevertheless, we have failed to fulfill a high priority task - to be more successful in obtaining international grants, mainly future projects within the 7th Framework Program.

The publishing activities of the employees of the Faculty have achieved the same level when compared with previous years. Undoubtedly, FCE has a leading position in the number of publications according to an evaluation by STU; however, the number per creative employee is much lower.

This means that only teachers who have exceeded the average have maintained the high standard of publishing activity. In the future, all the creative employees must be engaged in publishing activities. The preparation of the accreditation has pointed to a need for a better quality standard of our publications. We have to pay particular attention to significant journals, especially to current and international professional journals which are highly evaluated.

At present, the Faculty of Civil Engineering is participating in significant educational programs within the European Union, thanks to the activities of its employees. We refer to EU educational programs such as TEMPUS-Tacis, SOCRATES, ERASMUS, the LEONARDO da VINCI II educational programs or the scientific 6th Framework Programs. We should not forget other international activities, especially CEEPUS and bilateral programs, which, thanks to the Faculty's employees, have been significantly expanded on the basis of bilateral agreements with foreign partner universities.

In 2008, the Faculty of Civil Engineering registered a relatively large number of students enrolled in the Civil Engineering program in the English language (CE) from countries outside the EU. Currently, we have registered a total of 298 foreign students in the Civil Engineering program. It is gratifying that there has been an even more significant inflow of students in the CE Master's and Doctoral study programs.

We are pleased to inform you that the basis of the Faculty's network infrastructure in the locality of I. Karvaš meets the requirements of an IT area as formulated in the STU Long-Term Goals. This has significantly improved network monitoring and administration possibilities.

Currently, more than 700 active connection ports have been installed at the Faculty. During non-class time, the Faculty's information center classrooms are accessible to students of the Faculty for the purpose of individual work on PCs or the use of network services, including unlimited Internet access. A total of 20 PC work stands are reserved exclusively for individual student work and are in constant operation. Their installation was also completed last year. A wireless WiFi network is available in Faculty classrooms, the Atrium, the Library and Information Center, and the University Hall of Academician Bella.

On these premises, network access to notebooks is allowed without the required use of a cable. This is very important in order to ensure the required comfortable access of students to the Information System of the Center of Information Technology, STU. The CIT employees of the Faculty provide students with counseling services on a daily basis.

In 2008, the Faculty proceeded with its activities in the reconstruction and significant repair of classrooms and seminar rooms, which were fully financed from non-subsidized resources. In the same year, the Faculty also prepared the project documentation for implementation of investment plans with regard to a capital facelift of the Faculty's central buildings, barrier-free entrances to individual Faculty buildings, reconstruction of the building of the Central Laboratories of FCE and the foundation of the Regional Technical Education Center in the Educational and Recreational Facility at Kočovce.

The Faculty began to work on obtaining building permits for all these projects, and the Faculty's management will make a maximum effort to obtain funds for the implementation of its investment goals from non-subsidized resources. It is generally accepted that the successful implementation of future investment goals as well as the participation of the Faculty's employees in international science and research projects depends on the creation of a stable financial environment. As to this aspect, it is important to note that the Faculty has attained positive financial results in recent years.

As in preceding years, making a profit was expected, thanks to the Faculty's successful performance in the business arena and increased income from foreign students in the year 2008, among its main activities. In conclusion, let me thank you for the positive results we have achieved through our joint efforts in 2008.

We can state that there have been significant improvements and advances in many fields of our activities. We must not forget that the hallmark of our successful institution is primarily based on its stability and its gradual, balanced development. For that reason, we have to analyze and enquire about the data and the evaluations arising therefrom.

We have to estimate these factors in the future when evaluating the university sector and to demonstrate their influence and impact on our Faculty. We set out to increase the study success of our students, maintain a positive trend in the number of grants obtained and train our PhD students for the coming years. With regard to the long-term goals of the Faculty, we will have to pay attention to the leading and current contents journals and engage our individual employees in more prolific and successful publishing activities and thereby obtaining high-quality responses.

We have to support the activities of the new editorial boards of the SJCE and Expert's Almanac. Moreover, we should not neglect the Faculty's efforts to innovate our experimental basis and develop our laboratories.

A crucial shift forward should involve the projects concerning the Faculty's Centers of Excellence and CL. The year 2008 was called "the year of projects." In 2009, we would like to implement the projects obtained. We will have to provide the financial means and organize the competitive bidding, building activities and concurrent performance of the Faculty by means of our common endeavours. I believe that together we will manage to bring about a renaissance of our Alma Mater and succeed in pushing it forward by little steps.

I hope you will be sympathetic to all the Faculty's activities and will support them.

In Bratislava, February, 2009

Prof. Ing. Alojz Kopáček, PhD.
Dean of FCE STU

2. EXECUTIVE BODIES OF FACULTY

2.1 The Faculty's Administrative Bodies

2.1.1 The Faculty's Academic Senate

CHAIRMANSHIP OF THE AS

Chairman of the AS:

Prof. Ing. Viliam Macura, PhD.

Vice-Chairman of the AS:

Assoc. Prof. Ing. Juraj Veselský, PhD.

Executive Board of the AS:

Assoc. Prof. Ing. Michal Božík, PhD.

Prof. Ing. Ľudovít Fillo, PhD.

Martin Zavadský

Bc. Andrea Sabová

PEDAGOGIC AND SCIENTIFIC-RESEARCH COMMISSION

Assoc. Prof. Ing. Juraj Králik, PhD. - chairman

Assoc. Prof. Ing. Katarína Bačová, PhD.

Ing. Juraj Janák, PhD.

Assoc. Prof. Ing. Ľudovít Možiešik, PhD.

Gabriela Szántová

Bc. Viktória Mészárosová

Bc. Tomáš Kopecký

ECONOMIC COMMISSION

Ing. Ľuboš Hruštinec, PhD. - chairman

Ing. Ján Ježko, PhD.

Ing. Naďa Antošová, PhD.

PhDr. Soňa Vašková, PhD.

Ing. Miroslav Lipták

SOCIAL COMMISSION

Prof. Ing. Jozef Hraška, PhD. - chairman

Ing. Július Bartaloš, PhD.

Assoc. Prof. Ing. Vladimír Pavlík, PhD.

Bc. Jozef Žoldák

Ladislav Balog

ORGANIZATIONAL COMMISSION

Ing. Ján Ilavský, PhD. - chairman

Ing. Jana Šabíková, PhD.

Ing. Rudolf Ároch, PhD.

Dagmara Čehelová

Monika Švecová

LEGISLATIVE COMMISSION

JUDr. Jana Zajacová - chairperson

Mgr. Jozef Joštiak

Ing. arch. Peter Sedlák

Assoc. Prof. RNDr. Martin Kalina, PhD.

Bc. Monika Matejková

Bc. Tomáš Martiš

2.1.2 The Dean of the Faculty

Prof. Ing. Alojz Kopáčik, PhD.

2.1.3 Scientific Board of the Faculty

Members of the Scientific Board

Prof. Ing. Alojz Kopáčik, chairman of the SB, Dean of the Faculty, Department of Surveying

Prof. Ing. Peter Turček, PhD., Vice Dean for Science and Research, Department of Geotechnics

Prof. Ing. Ivan Baláž, PhD., Department of Steel and Timber Structures

Prof. Ing. Bystrík Bezák, PhD., Department of Transportation Engineering

Prof. Ing. Juraj Bilčík, PhD. Department of Concrete Construction and Bridges

RNDr. Ladislav Brimich, CSc., Director of Geophysical Institute SAS Bratislava

Assoc. Prof. Ing. Peter Černík, PhD., Visiting Prof., Statutory Director of STRABAG Development Slovakia, Ltd.

Assoc. Prof. Ing. arch. Elena Dohňanská, PhD., Department of Architecture

Prof. Ing. Jozef Gašparík, PhD., Department of Building Technology

Prof. Ing. Ján Hefty, PhD., Department of Theoretical Geodesy

Prof. Ing. Jozef Hraška, PhD., Department of Building Construction

Prof. Ing. Koloman Ivanička, PhD., Institute of Management

Prof. Ing. Jozef Kriš, PhD., Department of Sanitary and Environmental Engineering

Ing. Pavol Kusý, PhD., Director of Terraprojekt, a.s. Bratislava

Prof. Ing. Viliam Macura, PhD., Department of Land and Water Resources Management

Ing. Peter Matiašovský, CSc., Visiting Assoc. Prof. Director of ÚSTARARCH SAS Bratislava

Prof. RNDr. Radko Mesiar, DrSc., Department of Mathematics and Descriptive Geometry

Prof. Ing. Jozef Oláh, PhD., Vice Dean for Public Relations, Department of Building Construction

Prof. Ing. Dušan Petráš, PhD., Vice Rector of STU, Department of Building Services

Prof. Ing. Anton Puškár, PhD., Department of Building Construction

Prof. Ing. Ján Ravinger, DrSc., Department of Structural Mechanics

Prof. Ing. Ján Szolgay, PhD., Department of Land and Water Resources Management

Prof. Ing. arch. Štefan Šlachta, PhD., The Chief Architect of Bratislava, the capital city

Prof. Ing. Andrej Šoltész, PhD., Vice Dean for Foreign Relations, Department of Hydraulic Engineering

RNDr. Vlasta Štekauerová, CSc., Director of Hydrological Institute SAS

Assoc. Prof. Ing. Stanislav Unčík, PhD., Vice Dean for Education, Department of Material Engineering

Ing. Andrej Vojtičko, PhD.

Honorary members of the Scientific Board

Prof. Ing. Zdeněk Bittnar, DrSc., Dean of the Faculty of Civil Engineering, Czech Technical University in Prague

Prof. Ing. Ján Čelko, CSc., Dean of the Faculty of Civil Engineering, University of Žilina

Ing. Andrej Ďurkovský, Mayor of Bratislava, the capital city of Slovakia,

Prof. Ing. Dušan Majdúch, PhD., Chairman of the Slovak Chamber of Civil Engineers

Ing. Ján Majerský, PhD., President of the Slovak Association of Construction Entrepreneurs

Assoc. Prof. Ing. Alois Materna, CSc., MBA, Dean of the Faculty of Civil Engineering, Technical University of Ostrava

Dr.h.c. Prof. PhDr. Ľudovít Petránsky, DrSc., Dean of the Faculty of Architecture, STU Bratislava

Ing. Vladimír Stromček, Chairman of the Directorate of the Chamber of Surveyors and Cartographers

Prof. Ing. Ingrid Šenitkova, PhD., Dean of the Faculty of Civil Engineering, Technical University of Košice

Prof. RNDr. Ing. Petr Štěpánek, CSc., Dean of the Faculty of Civil Engineering, Brno University of Technology

Ing. Arch. Juraj Šujan, President of the Slovak Chamber of Architects

2.1.4 Disciplinary Proceedings Board for the Students

Chairman:

Assoc. Prof. Ing. Stanislav Unčík, PhD.

Members:

Prof. Ing. Andrej Šoltész, PhD.

Assoc. Prof. Ing. Juraj Králik, PhD.

Bc. Martin Závadský

Viktória Mézsárosová

Blažej Majdiak

2.2 Advisory Bodies to the Dean

2.2.1 Presidium of the Faculty

Prof. Ing. Alojz Kopáčik, PhD. - The Dean

Prof. Ing. Andrej Šoltész, PhD. - the First Vice Dean, Vice Dean for Foreign Relations

Prof. Ing. Peter Turček, PhD. - Vice Dean for Science and Research

Assoc. Prof. Ing. Stanislav Unčík, PhD. - Vice Dean for Education

Prof. Ing. Jozef Oláh, PhD. - Vice Dean for Public Relations

Assoc. Prof. Ing. Milan Sokol, PhD. - Vice Dean for the Development of the Faculty

Ing. Kornélia Polakovičová – Secretary

Prof. Ing. Viliam Macura, PhD. - Chairman of the Academic Senate

Martin Závadský - Chairman of the Student Parliament

Ing. Miloslav Štujber - Chairman of the Trade Union Organization

2.2.2 The Dean's Council

Prof. Ing. Alojz Kopáčik, PhD. – The Dean

Prof. Ing. Andrej Šoltész, PhD. – the First Vice Dean, Vice Dean for Foreign Relations

Prof. Ing. Peter Turček, PhD. – Vice Dean for Science and Research

Assoc. Prof. Ing. Stanislav Unčík, PhD. – Vice Dean for Education

Prof. Ing. Jozef Oláh, PhD. – Vice Dean for Public Relations

Assoc. Prof. Ing. Milan Sokol, PhD. – Vice Dean for the Development of the Faculty

Ing. Kornélia Polakovičová – Secretary

Prof. Ing. Viliam Macura, PhD. – Chairman of the Academic Senate

Martin Závadský – Chairman of the Student Parliament

Ing. Miloslav Štujber – Chairman of Trade Union Organization

Prof. Ing. Juraj Bilčík, PhD. – Department of Concrete Construction and Bridges

Prof. Ing. Bystrík Bezák, PhD. – Department of Transportation Engineering

Prof. Ing. Ján Hefty, PhD. – Department Of Theoretical Geodesy

Prof. Ing. Štefan Sokol, PhD. – Department of Surveying

Prof. RNDr. František Baliak, PhD. – Department of Geotechnics

Prof. Ing. Ján Szolgay, PhD. – Department of Land and Water Resources Management

Prof. Ing. Peter Dušička, PhD. – Department of Hydraulic Engineering

Prof. Ing. Anton Puškár, PhD. – Department of Building Construction

Assoc. Prof. Ing. Ján Brodniansky, PhD. – Department of Steel and Timber Structures

Assoc. Prof. Ing. Jozef Čižmár, PhD. – Department of Mapping and Land Consolidation

Prof. RNDr. Radko Mesiar, DrSc. – Department of Mathematics and Descriptive Geometry

Assoc. Prof. RNDr. Jozefa Lukovičová, PhD. – Department of Physics

Assoc. Prof. Ing. Norbert Jendželovský, PhD. – Department of Structural Mechanics

Prof. Ing. Jozef Gašparík, PhD. – Department of Building Technology

Prof. Ing. Jozef Kriš, PhD. – Department of Sanitary and Environmental Engineering

Assoc. Prof. Ing. Oľília Lulkovičová, PhD. – Department of Building Services

PhDr. Dagmar Špildová – Department of Languages

PaedDr. Ján Masarovič – Department of Physical Education

Ing. Katarína Heretiková, PhD. – Department of Humane Sciences

Assoc. Prof. Ing. arch. Elena Dohňanská, PhD. – Department of Architecture

Assoc. Prof. Milan Nič, PhD. – Institute of Forensic Engineering

Ing. Vladimír Priečhodský, PhD. – Central Laboratories

2.2.3 Industrial Board

Ing. Miloslav Beka, Chairman of the Directorate and Managing Director of SKANSKA BS

Ing. Anton Bezák, PhD., Managing Director of Ingsteel, Ltd., Bratislava

Ing. Mikuláš Bobik, CSc., Director of Applied Precision, Ltd., Bratislava

Ing. Ľuboš Fussek, Director of Baunit, Ltd

Ing. Marek Gálik, CSc., Managing Director of the Trnava Water Company, a.s. Piešťany

Ing. Daniel Gemeran, Chairman of the Directorate and Managing Director of the Bratislava Water Supply a.s. Bratislava

Ing. Peter Halász, Director of Jaga Group v.o.s. (unlimited liability company), Bratislava

Ing. František Hirner, Statutory and Managing Director of ZIPP, Ltd., Bratislava

Ing. Anton Holos, PREMAC, Ltd., Bratislava

Ing. Oto Hornáček, Managing Director of Hornex, a.s. Bratislava

Ing. Jozef Hric, Chairman of the Directorate and Managing Director of TUBAU, a. s. Žilina

Ing. Miloš Klein, Statutory of Wiener Berger – The Slovak Brick Factory, Ltd.

Ing. Marian Kmet', Director of SOLHYDRO, Ltd., Bratislava

Ing. František Kmit', Director of PREMAC, Ltd., Bratislava

Ing. arch. Gabriel Koczkáš, Chairman of the Directorate and Managing Director of Dopravoprojekt, a.s. Bratislava

Ing. Pavol Kontra, PhD., Managing Director of VKÚ, a.s. Harmanec

Ing. Ján Majerský, PhD., President of Association of the Construction Entrepreneurs of Slovakia, Director of Proma, Ltd.

Ing. Dušan Mráz, Managing Director of Doprastav, a.s. Bratislava

Ing. Peter Nemčok, CSc., Managing Director of SVP, National Enterprise., Banská Štiavnica

Ing. Ladislav Németh, Chairman of the Directorate of Bala, a.s. Holice

Ing. Pavel Obenau, Assistant to the Vice President of DDP Group, DOAS a.s.

Ing. Jozef Pekarovič, Director of NP Publications, Bratislava

Ing. Ladislav Piršel, PhD., Statutory and Managing Director of Johnson Controls International, Ltd.

Ing. Slavomír Podmanický, Managing Director of Reming Consult, Slovakia

Ing. Peter Pochaba, Managing Director of ABC Klíma, Ltd., Bratislava

Ing. Jozef Ružanský, Managing Director of DREVONA, a.s., Bratislava

Ing. František Stolárik, The M.R.Š. Airport in Bratislava

Assoc. Prof. Ing. Peter Suchánek, PhD., REHAU, Ltd., Bratislava

Vladimír Šablica, Statutory Director of TONDACH, Slovensko

Ing. Miroslav Trnovský, Statutory Director of SkyBau, Ltd., Žilina

Ing. Gabriel Tuhý, Director of Regotrans-Rittmeyer, Ltd., Bratislava

Ing. Vladimír Uhlík, Managing Director of Geodesy, a.s. Bratislava

Ing. Anton Viazanko, Director of Durisol-Stav, Ltd.

Roland van Wijnen, Executive Director and Chairman of the Directorate of Holcim Slovakia

Ing. A. František Zvrškovec, President of Divident Group Slovakia, Bratislava

Prof. Ing. Alojz Kopáček, PhD., Dean of FCE STU Bratislava

Prof. Ing. Dušan Petráš, PhD., Vice Rector for Public and Foreign Relations, STU

Prof. Ing. Jozef Oláh, PhD., Vice Dean for Public Relations

Prof. Ing. Peter Turček, PhD., Vice Dean for Science and Research

Prof. Ing. Andrej Šoltész, PhD., Vice Dean for Foreign Relations, the Chairman of the Alumni Club of FCE, STU

Assoc. Prof. Ing. Milan Sokol, PhD., Vice Dean for the Development of the Faculty

Assoc. Prof. Ing. Stanislav Unčík, PhD., Vice Dean for the Education

Prof. Ing. František Ohrablo, PhD., Honorary Chairman of the Alumni Club of FCE, STU

2.3 Departments of the Faculty

Department of Concrete Structures And Bridges (BKM)

Department of Transportation Engineering (DOS)

Department of Theoretical Geodesy (GZA)

Department of Surveying (GDE)

Department of Geotechnics (GTE)

Department of land And Water Resources Management (VHK)

Department of Hydraulic Engineering (HTE)

Department of Building Construction (KPS)

Department of Steel and Timber Structures (KDK)

Department of Mapping and Land Consolidation (MPU)

Department of Mathematics and Descriptive Geometry (MDG)

Department of Physics (FYZ)

Department of Structural Mechanics (SME)

Department of Material Engineering (MTI)

Department of Building Technology (TES)

Department of Sanitary and Environmental Engineering (ZEI)

Department of Building Services (TZB)

Department of Languages (JAZ)

Department of Physical Training (TVY)

Department of Humane Sciences (HUV)

Department of Architecture (ARC)

Institute for Forensic Engineering (USZ)

3. EDUCATION

The academic year 2007/08 constituted a breakthrough as the instruction of the students followed the new study programs. Students in the new Bachelor's degree study programs, except for the Building Structures and Architecture study program (where the length of study is 4 years), graduated from the Faculty for the first time. More than a hundred students with the prolonged standard length of study or students who registered for the same course a second time after interruptions of study were completing their course of study.

A similar situation existed in the case of the Doctoral degree study program, when the first graduates completed the new 3-cycle Doctoral degree study programs. Concurrently, students completed their studies in the previously existing Doctoral study branches.

In the previous academic year, the biggest story of the year that the Faculty was involved in was the preparation of the documents for the overall accreditation of the Faculty, including the improvement of the structure and content of the study programs.

3.1 The structure of the study programs

In the last academic year, the Faculty of Civil Engineering, STU in Bratislava offered university-level education in eight newly accredited Bachelor's study programs. Students of the six previously existing Bachelor's degree study programs with a prolonged standard length of study or after interruptions of study completed their course of study.

Twenty-one accredited study programs were offered in the new Master's degree study programs, twelve study programs were introduced. Thirteen new study programs were introduced in addition to the eleven existing branches of the Doctoral study programs.

Bachelor's degree study programs:

1. Building Structures and Architecture (PSA)
2. Civil Engineering and Transport Construction (IKDS)
3. Hydraulic Engineering and Water Resources Management (VSVH)
4. Geodesy and Cartography (GaK)
5. Building Technology and Management (TMS)
6. Environmental Engineering (IŽP)
7. Mathematical and Computational Modeling (MPM)
8. Civil Engineering (in English) (CE)

Master's degree study programs:

1. **Architectural Construction and Design (AKP)**
2. Buildings and the Environment (BP)
3. **Building Structures and Architecture (PSA)**
4. **Building Services (TZB)**
5. **Realization of Buildings (RS)**
6. Building Materials and Prefabrication (SMP)
7. **Transportation Structures (DS)**
8. **Bearing Structures of Civil Engineering Works (NKIS)**
9. Civil Engineering in Urban Areas (MSI)
10. **Economics and Building Industry Management (ERS)**
11. **Bearing Constructions of Building Structures (NKPS)**
12. Sanitary Engineering (ZI)
13. Hydraulic Engineering (HTE)
14. Land and Water Resources Management (VHK)

15. **Hydraulic Engineering and Water Resources Management (VSVH)**
16. **Landscape Engineering (KI)**
17. Buildings and the Environment (SŽP)
18. **Techniques for Indoor Building Environments (TPB)**
19. **Geodesy and Cartography (GaK)**
20. Mathematical and Computational Modeling (MPM)
21. Civil Engineering (in English) (CE)

(Note: The new study programs which were introduced in 2008 are in bold letters)

Doctoral study branches:

1. Theory and Construction of Civil Engineering Works (TKIS)
1. Theory and Construction of Building Structures (TKPS)
2. Theory and Techniques for the Internal Environments of Buildings (TTPB)
3. Building Technology (TS)
4. Sector and Cross-Sector Economics (OPE)
5. Applied Mechanics (AM)
6. Hydraulic Engineering (HTE)
7. Sanitary Engineering (ZDI)
8. Engineering Hydrology (IH)
9. Forensic Engineering (SI)
10. Applied Mathematics (AMAT)
11. Landscape Design (KR)
12. Geodesy and Cartography (GaK)

The previously existing study branches:

Bachelor's study branches:

1. Civil Engineering and Transport Construction
2. Water Resources Management and Hydraulic Engineering
3. Geodesy and Cartography
4. Building Structures and Architecture
5. Environmental Engineering
6. Civil Engineering (in English)

Master's study branches:

1. Civil Engineering and Transport Construction
- Water Resources Management and Hydraulic Engineering
3. Geodesy and Cartography
4. Building Structures and Architecture
5. Environmental Engineering
6. Economics and Building Industry Management
7. Material Engineering
8. Building Services
9. Realization of Buildings
10. Engineering (in English)

Doctoral study branches:

1. Theory and Construction of Civil Engineering Works
2. Applied Mechanics
3. Hydrology and Water Resources Management Hydraulic Engineering
4. Sanitary and Engineering Structures
5. Geodesy and Geotechnical Cartography,
6. Theory and Construction of Building Structures
7. Sector and Cross-Sector Economics
8. Non-Metallic Materials and Building Science
9. Building Technology
10. Applied Mathematics

3.2 Acceptance Procedure

3.2.1 Bachelor's studies

The procedure for acceptance to the full-time Bachelor's study programs is based on many years of experience and conditions of acceptance for studies. The terms of enrollment were announced in due time by the Faculty (including on its website) to the University, the Ministry of Education and the mass media. A General Certificate of Secondary Education Exam (GCSE) qualifies the prospective student for admission to the Faculty. Students achieving the A level in mathematics or physics were accepted without any entry examination. Those taking the B Level and other levels of GCSE examinations based on the results of their studies did not have to take the entrance examination with regard to the individual study programs.

The Faculty admitted all prospective students for the Geodesy and Cartography study programs without entry exams on the basis of their grade point average of up to 1.5; students for Building Structures and Architecture, Building Technology and Management, Environmental Engineering, Civil Engineering and Industrial Structures, and the Geodesy and Cartography study programs were accepted without an entry examination on the basis of a grade point average of up to 2.0 and applicants for the other study programs with a grade point average of up to 2.5 did not have to take an entrance examination. All the other applicants were required to undertake entrance examinations in mathematics, physics and general social science knowledge. 1586 students applied for the Bachelor's study at FCE STU. 191 applicants fulfilled the enrolment criteria and were accepted without an entry examination.

395 applicants were invited to the entry exam, but only 291 of them participated. The total number of students admitted to study was 1354.

Recently, after an analysis of the acceptance procedures with regard to the number of students accepted, the Presidium of the Faculty decided not to announce an additional round of acceptance procedures. Moreover, legal reasons prevented the Faculty from announcing an additional round of acceptance procedures. An overview of the classification of students accepted and enrolled for the first year of study is shown in Table 1. We can see that there is a trend of decreasing interest in studying at FCE, STU in the academic year 2008/2009. The decreased number of students is due both to demographic developments and to the lack of an additional round of acceptance procedures. It is necessary to say that in previous years, the students who applied for the additional round were the students who did not fulfill the required criteria to proceed in their studies. The number of registered students who applied for the study for the first time is in principle the same as in previous years. On the other hand, 30% of the students accepted did not register. This year that number amounted to 34.8%.

3.2.2 Master's study program

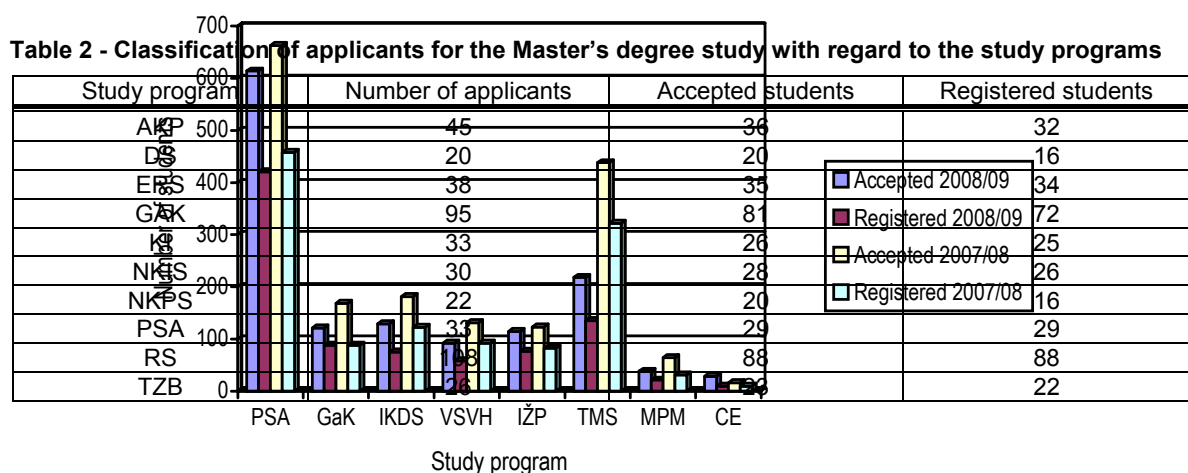
The procedures for acceptance were conducted in accordance with the rules for acceptance to the Master's study program at FCE, STU. The Faculty is not obligated to open a Master's degree study program if the number of applications submitted is less than 15.

580 applicants showed interest in the Master's degree study at FCE, STU, and 505 were accepted (Table 2).

Table 1 - Classification of students accepted for the first year of study

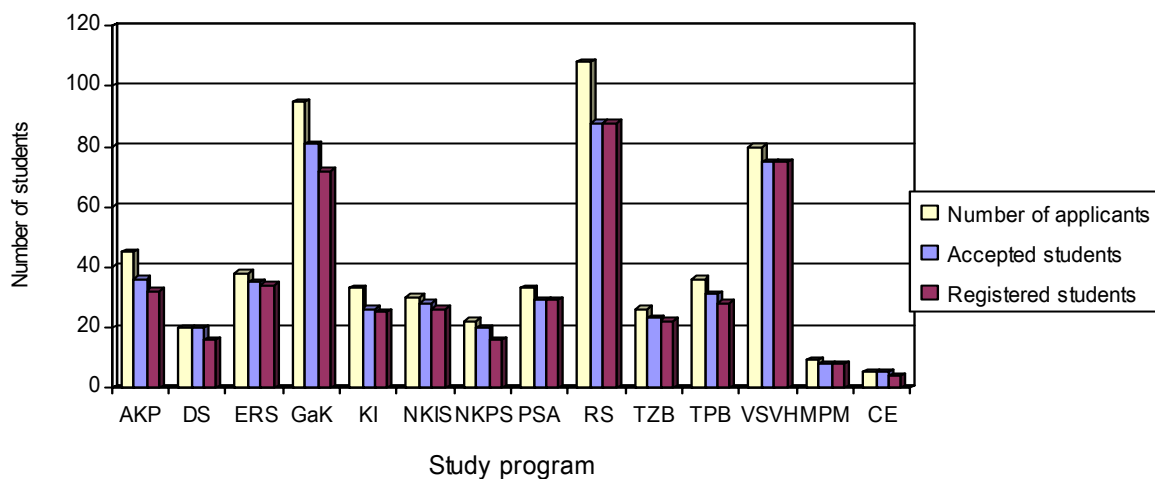
Study program	2007/2008		2008/2009	
	Accepted	Registered	Accepted	Registered
PSA	663	458	614	421
GaK	168	88	121	88
IKDS	181	122	129	75
VSVH	131	92	92	58
IŽP	123	82	114	76
TMS	438	322	218	135
MPM	64	31	38	21
CE	16	9	28	9
Total number	1,804	1,213	1,354	883

Graph 1 - Classification of students accepted for the first year of study 2008/09



TPB	36	31	28
VSVH	80	75	75
MPM	9	8	8
CE	5	5	4
Total number at FCE	580	505	475

Graph 2 - Classification of applicants for the Master's degree study with regard to the study programs



3.2.3 Doctoral study program

It is gratifying to note that the number of candidates interested in the Doctoral study at FCE, STU, has been relatively high and that the Faculty has succeeded in accommodating the candidates who show an interest in Doctoral study. The distribution of the number of accepted applicants according to the individual specializations and departments has always been uneven. (Table 3).

In 2008, the Faculty also registered foreign PhD students (particularly from Iraq). Their PhD study at the Faculty was mediated through the Institute for Foreign Relations (Department of Hydraulic Engineering, Department of Sanitary and Environmental Engineering and Department of Mathematics and Descriptive Geometry). 3.3 Assessment of success in studying.

3.3 Assessment of success in studying

The number of registered students with regard to the year of study and study programs (Table 4). We can see the most significant decrease in students is in their second year of study. The decrease is due to the high percentage of students who cannot cope with the requirements for study and who decide to leave the Faculty in their first year of study. During the last academic year the decrease in the

number of first year students reached 18.0% after the winter semester and 30.1% after the spring semester. The small number of students in the Master's degree study was conditioned by the relatively low study success of the third year students.

In 2008, out of the total number of third year students (604 students registered in all the study programs and branches of study), 67% of the students completed their studies and obtained the BSc. degree. In 2007, the number only reached 51.9%. In the case of the study programs, the number of students successfully completing their studies amounted to 59.7%, and the number in the previously existing study branches amounted to 80.9%. The high percentage of the study completions in the case of the study branches can be ascribed to the fact that it concerned the students who followed their course of study in a prolonged prolonged length of study; they repeated only some subjects and did not have as many commitments as the students who completed their course of study in the standard length of time. However, the rate of success in the third year of study was 10% higher in the case of the study programs when compared with the long-term trend from previous years. Recently, the rate of success in the third year of study has ranged up to 50%. On the other hand, the positive results can be explained by the new organization of the third

Table 3 Classification of applicants for the Master's degree study with regard to the study programs

Study program	Dept.	Number of applicants						Number of registered PhD students					
		Full-time form	FTF-foreign	FTF – EVI	Part-time form	PTF- EVI	Total	Full-time form	FTF-foreign	PTF- EVI	Part-time form	PTF- EVI	Total no.
TKIS	BKM	1			1		2	1			1		2
	DOS	1			1		2	1			1		2
	KDK	1			1		2	1			1		2
	GTE	2			1		2	2			1		2
AM	SME												
IH	VHK	3		1		2	6	3		1		2	6
THE	HTE	3					3	3					3
ZDI	ZEI	3			3		6	3			3		6
KR	VHK	4			2		6	4			2		6
GaK	GDE						2						2
	GZA	2	1		1		2	2	1		1		2
	MPU	2					2	2					2
TKPS	KPS	4			1		5	4			1		5
	ARC	7					7	7					7
TTPB	TZB	9			2		11	9			2		11
TS	TES	2					2	2					2
	USZ	2			1		3	2			1		3
	MTI	2			1		1	2			1		1
AMAT	MDG	2					2	2					2
	FCE	48	1	1	14	2	66	48	1	1	14	2	66
OPE	UM	7			3		10	7			3		10
	Total number	55	1	1	17	2	76	55	1	1	17	2	76

Table 4 - Number of students with regard to the year of study

Academic year	Number of students					
	2003/04	2004/05	2005/2006	2006/07	2007/08	2008/09
1.BSc.	784+97ex	941+125ex	1,024+126ex	1237	996	883
2.BSc.	660	491+65ex	653+50ex	654+46ex	759	696
3.BSc.	858	883	688+60ex	795+49ex	821+45	700+3 ex
4.BSc.	-	-	-	-	-	221
1.MSc.	434	502	550	379+35ex	456	475
2.MSc.	434	488	552	531	420+28	408+3 ex
Total number	3,170+97ex	3,495 + 190ex	3,467+236ex	3,676+130ex	3452 + 73	3,383+6 ex

year of study and, above all, by allowing more time to write the Bachelor's dissertation and reducing the number of subjects in each semester. On the other hand, the Faculty applied a tougher execution of study regulations, which resulted in an increase of study success.

Due to the above actions the number of third year students who repeatedly failed to meet the study requirements dropped. 345 graduates completed their Master's degree study (Ing.) in the last academic year (Table 5).

The qualitative study indicators leading to the commendation of students in their final year of study are actually the same as last year. Our graduates were given six awards by the Rector and 17 awards by the Dean last year.

In addition to the commendations presented in Table 5, 35 graduates received an honorable mention from the Dean for their outstanding dissertations; two graduates were given an award from the Slovak Chamber of Civil Engineers; one graduate was given an award by the Slovak Chamber of Surveyors and Cartographers. Seven graduates of the Bachelor's degree study and four graduates of the Master's

Annually, the best students from the individual study programs closely related to a particular industrial sector have been given an award from a government minister.

The award of the Minister for Construction and Regional Development was given to a graduate of the Realization of Buildings study program.

The Minister of the Environment award was given to a graduate of the Hydraulic Structures and Water Resources Management study program; the Minister of Transport, Posts and Telecommunications award was given to a graduate of the Bearing Structures of Civil Engineering Works study program, and the Institute of Geodesy and Cartography award was given to a graduate of the Geodesy and Cartography study program.

In 2008, 27 PhD students completed their studies, 21 in the full-time form of study (including two foreign PhD students) and six in the part-time form.

Out of the total number of 27 PhD graduates, there were 19 PhD students from the previously existing study branches (13 in the full-time and six in the part-time forms of study)

Table 5 - Commendation

Commendation	2003/04	2004/05	2005/06	2006/07	2007/08
Bachelor's Degree Study					
Award of Dean	3	1	2	3	2
Award of Rector	-	-	-	-	-
Master's degree study (Ing.)					
Design studio	2	5	5	2	4
Award of Dean	9	16	4	16	15
Award of Rector	-	3	3	7	6
Award of minister	3	4	4	3	3

Table 6 - Number of PhD graduates

3.4 Student mobility

Study branches (P)	Standard length of study stays (P)	Part-time form	Total number of graduates (P)
Short term exchanges of students and long-term study stays continued in the academic year 2007-2008. FCE has taken a leading position in the implementation of student mobility at our University together with the Faculty of Applied Mathematics (O) and the Faculty of Architecture (O) in the constructionally building structures (O) at Erasmus program and to obtain professional experience with companies of the EU countries within the Vinci II program. In the academic year 2007/2008, 28 students left Slovakia to study at foreign universities, and five left to participate in vocational training with companies within the EU countries in order to acquire professional experience (P). Six students travelled abroad through the CEEPUS program.	3	1	1
Applied Mechanics (O) especially offered to the very best students. It is important to select candidates both on a professional basis and on their language proficiency and to fulfill all the requirements corresponding to the criteria of the ECTS (European Credit Transfer System) so as to avoid problems in the exchange of the study stay application.	3	0	1
Propagative students for study abroad would welcome the amount of study stays implemented has increased and that the number of university students from abroad who are interested in studying at our Faculty is also increasing.	3	0	1
Sanitary and Engineering Works (O) and Hydraulic Engineering (P). The Faculty accepted a student from Sofia, Bulgaria, so that she could accomplish her diploma work (Department of Hydraulic Engineering), two PhD students from Podgorice, Montenegro (Department of Steel and Timber Structures) and Skopje, Macedonia (Department of Geotechnics), one PhD student from Belgrade, Serbia (Department of Geotechnics) and two students through Czech Non-Governmental Agreements.	3	0	5
Geodesy and Geotechnical Cartography (O) and Hydrology and Water Resources Management (O).	3	0	1
Landscape Design (P).	3	0	1
3.5 Student scientific conference			
In the 2007/2008 academic year, the traditional student Scientific conference was organized concurrently with the Eighth Day of the Faculty of Civil Engineering, STU (at the CONECO international trade fair) on April 2, 2008. The conference consisted of 15 sections, and 147 students with 147 works participated in it. Eighty-five distinguished experts from the Faculty and practice were members of the professional boards. The 253 best works which won the first, second and third positions and the fourth and fifth positions in sections with more than 11 works were commended by the Faculty. Eleven works were awarded the Literary Fund Prize. The order of the other works was not specified. The members of the professional boards confirmed the high quality of the works presented.			

Table 7 - SSC – Number of works

Department	Number of works	Number of students	Section	Number of works in the section	Number of positions awarded	Number of board members
ARC	10	16	Architecture	10	3	6
BKM	5	5	Concrete Structures and Bridges	5	2	5
DOS	11	11	Transportation Engineering	11	3	5
ERS	12	12	Economics and Building Industry Management	12	5	6
FYZ	13	26	Building Physics	13	5	5
GDE	3	5	Geodesy and Cartography	8	3	5
GZA	4	4				
MPU	1	1				
HTE	9	9	Hydraulic Engineering	9	3	5
JAZ	6	7	Languages	6	3	5
KPS	7	7	Building Construction	7	3	5
KDK	7	7	Steel and Timber Structures	7	3	5
GTE	4	4	Structural Mechanics and Geotechnics	11	5	5
SME	7	11				
TZB	5	11	Building Services	5	2	5
TES	16	18	Building Technology	16	5	5
VHK	9	9	Land and Water Resources Management	9	3	5
ZEI	18	18	Sanitary and Environmental Engineering	18	5	66
Total number	147	181		147	53	85

The general sponsor of the 8th Day of the FCE was once again the First Building Savings Bank which, in a decisive way, contributed to the financial awards of the winning works in each of the sections and the award of the Dean. The nominees were also allocated special incentive scholarships.

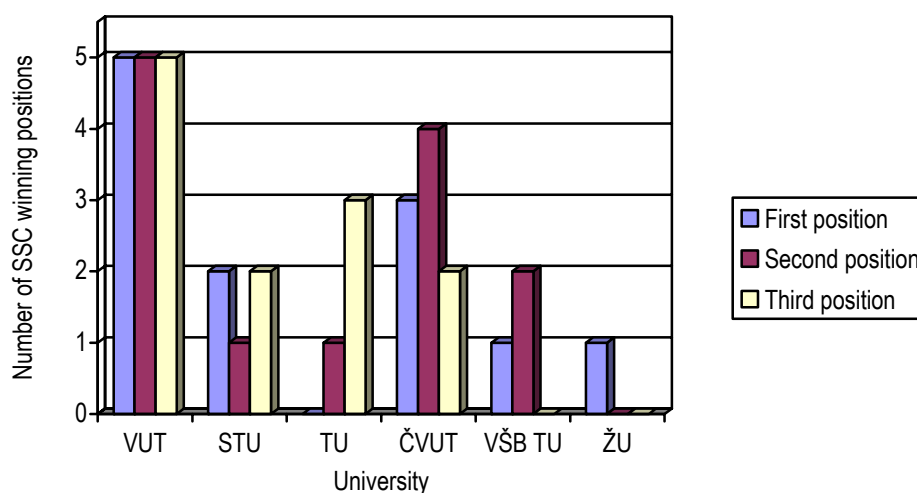
The first position was in the amount of SKK 5,000, the

Eighteen winning works participated in the 9th annual competition of the SCC of the Czech and Slovak Faculties of Civil Engineering, which was held at the Faculty of Civil Engineering of VŠB TU, Ostrava on May 22, 2008. Students from the Faculties of Civil Engineering of ČVUT Prague, VUT Brno, VŠB TU Ostrava, ŽU Žilina, TU Košice and STU Bratislava took part in the competition.

Table 8 – An overview of the number of SSC works winning positions

University	First position	Second position	Third position
VUT Brno	5	5	5
STU Bratislava	2	1	2
TU Košice	-	1	3
ČVUT Prague	3	4	2
VŠB-TU Ostrava	1	2	-
ŽU Žilina	1	-	-

Graph 3 - An overview of the number of SSC works winning positions



3.6 Managerial activities and supervision of education

The principal aim of the Faculty is to provide a high level of education. The Presidium of the Faculty fully realizes that the quality of the pedagogical process is dependent to a certain degree on the quality of the management and the supervision of such a process. Educational issues are regularly discussed at meetings of the Presidium of the Faculty and the Dean's Council.

The principal and conceptual documents which are of main concern and deal with the educational process are approved by the Academic Senate and the Scientific Board of the Faculty.

The Presidium of the Faculty pays particular attention to the application of the system of quality management in the field of education. The relatively large number of study programs along with the present restructuring of the study branches to

form study programs emphasize the quality of the managerial and supervisory activities. A pedagogic board has been set up for each Bachelor's degree study program; they control the educational process within the Bachelor's degree study program and the related Master's degree study program (Ing). The chairperson of the pedagogic board is the guarantor of the individual study program. Students representing the individual study programs are also members.

The guarantor of a study program holds an irreplaceable position in the quality management process of education in order to execute the performance of such activities.

FCE, STU, approved the Statute of the Guarantor to ensure the above activities (it was given as an example for the formulation of the Statute of the Guarantor of a Study Program at the individual Faculties of STU).

The Statute defines the position of the guarantor in the structure of the Faculty, as well as his competence, rights and commitments. The study results of the study program the guarantor is in charge of and the assessment of the quality of the education from his/her students are the basic and effective tools of quality management which the guarantor of the study program maintains.

Regular meetings with the students of a specific study program are among the basic duties of the guarantor of a study program. The purpose of such a meeting is the exchange of mutual information on events with regard to the study program and the prompt resolution of possible problems.

The guarantor informs students about the contents of the study program and obtains information from students, especially about the quality of the lectures and seminars, faculty premises or program schedules, etc. Consequently, he deals with any problems in cooperation with the guarantors in charge of individual subjects or departmental heads and more serious problems with the relevant vice dean.

An inseparable part of the management of the educational process is its supervision via the inspection of classes. The goal of such inspections is the control of the quality of the educational process with regard to the time allowed for teaching, the content of the subject, and the performance of a teacher. This inspection also looks for easy-to-understand explanations on the one hand and tries to help novice teachers on the other hand.

At the beginning of each semester, the Dean specifies the duties of the Departmental Heads. One of them is to perform the inspection of the classes of the Department's teachers and provide other inspection activity, e.g., the inspection of seminars given by lecturers. Members of the Presidium of the Faculty carry out inspection activities, too.

With regard to the supervision of the quality of the educational process, inspection of classes by the guarantors of the study programs plays an important role. It is their principal duty. We keep a record of the inspections. The results of inspections are dealt with at the departmental meetings, the pedagogic and scientific boards and the Dean's advisory board. More serious problems are dealt with by the relevant vice deans.

The process of implementing quality management in the teaching process was launched last year. The first versions of the basic documents, i.e., the quality manual and the quality policy, were drawn up.

The documents were submitted to the academic community for open discussion via the Dean's Council and the Academic Senate of the Faculty. The documents were also submitted for discussion at a meeting of the Academic Senate in Kočovce on November 20 and 21, 2008. Proposals were implemented in the versions of the documents, which will be a matter for more discussions at the meetings of the executive bodies.

We assume that the formation of the basic documents on the quality management program will be completed in the first quarter of the year 2009. Subsequently, the system will be introduced into practice, that is, from the academic year 2009/2010.

The system is expected to substantially improve monitoring of the teaching process and effectively mobilize feedback, define the competences and authority of all the levels of management of the teaching process, develop effective tools in order to eliminate any identified deficiencies and thus improve the quality of the teaching process.

3.7 Evaluating the quality of the teaching process and the assessment of teachers by students

In accordance with the Act on Higher Education, an evaluation of the quality of the pedagogical process belongs among the basic rights of students. However, the Presidium of the Faculty understands the monitoring of the educational process by students not only as a right of the students but also as an effective tool to improve the educational process.

In the academic year 2007/2008, an assessment of the pedagogical process by students was carried out in the form of questionnaires. The Student Parliament prepared the principles of assessment. The Student Parliament, in cooperation with the Presidium of the Faculty and experienced pedagogical staff, developed the questionnaires. The questionnaire and the organization of the assessment procedure were discussed by the Presidium of the Faculty.

The assessment itself was carried out in the tenth and eleventh weeks of both the winter and summer semesters. Due to the fact that lectures are not compulsory, it was decided that the assessments of the educational process would be conducted during the course of seminars. Consequently, it was expected that a larger number of students would participate in the survey.

The Faculty's Presidium created the conditions and premises to perform such an assessment. The heads of the departments were familiarized with the method of the assessment and were asked to reserve the time needed during the pedagogical process. Based on this procedure, a relatively large number of students participated in the assessment, which mainly concerned the winter semester.

The Student Parliament performed the distribution and collection of the questionnaires. The filled-in questionnaires were handed in to the Center of Information Technology of FCE, where they were processed.

The survey performed during the pedagogical process proved to be less satisfactory than expected. The persons in charge of the distribution and collection of the questionnaires had to visit each group separately and, as a result, their number increased. Consequently, we can state that the organization of the survey was time consuming. This fact was evident in the summer semester, as there was a lack of volunteers to perform the survey.

Fifty percent of the students took part in the assessment. Participation in the survey varied in all the study programs. In some cases, due to a smaller number of students, it was not possible to evaluate the results objectively. In the summer semester, we did not succeed in carrying out the assessment in all the study programs, particularly in the Master's degree study (Ing). It was possible to evaluate the results objectively only in the case of 50% of the students in the Bachelor's degree study.

On the basis of the results, we can conclude that the overwhelming majority of the teachers assessed are perceived positively. On the other hand, a very critical evaluation emerged.

All the guarantors of the study programs were informed about the results of the assessment (within their study programs). At the same time, they were asked to discuss any identified deficiencies in quality with the relevant departmental head.

The departmental heads were asked by the Presidium of the Faculty to deal with such cases. The departmental heads informed the Presidium of the Faculty about any measures taken.

Students expressed their opinion on the quality of the pedagogical process via their representatives in the Academic Senate, the Presidium of the Faculty and at a meeting held on the occasion of International Students' Day in the winter semester.

In the future, evaluations of the pedagogical process will be performed via the Academic Information System. That is expected to save time as the currently used method of assessment by questionnaires is time consuming.

3.8 Student grants and loans

3.8.1 Social scholarships and loans

The Faculty's Registrar's Office is in charge of social scholarships, including student loans and their regular payment. In addition, the Office follows the students' performance and related study matters.

In the academic year 2007/2008, social scholarships were granted to 441 students.

The social scholarships ranged from SKK 300 to SKK 6,000. The total for social scholarships was SKK 17,689,900. In the academic year 2007-2008, 43 students received loans from the Faculty of Civil Engineering.

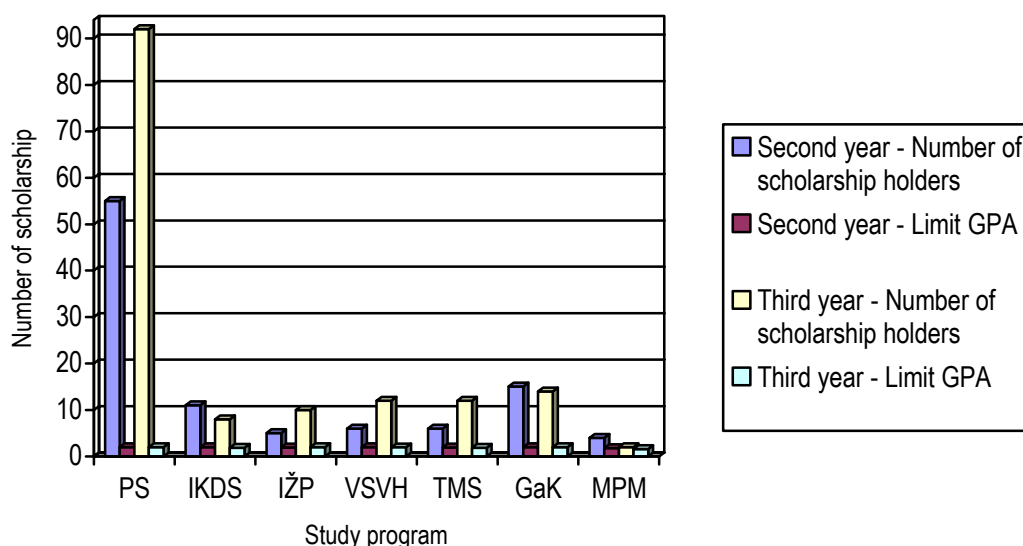
3.8.2 Merit scholarships

In the previous academic year incentive, performance-based, as well as extraordinary scholarships were granted. The incentive and performance-based scholarships were granted only as a lump sum for the winter term due to changes made by the amendment to the Act on Universities No. 131/2002 Coll. The scholarships were granted only to higher-level students (not to students in their first year of study). Scholarships of SKK 10,000 were granted to 190 students (125 Bachelor's students and 65 Master's students) and scholarships of SKK 5,000 went to 192 students (127 Bachelor's degree students and 65 Master's degree students). The total amount of all the incentive or performance-based scholarship awards was SKK 2,860,000. The candidate lists were made in accordance with the rules for awarding incentive scholarships approved by the Academic Senate of the Faculty. Separate candidate lists were compiled for each study program for the Bachelor's degree students and a joint list for all the study programs for the Master's degree students. An overview of the number of scholarship holders in the Bachelor's degree study with regard to the year of study is shown in Table 9. An overview of the extraordinary scholarships allocated by FCE, STU in 2008 is shown in Addendum 1.

Table 9 – Number of scholarship holders in the Bachelor's degree study

Study program	Second year		Third year	
	Number of scholarship holders	Limit GPA	Number of scholarship holders	Limit GPA
PS	55	1.99	92	2.00
IKDS	11	2.00	8	1.86
IŽP	5	1.89	10	1.96
VSVH	6	1.98	12	1.94
TMS	6	1.88	12	1.86
GAK	15	1.96	14	2.00
MPM	4	1.76	2	1.54
	102		150	
Total BSc. Degree scholarship 252				

Graph 4 - Number of scholarship holders in the Bachelor's degree study



An extraordinary merit scholarship can be awarded for extraordinary academic performance, research activities or representing the Faculty in sports or scientific and cultural areas. Student candidates for extraordinary scholarships can be nominated by members of the academic community, and the scholarship is awarded by the Dean of the Faculty (for representation of the Faculty) or by the Rector (for representation of the University).

The award of extraordinary scholarships is regulated by STU Rector's Directive No. 1/2006-N: Criteria for Extraordinary Scholarships at the Slovak University of Technology in Bratislava. In the past academic year, extraordinary scholarships were awarded to successful SVK nominees in the amount of SKK 5,000 for the first rank, SKK 4,000 for the second rank, SKK 3,000 for the third rank, SKK 2,000 for the fourth rank and SKK 1,500 for the fifth rank and for the Literary Fund Prize. There were 74 SVK scholarship awards.

The total amount awarded for extraordinary scholarships for the SVK nominees was SKK 204,500. Extraordinary merit scholarships of SKK 8,000 were awarded to 14 Master's degree program graduates (Ing) and two Bachelor's degree program graduates for their outstanding academic achievement (the Dean's Award). Six students were granted the Rector's Award based on extraordinary scholarship by the STU Rector.

Excellent final theses by 27 Master's program graduates and eight Bachelor's program graduates earned these students SKK 3,000 in extraordinary scholarships. Four students were each awarded extraordinary scholarships of SKK 1,500 for excellent studio work. Extraordinary scholarships of SKK 5,000 were awarded to five students and SKK 6,000 to one student for activities on behalf of the Faculty's development.

3.9 Life-long learning

FCE offers courses of continuing education following its study branches or programs, the aim of which is to gradually create a complete system of life-long learning. In the academic year 2007/2008, FCE, STU offered 44 courses to the professional public, which were attended by more than 1,090 participants (Addendum1).

Lecturers paid great attention to the prepared texts offered in the form of CDs in many cases or in the form of printed texts. Some of the courses, mainly the accredited ones, are provided in the form of textbooks.

The quality of the individual courses can be rated very highly. The participants showed great interest in such courses and appreciated the high level of their preparation and the conduct of the courses as well as the study materials.

4. SCIENCE, TECHNOLOGY

The variety of the evaluated aspects, together with growing pressure for universities to obtain their own funding, which is expressed by their efforts to acquire research projects, must bring us to a reassessment of certain traditional processes. Because we want to rank among the so-called "research universities" which will be preferred grantees of subsidies from the Ministry of Education SR, we should use our potential and all opportunities to revitalize the experimental basis which is indispensable for the development of any science discipline.

4.1 Activities of the Faculty's Scientific Board

The Scientific Board of the Faculty consists of 27 ordinary members and 11 honorary members. In the year 2008, it held one ceremonial and three working sessions. The key topics of the March meeting were the Faculty's Annual Report for the year 2007 and updating the Long-Term Goals for the development of the Faculty for the year 2008. In addition, the Board approved the principles for awarding the title of "Visiting Prof." At the March meeting, attention was paid to the approval of study plans for all levels of study for the academic year 2008/2009; the rules for the appointment of members of boards for state final examinations of the third level of study, and the rules for the appointment of supervisors. Moreover, a list of the members of the state final examination boards for all the levels of study was supplemented.

The key topic of the October meeting of the Scientific Board was a report on the educational activities of the Faculty for the academic year 2007/2008. The ceremonial session, which was held on December 5, 2008, was directed at the 70th anniversary of the Faculty of Civil Engineering, STU.

Approvals of qualification procedures have formed an important part of the meetings of the Scientific Board. The Scientific Board approved awards of the PhD degree to 19 students, and nine graduates of the new doctoral study programs were awarded the PhD degree over the course of the last year. In 2008, inaugural procedures for four Faculty employees were commenced (Assoc. Prof. Sokol, Assoc. Prof. Halvoník, Assoc. Prof. Hudoba, and Assoc. Prof. Grünner). On December 1, 2008, the Scientific Board of STU unanimously approved the nomination of Assoc. Prof. Sokol. In February 2008, the Scientific Board of STU approved Assoc. Prof. Šveda to be appointed Professor. He has been waiting for his appointment by the President of the Slovak Republic (it will take effect on January 20, 2009).

Four habilitation procedures were commenced (Aroch, Štujberová, Šiagiová and Husár). We are gratified to say that Prof. Rouseková, Prof. Bednárová and Prof. Mikula were appointed Professors and Assoc. Prof. Somorová was appointed Assoc. Professor in 2008. Ing. Martinček, PhD, was appointed Visiting Professor (Department of Steel and Timber Structures) by the Scientific Board, and Prof. Melicher was appointed Emeritus Professor. Prof. Joseph A. Clark of Strathclyde University of Glasgow was appointed Dr.h.c. by the Ceremonial Academy of FCE, STU.

4.2 Science and research

We are witnessing a highly competitive environment in the field of scientific research. This has been evident in the increased requirements of some agencies when submitting new projects along with continuing and final assessments of projects. Low assessments of projects have a negative effect on project authors when planning their future work. There has been a considerable increase in the research activities of our employees. This trend is considered to be a positive one. It is possible to supply some assessment reports using concrete figures as shown in Table 10.

The assessment indicators show what forms of research activities predominate under FCE's conditions. The VEGA and APVV agencies, international research projects, the INTERREG and structural funds drawn from the ESU are currently ranked among the leading agencies. Considering the fact that some types of research projects have been finished this year, it is essential to proceed in the VEGA programs and apply for international research projects.

The figures in Table 11 cannot capture the efficiency of the Faculty's individual employees. The calculated efficiency or allocated financial means per person can more precisely indicate the development of their efficiency; relatively smaller workplaces can be reflected in a more favorable light. For that reason, the allocated financial means in Table 10 point to the performance of the Faculty as a whole and per person.

We might thereby be satisfied to a certain extent with such an evaluation as the financial allocation from the ongoing projects per person has actually been gradually increasing; in 2008, when most of the projects concluded, the above proportion increased by 48% in comparison with 2007. The results presented are to a certain degree subject to factors we cannot influence.

Table 11 - The financial allocation per creative employee

Year	Number of creative employees	Allocated financial means (in thousands of SKK)	Allocated financial means per employee (SKK)
Faculty as a whole			
2004	333.30	26,445,159	79,343
2005	323.05	34,264,330	106,065
2006	310.93	67,973,916	218,615
2007	303.04	53,097,377	175,215
2008	293.03	75,907,880	259,045
Average 2004 – 2008	312.67	51,537,732	167,657

Table 10 – Number of ongoing projects at the Faculty in 2008

Agency	Nos.	Project duration	Funds from state budget		Funds from other sources
			Running funds	Capital funds	
VEGA	19	2006-2008	4,655,000	2,124,000	
	11	2007-2009	1,969,000	860,000	
	23	2008 - 2010	3,685,000	2,621,000	
	3	2008-2010 SAC and FEI	110,000		
Total number:	56		10,419,000	5,605,000	
KEGA	2	2006-2008	454,000	338,000	
	1	2007-2009	697,000		
	1	2008 -2010	39,000		
	2	Cooperation	307,000		
Total number:	6		1,497,000	338,000	
Applied research	1	2006-2008	,000		
	3	2007-2009	1,400,000	50,000	
	1	2008 -2010	250 000	300,000	
Total number:	5		1,850,000	350,000	
MVTS	3	2006-2008	520,000		
	4	2007-2009	460,000		
Total number:	7		980,000		
State research and development programs	4	2008	623,000		
Total number:	4		623,000		
APVV	2	2006-2009	2,674,000	140,000	
	3	2007-2009	3,121,000		
	6	2008 - 2010	5,707,000	1, 915,000	
Total number:	11		11,502,00	2, 055,000	
APVV – LPP	4	2006-2009	1,572,000		
	3	2008 - 2011	1,399,000		
Total number:	7		2,971,000		
APVV – International cooperation – mobility	2	2008-2009	190,000		
Total number:	2		190,000		
APVV – cooperation with other agencies	1	2006-2008	286,500		
	1	2007-2009	122,000		
	3	2008 - 2010	437,000	35,000	
Total number:	5		845,500	35,000	
Structural funds from ESF	9		3,487,371		SKK 4,697,078
INTERREG	3		6,230,524		SKK 6,922,805
International research projects	15				EUR 453,595 EUR = SKK 13,998,601
International educational projects	9				EUR 42,166 = SKK 1,321,001

A statistical assessment alone cannot capture certain significant trends. International projects not only bring direct financial resources but also improve the Faculty's standing with other partner universities ranked among the highly evaluated ones. It is this difficult-to-measure aspect that creates the image of the abilities of the Faculty for meeting the needs of long-term development. Certain positive elements could be observed in 2008, namely, a moderate increase in state subsidies for ongoing projects (which meant an increase in the financial resources which do not depend on the influence of the employees of the Faculty), a higher number of calls, and so forth. There were these positive developments but also a striking trend of a downturn in the autumn months in the activities of certain agencies, which were experienced by several project teams.

Considering the above facts, it is not appropriate to draw firm conclusions from the anomalies of a certain year. However, a fact that must also be accepted is that the conditions for acquisition of a grant from any agency have been becoming more difficult every year and schools relatively unknown until recently have been able to push out those university departments which have not been quick enough to respond to the new competitive environment.

Much more attention will need to be devoted to better project design than has been done until now.

Several departments could thereby be inspired to improve in this area and to guide colleagues that cover the administrative requirements of their projects.

We have to admit that it is essential to pay greater interest to international projects. It is reported that the results of the performance of our employees abroad has been outstanding. We might be interested in an assessment of the ratio between the international and domestic grants which has lately been expressed as the percentage ratio between the international and domestic grants and which has developed as follows:

The percentage ratio between international grants and domestic grants:

2004:	70.5 %
2005:	22.5 %
2006:	30.6 %
2007:	12.5 %
2008:	25.1 %

It seems as if the ratio oscillated within ranges from a yearly value of about 25%. We cannot be fully satisfied with the resulting number. The Presidium of the Faculty has urged departments to apply for international projects, but it did not have the response expected. In addition, the above-standard conditions were prepared in the form of assistance to our employees in the preparation of and application for projects by the Faculty's Project and Internal Affairs Department.

4.3 Publishing activities

Publishing newly acquired knowledge is directly related to the outcomes of research activities. Issues concerning the recordkeeping of publishing activities were discussed in the Dean's Council several times over the course of the year. A summary by department can be found in Table 12; the number of publications by the Civil Engineering Faculty, STU from 2004-2008 is in Addendum 2.

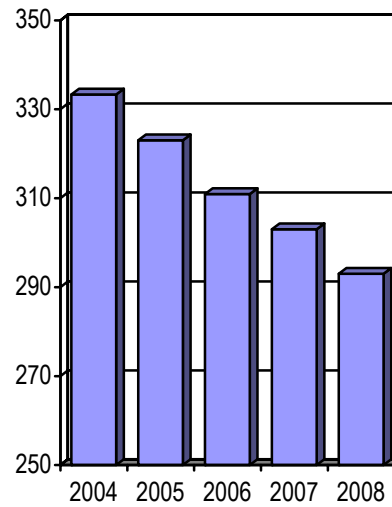
The absolute number of publications could result in a false sense of self-satisfaction; for that reason the last two columns of Table 12 convert the overall numbers into publications per person (employees, including PhD. students), while considering only the so-called "subsidized" titles.

The total number of publications in recent years has ranged from 1,200 to 1,400 each year. If we include only those publications that the Ministry of Education SR considers when decisions are made about subsidies, it is clear that several departments need to give serious thought to the quality of their publications as well as to the standards of the journals or proceedings where their papers are published. Almost 250 titles, representing 20 percent of the total publishing activities, were not included in the database of the Ministry of Education SR.

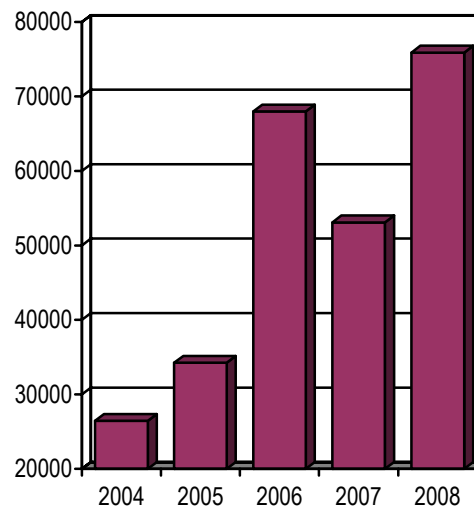
This is a very high number of papers that were not evaluated, which must be considered as unacceptable in the future. Time spent preparing non-evaluated papers could be used for better ends. In addition to that, we can still see that a rather high portion of the papers in the database are incorrectly classified.

Let us hope that these critical remarks are positively perceived by the academic community for the sake of higher quality.

Graph 5 - Number of creative employees



Graph 6 - Allocated financial means (in thousands of SKK)



Graph 7 - Allocated financial means per employee (SKK)

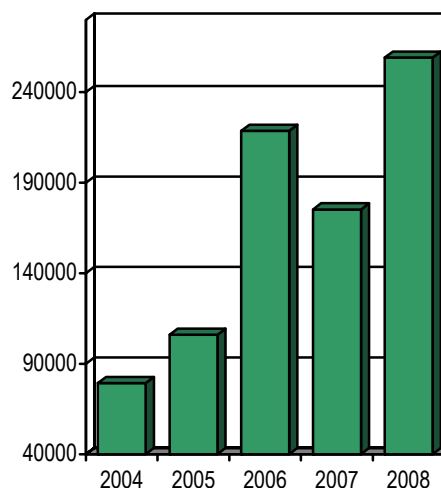


Table 12 – Evaluation of publishing activities in 2008

Department	Publications		Number of employees		Ratio of publications	
	All	Subsidized	Univ.teachers	Univ.teachers + PhDs	publ./univ.teachers	publ./univ.teachers+PhDs
BKM	39	33	15	28	2.20	1.18
DOS	25	14	8	9	1.75	1.56
GZA	36	32	14	20	2.28	1.60
GDE	41	41	11	14	3.73	2.93
GTE	69	67	17	24	3.94	2.79
VHK	133	87	12	24	7.25	3.62
HTE	118	78	10	13	7.80	6.00
KPS	125	109	39	53	2.79	2.06
KDK	50	33	11	19	3.00	1.74
MPU	11	8	5	7	1.60	1.14
MDG	136	130	40	44	3.25	2.95
FYZ	27	27	5	5	5.40	5.40
SME	79	76	16	22	4.75	3.45
MTI	44	43	6	7	7.17	6.14
TES	102	89	15	19	5.93	4.68
ZEI	67	62	11	13	5.64	4.77
TZB	98	83	14	24	5.93	3.46
ARC	38	15	9	14	1.67	1.07
USZ	25	25	3	5	8.33	5.00
JAZ	32	0	9	9	0.00	0.00
TVY	0	0	7	7	0.00	0.00
HUV	19	17	5	5	3.40	3.40
The total number	1,352	1,107	287	385	3.86	2.87

4.4 Specialist, expert and expert evidence activities

So-called contractual research has long been a part of the tradition at the Faculty. The Faculty has provided the latest acquired knowledge of building practice through solutions for non-routine tasks. The proportion and resulting financial budget of the Faculty for contractual research decreased in 2008 (Table 13).

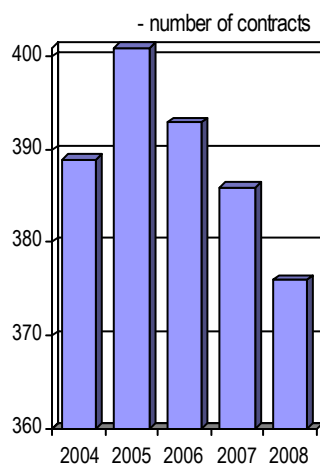
The total financial budget of more than SKK 40 million provides evidence of the constant interest of the building practice in maintaining its collaboration with the Faculty, which has been useful for both parties; however, the Faculty's teams cannot meet all its demands. The Faculty Administration supports this kind of activity and is aware of its positive impact on the professional interface between the Faculty's employees and practice, especially due to its generation of supplementary financial sources for the Departments.

Table 13 – An overview of entrepreneurial contracts from 2004 to 2008

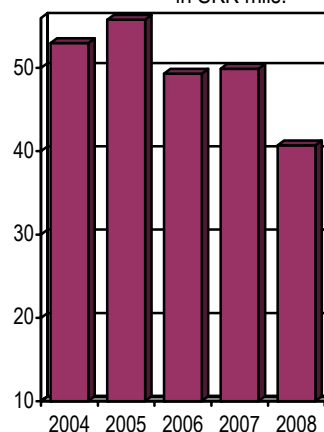
Year	Number	Financial budget in SKK mils.
2004	389	53.0
2005	401	55.8
2006	393	49.3
2007	386	49.9
2008	376	40.7

In the above overview of business contracts (Table 13), expert evidence by the Institute of Forensic Engineering is included in the financial budget of the Faculty. The Institute of Forensic Engineering focuses its activities on two basic fields: providing special expert education for applicants trying to obtain the qualification of forensic expert (based on an approved schedule) and providing expert evidence. The Institute's 30 instances of expert evidence in 2008 demonstrate its professional and organizational work. In addition, its forensic activity is ensured in collaboration with the Faculty's employees and outside experts, and it is expected that courts, state and public authorities will make use of its services in the future.

Graph 8 - An overview of entrepreneurial contracts from 2004 to 2008



Graf 9 - An overview of entrepreneurial contracts from 2004 to 2008 - financial budget in SKK mils.



4.5 Innovation in the Faculty's experimental platform

As mentioned before, the mission of universities is the provision of a university education and creative scientific research, the results of which should be reflected in the pedagogical practice. Obtaining newly acquired knowledge in technical branches cannot be accomplished without a high-quality experimental platform. Therefore, the Presidium of the Faculty set a goal to renovate the neglected laboratories and departments of the Faculty. Such a process is time-consuming even in the case of sufficient financial means. We have been facing the problem of how to obtain the financial means to renovate the laboratories. In 2008, several submitted projects focused on this kind of activity. We can attract the attention of new students to study at our Faculty if the general public learns about our experienced teachers who, in addition to their good pedagogical performance, create value by working in experimental laboratories equipped with the latest technology.

4.5.1 Centers of excellence

The first proposed call to apply for projects concerning "Centers of Excellence" became an important impetus to encourage most employees of the Faculty to redirect their research activities. In the end, due to the delayed announcement of the call the focus of our work shifted from the spring months to the autumn period, and our finalization employees had to work vigorously. Out of the 16 projects that were originally on offer, STU finally managed to submit 12 projects. Our Faculty submitted two projects and one in cooperation with the Faculty of Architecture for the establishment of Centers of Excellence:

- Center of Excellence for Intelligent Buildings – Prof. Petráš, research team leader
- Center of Excellence for Integrated Flood Protection of Land – Prof. Šoltész, research team leader
- Center of Excellence for Research and Reference Center for Cultural Heritage – Assoc. Prof. Kráľová, research team leader, Faculty of Architecture, STU

Nearly all the Faculty's departments participated in the above projects. Unfortunately, only one of them succeeded in overcoming all the obstacles in the selection process (the project by Prof. Šoltész). In spite of our disappointment over the failure to obtain more projects, we will concentrate all our efforts, energy and experience from the previous call and redirect them to participate in the next calls, which are expected soon.

4.5.2 Central Laboratories of FCE STU

In September 2008, the Central Laboratories (CL) of FCE STU were founded as an independent organizational part of the Faculty. A CL Manager was appointed on October 1, 2008, and employees from individual departments were shifted to the above organizational unit of the Faculty. A concept for its development has been drawn up with regard to its eventual economic independence. A proposal for its economic performance for the years 2009 – 2011 and the estimated percentage ratio for its co-financing is given in Table 14. As a result of the above indicators, the Laboratories should be financed to a certain degree from their own activities over the course of the coming years.

It is obvious this co-financing will correspond to the extension of their portfolio of activities, which will consist of such activities as testing, accreditation of the laboratories and providing courses and other services.

The following planned investment activities regarding the CL STU facilities for the year 2009 are as follows:

9. Insulation of the building of the Laboratory of Bearing Structures of the CL (roof insulation, external insulation of the envelope, adjustment of the heating) at a cost of SKK 12.3 million. In order to subsidize the insulation of the envelope of the CL building, Vice Deans Prof. Šoltész and Assoc. Prof. Sokol applied for a grant from the EKOFOND on the basis of which the Faculty obtained over SKK 3.5 million to co-finance the project.
10. Renovation of the Laboratory of Bearing Structures of the CL to make three classrooms for training and courses and reconstruction of the convenience facilities in the amount of SKK 3.9 million
11. Enclosure of the complex of the CL FCE STU in a length of about 830 meters at a cost of SKK 1 mil.

Table 14 – The CL financial budget for 2009 – 2011 in SKK and means of co-financing.

Year	Financial budget in SKK mils.	CL	FCE
2009	7.0	23%	77%
2010	7.9	54%	46%
2011	9.0	70%	30%

4.6 Awards

In addition to dealing with the Faculty's goals in 2008, we were delighted to learn about awards our employees and students were granted by the Faculty and on a nationwide basis. At the end of the year, the Rector of STU awarded Prof. Ing. Ján Szolgay, PhD, the title of "Scientist of the Year." He was awarded a certificate recognizing his work with the Intergovernmental Panel on Climate Change (IPCC), which was awarded the Nobel Peace Prize in 2007. He has contributed substantially to the work of the IPCC over the years since the inception of the organization. Prof. J. Szolgay's research work deals with solutions to global warming and flood protection.

Prof. RNDr. Karol Mikula, DrSc. FCE, was nominated the "Best STU Prof.," a prize which is awarded annually. The Slovak Academy of Sciences awarded Prof. Ing. Dušan Petráš, PhD., the "honorary Aurel Stodola Plaque" for merit in the technical sciences. Prof. Ing. Jozef Gašparík, PhD, was awarded "The 2008 National Prize SR" for "Quality," which was published by the Slovak Office of Standardization, Metrology and Testing for his popularization and publishing activities in the field of quality management. The fourth year of a Slovak competition for talented personalities from universities in Slovakia known as "The Student Personality of Slovakia" for the 2008/2009 school year for all three levels of study was held and evaluated under the auspices of the President SR, supported by the Slovak Rectors' Conference and sponsored by SAS. The aim of the project is to honor young Slovak personalities at universities in Slovakia for their talent, goal orientation, and achievements and to introduce them to the public; the award is additionally designed to enable them to win recognition both at home and abroad as well as to motivate other students to emulate their outstanding performance. Among the ten winners in the ten categories of study fields, Ing. Michaela Danáčová of the Faculty of Civil Engineering was awarded in the category of Civil Engineering and Architecture. In addition to her excellent study results in the full-time Doctoral degree study, Ms. Danáčová keeps herself up to date in scientific and research activities involving projects of the Department of Land and Water Resources Management, the results of which she regularly publishes. She has won several awards in competitions and scientific conferences of hydrologists and water managers.

5. OVERAL ACCREDITACION

The preparation of documents for the overall accreditation of STU and the Faculty was one of the most important tasks of the period evaluated. The Presidium of the Faculty decided to exploit this opportunity and improve the structure of the study programs. The new structure of the study programs reflects new opportunities and the interests of the Faculty, as well as the needs of the civil engineering and geodesy practice.

This is important to allow for the continuity of the educational process and the continuing graduation from the Faculty of those students who have enrolled in the newly introduced study programs.

Due to the relatively good qualification structure, the Faculty does not have any problems with the guarantors for the study programs which are in the process of preparation.

Eight Bachelor's degree study programs, twelve Master's degree study programs and nine Doctoral degree study programs were submitted for accreditation. Their structure is as follows:

Bachelor' degree study programs:

- Geodesy and Cartography
- Civil Engineering and Transport Construction
- Environmental Engineering
- Building Structures and Architecture
- Mathematical and Computational Modeling
- Building Technology and Management
- Civil Engineering (in English)
- Hydraulic Engineering and Water Resources Management

Master's degree study programs:

- Architectural Construction and Design
- Buildings and the Environment
- Geodesy and Cartography
- Civil Engineering and Transport Construction
- Landscape Engineering and Landscape Design
- Mathematical and Computational Modeling
- Bearing Structures of Civil Engineering Works
- Building Structures and Architecture
- Building Services
- Techniques for Indoor Building Environments
- Realization of Buildings
- Hydraulic Engineering and Water Resources Management

Doctoral degree study programs:

- Applied Mathematics
- Applied Mechanics
- Geodesy and Cartography
- Landscape Engineering
- Building Technology
- Theory and Construction of Civil Engineering Works
- Theory and Construction of Building Works
- Theory and Techniques for the Internal Environments of Buildings
- Hydraulic Engineering

The compilation of the accreditation document of the Faculty in the fields of science and research was a chance to evaluate the orientation of both the Faculty's research activities and individual departments to a greater extent than ever before. In addition, the departments evaluated the Faculty's activities and performance.

The Faculty submitted the accreditation document for three fields of research:

- Research Field No 5: Design, Engineering and Technology, and Water Resources Management
- Research Field No.19: Agricultural and Forestry Science;
- Research Field No. 24: Mathematics and Statistics.

The evaluation of the research activities in the specified areas consisted of three attributes, namely output, setting, and award, each of which should be weighted both for the total evaluation and for the criteria that must be met.

The output attribute was fully founded on the quality of the publishing activities of the Faculty, depending upon their inclusion in various categories of papers. The setting attribute consisted of the capacity and results achieved in the Doctoral degree study (weight 1/3), research infrastructure (laboratories, seminar rooms, KIC Library and Information Center, computer technology, and workshops: weight 1/6) and other aspects (e.g., students working as scientific assistants at a departmental level (VPS), scientific and artistic events accomplished, and implementation of research results (weight 1/6).

The award attribute consisted of citations (above all, the SCI-science citation index), invited lectures, memberships on international committees, editorial boards of journals, international awards, acquisition of international projects, patents granted, competition nominees and participation in international exhibitions.

The evaluation, a summary of which is in Table 15, was not easy to compile despite the extended source material.

The total evaluation of the Faculty can be characterized as the average of the partial final evaluations of the individual attributes which, with respect to various research areas, have various weights as reflected in the final overall evaluation. Let us hope that the Accreditation Committee of the Government SR will confirm that our outputs will permit us to acquire the required level of a so-called "research university."

The accreditation document was accomplished in accordance with the requirements of the Rector's Office during January 2008 and submitted in compliance with the timetable of works to the Rector's Office by January 31, 2008. Consequently, sections of the Rector's Office checked it and, after harmonization, the complete accreditation document of STU was submitted to the Accreditation Commission of the Slovak Government. The deadline was February 2, 2008.

The process of the control regarding the accreditation document and facilities, material, personnel and other conditions that were the subject matter of the accreditation began at STU during the winter semester 2008/2009. The first visit of the members of the Accreditation Commission of the Slovak government to STU was on November 12, 2008. Consequently, the first visit of the members of the Accreditation Commission to FCE, STU was on November 13, 2008. The aim of the visit was to inspect utility facilities. The members of the Accreditation Commission visited spaces of selected laboratories, the Library and Information Center, the IT Center, some classrooms and other Faculty spaces. No negative opinion was given.

Table 15 – Overall accreditation-a complete self-assessment by the Faculty of Civil Engineering

	Output attribute	Setting attribute	Reward attribute	Total evaluation
Research field No. 5 – Design, Engineering and Technology, and Water Resources Management				
Weight	50 %	30 %	20 %	100 %
Evaluation	A– (3.55)	A (4.00)	A (4.00)	A (3.77)
Research field No. 19 – Agricultural and Forestry Science				
Weight	50 %	35 %	15 %	100 %
Evaluation	B (3.15)	A (3.79)	A (4.00)	B+ (3.45)
Research field No. 24 – Mathematics and Statistics				
Weight	40 %	30 %	30 %	100 %
Evaluation	A (4.00)	A (4.00)	A (4.00)	A (4.00)
Faculty of Civil Engineering STU				
Evaluation	3.57*	3.93*	4.00*	
	A–	A	A	A

Note: Data marked with an asterisk (*) stand for the average of the individual attributes

The second visit of the working group's members to the Faculty under the supervision of Prof. Ing. Ivan Hymen, PhD, was held on December 12, 2008. The goal of the visit was to inspect the personnel administration of the guarantors of the individual study programs and their quality control, i.e., classification of the scientific and publishing outputs of the Faculty's staff, outputs of PhD students and award attributes and a visit of selected Faculty utility spaces, too.

There were no comments on either the personnel administration or utility spaces. The members of the AC observed the large number of outputs presented in the accreditation document and asked for a selected number of outputs. Consequently, the Faculty prepared a supplementary list of publication outputs and attributes of rewards and delivered them to Prof. Hymen. The process of the accreditation of our Faculty and STU is expected to be accomplished by the end of February 2009.

6. HUMAN RESOURCES

The area of human resources and the continuing development of the personnel of the Faculty and its specific workplaces is considered one of the priorities that will subsequently determine the further development of the Faculty in all its sectors. Therefore, requirements for the qualification and scientific structure, age structure and professional orientation of all the Faculty's employees must be clearly defined. The Faculty's basic goals must aim towards building up the research of a type of technical university that provides all levels and forms of technical education and maintains the Faculty's dominant position in the provision of education, science and research as well as the assurance of qualifications in the sectors of civil engineering, geodesy and cartography in Slovakia.

A gradual reduction in the number of staff has continued at the Faculty during the monitored period from 607 in the year 2002 to 533 in the year 2008. However, the structure of the teachers remains at almost the same level: professors account for 17% on average, associate professors account for 23%, senior lecturers with a PhD account for 40%, senior lecturers without a PhD account for 19% and lecturers account for 1%. The average age of the university lecturers is 51 and significantly differs from a detailed analysis of the particular categories. For example, the average age of professors is 60 years, associate professors 56, senior lecturers with a PhD 46, senior lecturers without a PhD 43 and lecturers 23 (Table No.16).

There is a high percentage in the category of senior lecturers without a PhD degree, the number of which is gradually decreasing; however, it is still relatively high. The Presidium of the Faculty continues to place emphasis on the support of young employees to encourage them to remain at the Faculty; e.g., successful graduates of the Doctoral study are given preference when applying for a job at the Faculty. The average age of the research and development employees is 45. The average age of the departmental technical staff and administration personnel is 51. There are about 70 technical and administration staff members employed in the Dean's office, the Library and Information Center, and the Center of Information Technology; their average age is 46 years (Table 17).

We have failed to fulfill a high-priority task – an increase in inaugurated and habilitated professors to 60% of the total number of teachers. The number of Professors increased on the one hand, but on the other hand, the category of Assoc. Professors did not follow its expected development and has not reached the required qualification. Through its goal-minded activities, the Faculty's Presidium has succeeded in reducing the number of senior lecturers without a PhD, but the average age of this category is not satisfactory. It indicates that the group of employees in this category older than 55 years of age has stagnated and that the Faculty has not changed its position on lecturers or educational activity providers on a contractual basis yet.

Graph 10 - Structure of the Faculty's teachers

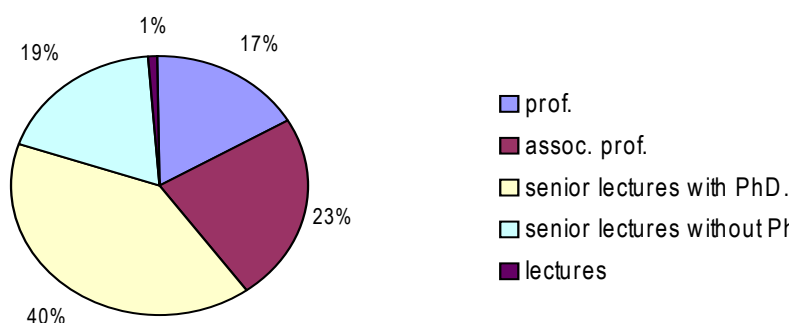


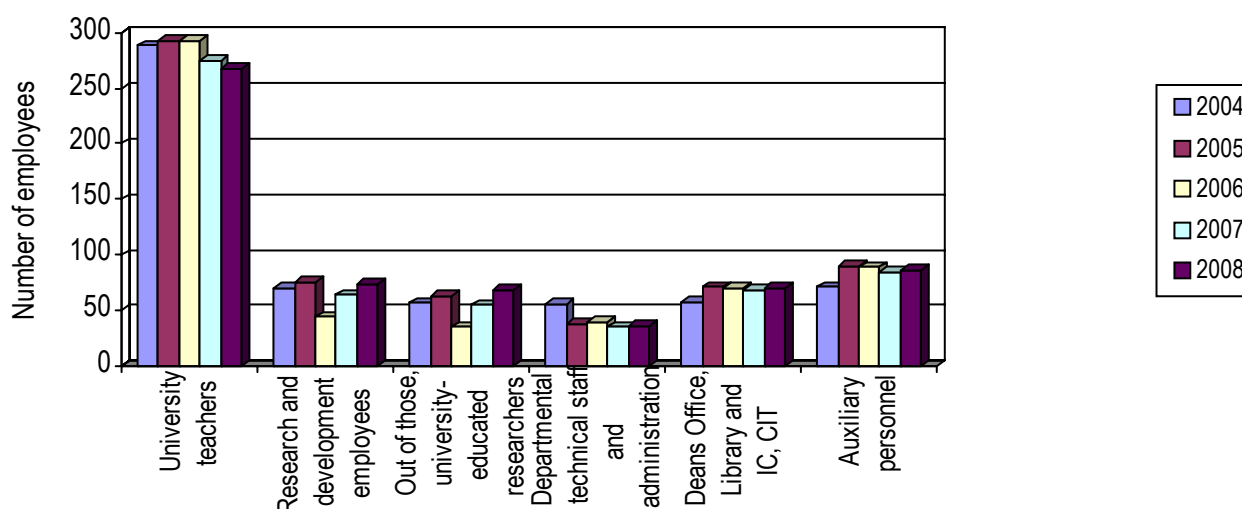
Table 16 – Developments in the age structure of the Faculty's teachers for the period 2004-2008

	2004			2005			2006			2007			2008		
	Amount	%	Average age	Number	%	Average age	Number	%	Average age	Number	%	Average age	Number	%	Average age
University teachers	288	100	49	293	100	50	292	100	49	274	100	51	267	100	51
Out of those, Professors	32	11	59	39	13	58	41	14	59	37	14	60	45	17	60
Assoc. Prof.	88	31	54	83	28	55	79	27	56	71	25	54	63	23	56
Senior lecturers with a PhD	85	30	46	90	31	47	96	33	45	111	41	45	106	40	46
Senior lecturers without a PhD	83	29	43	81	28	43	76	26	43	55	20	55	51	19	48
Lecturers	0	0	0	0	0	0	0	0	0	0	0	0	2	1	23

Table 17- Developments in the age structure of the Faculty's employees for the period 2004-2008

	2004		2005		2006		2007		2008	
	No.	Average age	No.	Average age	No.	Average age	No.	Average age	No.	Average age
University teachers	288	49	293	50	292	49	274	51	267	51
Research and development employees	70	45	76	45	44	47	64	43	74	45
Out of those, university-educated researchers	57	45	63	44	35	47	55	42	68	45
Departmental technical staff and administration	56	45	38	46	40	49	35	52	36	51
Dean's Office, Library and IC, CIT	58	46	71	43	70	43	69	45	70	46
Auxiliary personnel	71		90		89		85		86	
Total number	543		568		535		527		533	

Graph 11 - Developments in the structure of the Faculty's employees



We have failed to fulfill a high-priority task – an increase in inaugurated and habilitated professors to 60% of the total number of teachers. The number of Professors increased on the one hand, but on the other hand, the category of Assoc. Professors did not follow its expected development and has not reached the required qualification.

Through its goal-minded activities, the Faculty's Presidium has succeeded in reducing the number of senior lecturers without a PhD, but the average age of this category is not satisfactory. It indicates that the group of employees in this category older than 55 years of age has stagnated and that the Faculty has not changed its position on lecturers or educational activity providers on a contractual basis yet.

Due to the offer of a greater variety in the forms of study, the Presidium of the Faculty has emphasized the need for visiting Professors from the Institutes of the Academy of Sciences and the scientific research sector, including the leading project organizations or practice. The Scientific Board of the Faculty has dealt with and approved all proposed hires. An inflow of distinguished personalities from abroad whom the Faculty would prefer give instruction

to students in the Master's degree (Ing.) and Doctoral degree study programs and be involved as specialists in selected topics related to the Master's degree and Doctoral degree dissertations has not been as significant as the Faculty had hoped. Not until recently did we record the first cases of "visiting" Professors and Assoc. Professors of the Faculty from abroad. The feedback on the outstanding performance of our visiting Professors can be regarded as an appreciation of the high level of professional competence outside Slovakia.

The Presidium of the Faculty has paid special interest to the increased number of Doctoral students and leading graduates of the Master's degree study with fluent language skills, which is due to experience gained from the students' international mobility. For this purpose, funds other than those allocated by the SR Ministry of Education have been spent. The success rate has gradually increased in the third year of study, but still has not reached the required level. It has been demonstrated that this category of future employees will become a significant resource from the perspective of eventual employee exchanges and the resulting rejuvenation of the Faculty.

7. INTERNATIONAL COOPERATION AND FOREIGN RELATIONS

Thanks to its employees' activities, the Faculty of Civil Engineering has been involved in the most significant EU projects, namely TEMPUS-Tacis, SOCRATES, ERASMUS, LEONARDO da VINCI II educational programs and the 6th Framework program. Along with other international activities, in addition to the above-mentioned forms of cooperation, educational programs that should be mentioned especially include the CEEPUS II program, the Visegrad 4 and the Norwegian Financial Mechanism programs.

7.1 Tempus-Tacis Program

The Tempus-Tacis Program is focused on the countries of the former USSR, the Balkan states, and the Mediterranean and Asian states. In the year 2008, the Faculty's activities expanded within the Tempus Tacis program and dealt with the implementation of internal quality control systems at universities in Kazakhstan entitled "Transferring EU Evaluation Models to KAUIR Functions and Processes" and Kyrgyzstan entitled "Transferring Quality Management Models to KSTU Functions and Processes."

In addition to the employees of the Project and External Affairs Department covering the organization and dissemination of the project within the Faculty, employees of the Department of Humane Sciences, Department of Economics and Building Industry Management, the Institute of Management, Department of Sanitary and Environmental Engineering, Department of Hydraulic Engineering and Department of Structural Mechanics were engaged in the project.

7.2 The SOCRATES-ERASMUS II Program

The SOCRATES-ERASMUS Program refers to the most important and significant educational programs in the spirit of the Bologna challenge addressed to EU countries and also joined by the Slovak Republic.

7.2.1 EUCEET III – European Civil Engineering Education and Training

The aim of the EUCEET III project (2007-2008), which is currently in progress following the first two stages (EUCEET I, II), is dedicated to an outline of the system of European civil engineering education and to the development of professional recommendations for harmonization of study programs, the goal of which is to create conditions in the spirit of the Bologna challenge, expand teacher and student mobility and obtain joint diplomas.

The year 2008 was the second year of the above program. There were three working groups. Assoc. Prof. Dický, who represents the Faculty of Civil Engineering, contributed to the project in the form of questions and answers to questionnaires developed by groups dealing with aspects of the individual study programs on the Master's (Ing) and Doctoral degree levels.

In addition, Assoc. Prof. Dický was an active member of the A working group, which dealt with analysing the knowledge acquired for the implementation of a three-stage model for European faculties of civil engineering. The core of the work was performed via the internet. He also participated in a plenary session of the program researchers, which was held at the Warsaw University of Technology in October.

He presented his contribution on the results of the knowledge and experience gained at the Faculty of Civil Engineering, STU. The next item on the agenda of the session was the foundation of the Association of European

Faculties of Civil Engineering, the mission of which is to disseminate the project within and outside the EU. The full costs were covered from the project fund.

7.2.2 EEGECS

In 2008 geodetic departments and geodetic and cartographic workplaces in the EU were involved in activities similar to that of EUCEET, i.e., the European Education in Geodetic Engineering, Cartography and Surveying (EEGECs) international project, which is financially supported by the EU within the SOCRATES-ERASMUS program.

The project deals with university education in the areas of geodesy and cartography, and its associates comprise approximately 100 European universities from 26 European countries as well as business institutions, expert companies and research centers.

The principal aim of the project is to promote an international approach to EU educational resources, support university student mobility and to explore possibilities of employment within the EU countries. Prof. Ing. Alojz Kopáček, PhD, is the coordinator for Slovakia, and the Faculty is represented in several working groups within the project.

7.3 Other thematic networks and intensive programs

The Faculty of Civil Engineering is connected to other university networks on the departmental level. One of them is, e.g., the Baltic University Program (BUP), which is coordinated by the University of Uppsala (Sweden).

The program focuses on the issues of sustainable development and protection of the environment in the Baltic region. The Department of Land and Water Resources Management, FCE is the workplace responsible for the program, and Assoc. Prof. Ing. Silvia Kohnová, PhD., is its research team leader. Another program is the "Intelligent Energy Program (EIE)" project. The EIE project handles the problem of municipally subsidized flat apartments through low-energy technologies and attic construction on the basis of the European experience. At present Prof. Ing. Koloman Ivanička, PhD., who is in charge of the Institute of Management STU, represents the Faculty of Civil Engineering.

In addition, the Faculty of Civil Engineering STU is a member of the Slovak Academic Association for International Cooperation (SAIC), an active member of the International Association of Civil Engineering Faculties (IACEF) located in Prague, a guest member at the Permanent Conference of the German-Speaking Countries' Civil Engineering Faculties (FTBeGV, which consists of the Federal Republic of Germany, Austria, Switzerland), a member of the LEONET network located in Vienna, and a member of the International Council for Research and Innovation in Building and Construction (CIB).

The Student Parliament, which is an associate member of the International Association of Students, has established contacts with the Associations of Civil Engineering Students in the above countries.

7.4 Student mobility

In order to spend the funds allocated, the Faculty prepares a plan for student mobility every academic year within the SOCRATES mobility program. We can confirm the increased

number of study stays implemented and have taken a leading position in the implementation of student mobility together with the Faculty of Architecture at our University. Travel opportunities have gradually been expanded by new destinations – the Czech Republic, Hungary, Poland and Malta.

We are pleased to say that Brussels has maintained its financial position. This has enabled students to pay off their mobility grants in due time before they set off to travel to a foreign university.

We are gratified to state that in recent years, the students' command of foreign languages has improved at the Faculty of Civil Engineering and that the grants have increased, owing to a contribution from the Ministry of Education for the first time.

In Table 18, we can follow the development of student mobility at STU in Bratislava within the SOCRATES-ERASMUS program from 2003 to 2008. Currently, we have a large number of students who want to study in English-speaking countries and not enough students who are interested in studying at German universities.

The average grant per month allocated for student mobility amounted to about EUR 314 in the academic year 2007/2008. At present students travelling within the SOCRATES mobility program obtain a contribution from the Ministry of Education that amounts to about SKK 3,500 (EUR 116.18) per month.

There has been an upward trend with regard to the grants allocated for student mobility. The Faculty of Civil Engineering and the Faculty of Architecture in particular apply for more mobility positions than the other faculties, who do not manage to fill their quotas. There is a possibility of expanding travel opportunities to new destinations via departments that can exploit their contacts with foreign universities, which might result in more offers for cooperation within the program in the English-speaking countries.

7.5 Teacher mobility

Based on the successful implementation of teacher mobility in the previous year by the individual faculties of STU, the number of teachers who are able to travel in the next academic year per particular faculty is specified.

Table 19 shows the success of the teacher mobility and the consequent amount of related grants per specific faculty planned in the next year. Unfortunately, we received a smaller grant for STU from Brussels during the last academic year. The planned grant amounts to EUR 700 per capita (a total of EUR 3,500 for the Faculty of Civil Engineering).

The Presidium of the Faculty decided on five nominations and two substitute teachers for the teacher mobility during the academic year 2007/2008. In the academic year 2008/2009 the grant allocated to the University was extended. Administrative personnel of the faculties can also participate.

Table 18 – Overview of the average monthly grant of an STU mobility student

Year	2003/2004	2004/2005	2005/2006	2006/2007	2007/2008
Average grant per month in EUR	258	320	314	257	314
Total number of grants	480	345	521	594	671
Number of students	68	85	91	95	98

Graph 12 - Overview of the average monthly grant of an STU mobility student - average grant per month in EUR

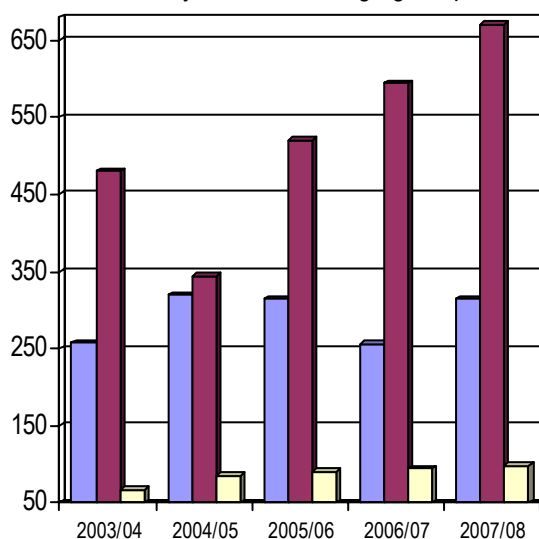


Table 19 – An overview of the annual rate of the successful implementation of teacher mobility at FCE

Faculty	The planned number of teachers	Number of teachers implemented	Teacher mobility grants in EUROS	Rate of implementations in %
2003/2004	4	7	2,944	175
2004/2005	11	9	5,808	82
2005/2006	9	9	6,561	100
2006/2007	7	10	5,600	142
2007/2008	5	6	3,500	120

7.6 LEONARDO da VINCI II Program

The Faculty of Civil Engineering has been very successful with this program in the past. The last grant that the Faculty was involved in within the Leonardo da Vinci II program was submitted in February, 2006. The grant, which was allocated to twenty students, was worth EUR 60,280. The project was successfully completed in 2008.

The National Agency allocated the total amount of the grant within the Leonardo da Vinci II program to the Faculty of Civil Engineering, thanks to the cooperation of the Project and External Affairs Department together with the Alumni Club (AC) of the Faculty of Civil Engineering STU, which helped to prepare and submit the project. At present, the grant amounts to EUR 799,599.

An overview of the submitted, approved and completed mobility projects within the Leonardo da Vinci II program is demonstrated in Table 20. The Problem Solve project, which was implemented from 2005 to 2006, thematically follows the current Multilanguage Pilot project within the long-life learning program entitled VOCAL.

The Technology Institute in Tralle, Ireland, is the research workplace responsible for the project. At present, individual language versions are being finalized.

When compared with the Problem Solve project, this project has been increased in the following number of language versions: Hungarian, Bulgarian, Finnish, Lithuanian and Portuguese.

The Faculty of Civil Engineering is participating in another pilot project, i.e., D/06/B/F/PP 146 454 "European Specific Qualification Design and Construction in an Existing Context." The project belongs among 23 projects selected out of 147 projects submitted within the Leonardo da Vinci program in Germany.

The goal of the project is to develop a curriculum of life-long education for a European civil engineer. It will provide an overview of construction. construction issues in the "existing context." Completion of the project is planned for January 2009.

7.7 The CEEPUS II Program

Two programs within the last call of the CEEPUS (2006-2009) program on "Double Diplomas for Central and East European Countries" were approved and carried out by the Department of Hydraulic Engineering (UACEG Sofia, coordinator; Prof. Šoltész represents FCE) and the Department of Building Services (Assoc. Prof. Lulkovičová). Hochschule Eisenstadt in Austria is their partner university.

Table 20 – An overview of mobility projects within the LEONARDO da VINCI II program

Year	No. of submitted projects	No. of approved projects	Grant amount in EUR	Contractor + Slovak partners	No. of students abroad	Number of project	EU countries engaged in the project	No. of companies engaged in the project
2003	1	1	53,683	AC - FCE	20	SK/03/A/F/PL -301314	A, D, E, FR, B, IT, IE, N, SE	18
2003	1	1	171,298	STU+ Slovak Universities	68	SK/03/A/F/PL-301213	AT, DE, UK, ES, FR, GR, IE, IT, NL	58
2004	1	1	31,605	AC -FCE	10	SK/04/A/F/PL -401322	AT, DE, UK	10
2004	1	1	119,809	STU+ Slovak Universities	47	SK/04/A/F/PL -401223	AT, DN, UK, ES, FR, GR, IE, IT, NL	38
2005	1	1	31,261	FCE	10	SK/05/A/F/PL-5022081	AT, DE, UK	6
2006	1	1	60,280	FCE	20	SK/06/A/F/PL -601 2006	AT, DE, UK, SE	15 Successfully completed in 2008
Total No.	11	11	799,599	FCE+ others	290			

7.8 Norwegian Financial Mechanism

It is gratifying that one of the submitted projects within the Norwegian Financial Mechanism under the guidance of Prof. Petráš has been accepted after a lengthy decision-making process. The project is oriented towards the implementation of tools and software for energy certification, audits and monitoring of buildings. It is planned for the years 2008-2010. The Faculty in its proposed call in January has prepared the next project under the guidance of Assoc. Prof. Sokol.

7.9 Cooperation between the faculties of civil engineering in the Czech and Slovak Republics

Individual departments which succeeded in the selection of science-research projects last year have been engaged in cooperation projects. At present, there are three ongoing projects at the Faculty performed in cooperation with our colleagues in the Czech Republic. They are as follows: Prof. Hraška, research team leader (Department of Building Construction), Prof. Mikula, research team leader (Department of Mathematics and Descriptive Geometry) and Prof. Bezák (Department of Transportation Engineering). At present, other cooperation projects between the Czech Republic and Slovakia are in the process of being submitted.

7.10 Civil Engineering Study (in English)

Currently, the English language study at the Faculty of Civil Engineering can be divided into three categories. The first category consists of self-paying students from Kuwait, who follow the study in the Bachelor's degree study program in six-week courses. The second group consists of Slovak, Greek and Turkish full-time students. They are in the first and second years of their study.

The third group consists of four registered students who attend the Civil Engineering program in the Master's degree study. The Faculty took action in providing the above forms of study based on our University's involvement in the Asia Link project.

Two students who come from Pakistan are registered. One student from Malawi is an International Relations Office fellowship holder, and there is one more student from Cairo University. Subsequently, two students within the Erasmus-Socrates program joined the above group of students: one of them is from Slovenia and the other one from Latvia. We have registered a total of over 300 CE students at the Faculty of Civil Engineering, STU.

7.11 The INTERREG III Projects

Last year four projects within the cross-border INTERREG program were successfully completed. The first workplace involved was the Department of Theoretical Geodesy under the leadership of Assoc. Prof. Mojzeš. The Department has been a sub-contractor of SGIDŠ within the INTERREG IIIB sub-program of the CADSES project.

In 2008, a second workplace that successfully completed a project of cross-border cooperation within the INTERREG IXIA (Slovakia-Hungary-Ukraine) program entitled "Landscape and Water Management Concepts Based on Water Retention. A Study of Its Feasibility and Planning at the Bodrogkoz Area" was the Department of Hydraulic Engineering under the leadership of Prof. Šoltész.

The Department of Hydraulic Engineering, in cooperation with the Ministry of the Environment SR, submitted an additional INTERREG IXIA (Slovakia-Hungary-Ukraine) project entitled "Zemplín Waterway," which was successfully completed in 2008. The project was under the leadership of Assoc. Prof. Možiešik. The last project was an Agenda 21 project – "Sustainable Development of Rural Areas" under the guidance of the Faculty of Architecture.

In the year 2008, Slovakia "de facto" entered the third financial period of EU 2007-2013. Slovakia will apply for projects from structural funds in a total of EUR 11.4 billion. The first submission calls already exist, and it will only depend on us, the employees of the Faculty, as to how we will face the calls. Needless to say, it is an important resource for the further advancement of the Faculty.

8. PUBLIC RELATIONS

The area of public relations has gained importance year after year. In compliance with the long-term development goals of the Faculty of Civil Engineering, STU, the area of public relations is being structured to cover all the Faculty's fundamental activities, especially the promotion of the study programs, students, Faculty presentations at trade fairs, professional and scientific undertakings, activities of the Industrial Board, competitions, media coverage and social events.

8.1 Promotion of the study programs

Promotion of the study program at secondary schools has been fruitful for a long period of time. A total of 13 visits to secondary schools across the entire Slovak territory were conducted in order to acquaint the students with the Faculty's past and present. During the secondary school visits, information materials were distributed containing details of the Bachelor's degree study programs; they were also shipped to another 37 schools. Information on the study programs was also distributed to 110 building organizations in Slovakia. The Faculty regularly attends the international fair of post-leaving examination education as well as the AKADÉMIA and VAPAC exhibitions, which were held on October 7-9, 2008, in order to promote the study and provide materials on the accredited study programs. The Faculty organized an Open Door Day on December 12, 2008, with almost 200 participants from secondary schools from all over Slovakia. One of the most effective means to promote the Faculty and obtain information on studying at FCE, STU, is the website of the Faculty. We have to emphasize that the information there should be as comprehensive as possible and presented in a timely fashion.

The project "Improvement of High School Students' Awareness and Their Preparation for Study at the Faculty of Civil Engineering, STU" has continued to be very successful. All secondary schools in Bratislava have been addressed within the project. Nearly 200 secondary school students have taken part in special introductory courses to prepare them for study at the Faculty. The Faculty makes an effort to help the students admitted from the very beginning. At the start of every academic year, the Faculty issues an updated publication called "A Guide for First Year Students of the Faculty of Civil Engineering," which contains useful information. Exhibitions of student works in the Building Structures and Architecture study program are organized on a regular basis.

They present all the methodology of training – project information, construction solution of designs and finally the design of details. The professional public that attended the exhibitions as well as the students greatly admired the works presented. A "Job Auction" is organized on a regular basis for graduates of the Bachelor's and Master's degree studies (April 8, 2008). A total of 21 companies attended the latest auction and offered available jobs to the students. In this way, the Faculty helps our students to apply their knowledge to practice and find jobs after the completion of their study. Great attention has been paid to the promotion of life-long learning. Courses of further education provided by the Faculty are published in the brochure "A Program of Courses of Further Education." Information on the courses is presented on the Internet pages of the individual departments that organize the courses. In addition, the courses are promoted via scientific journals and professional undertakings (conferences, seminars, etc.) organized by the Faculty and its departments.

8.2 Student competitions

As a part of the traditional student scientific conference, which was held on April 2, 2008, 181 students of the Bachelor' and Master's degree studies participated with 147 works. The conference was organized concurrently with the CONECO international trade fair.

The Faculty of Engineering organized a third annual competition of Bachelor's degree dissertations known as "ABF Slovakia", which was evaluated on the Faculty's premises on December 11, 2008. Four Faculty students were awarded prizes at the competition of the Bachelor's degree theses from the Faculty of Civil Engineering and the Faculty of Architecture SR (Bratislava, Košice, Žilina).

They confirmed the high quality of the bachelor's degree theses at the Faculty of Civil Engineering, STU. The Eighth Annual Sports Day of the Faculty of Civil Engineering, STU, held on May 6, 2008, celebrated the traditional joint sports activities of the Faculty's teachers and students. A total of 100 athletes, who competed in six sports disciplines, attended competitions. Prizes were awarded at a ceremony, which was combined with a party and discussion at the Club of the Faculty of Civil Engineering, STU.

On the occasion of International Students' Day and the Day of the Struggle for Freedom and Democracy, a meeting of the very best students of the Bachelor's and Master's degree study programs with the Presidium of the Faculty was held on November 13, 2008. Thirty-five students were awarded prizes. Those who participated in the PhD student competitions, which are organized on a regular basis every year in the autumn, were also financially awarded.

The winners can present their work at the JUNIORSTAV international conference in Brno, with their full costs covered. The financial awards of our students are possible due to the support from the Faculty's sponsors, the Alumni Club of FCE and, above all, the members of the Industrial Board. A competition featuring designs for recreational and relaxation zones and architectural designs of buildings constructed of porous concrete is organized on an annual basis. These student competitions, which are organized with the cooperation of the Faculty, are under the auspices of the Xella Company. The Faculty's students were ranked at the top.

8.3 Accommodation of students

The accommodation of students in dormitories is one of the most delicate social issues. The amount of accommodation spaces of STU have decreased and consequently affected the students of FCE. A list for the allocation of places at dormitories is within the competence of the Student Parliament and approved by the Faculty.

The main criteria for the allocation of accommodations are the grade point average and the distance between the student's home address and Bratislava. Accommodation with regard to distance was made available to students who were matriculated. Due to the decreased capacities in accommodation and the relatively high number of first year students admitted, problems occurred with regard to the students in the first year of study.

8.4 Support for the development of civil engineering and architecture

Similarly, as in preceding years, the Faculty's experts participated in an evaluation of a Slovak competition organized by ABF Slovakia – "Construction of the Year."

As an expert guarantor and announcer of the competition, the Faculty provided "The Prize of the Faculty of Civil Engineering, STU" to the competition for the implementation of science and technology in the execution of construction work. In the year 2008, the prize of the Faculty of Civil Engineering was awarded to the STEEL ARENA, the winter sports stadium in Košice. The participation of the Faculty of Civil Engineering, STU, at the "CONECO-RACIOENERGIA-CLIMATHERM" trade fairs (April 1-5, 2008) and "DOMEXPO" in Nitra (April 17-20, 2008) is traditional. The Faculty is a coordinator of both events, which permits making the events accessible to both teachers and students. The periodic organization of various professional events, conferences and seminars significantly contributes to the successful presentation of the Faculty. More than 80 events were organized during the previous year: Heating, Geometry Day, Low-Energy Building Facades, Aspects of Rural Area Recovery, Mobility, Stability of Geodetic Instruments, Aqua, Drinking Water, Sanhyga, Roofs, Indoor Climate, Magia, Water Management Industry, Concrete Days, INGENIO 2008, etc. In this form, the Faculty presents the latest scientific and technical knowledge acquired and directly transfers it to practice.

8.5 The Faculty's website

In coordination with the Rector's Office, the Faculty is focusing its attention on its website to relay information. In 2008, the website was updated with regard to its content and visual style. Its English version is very important with respect to all prospective students from abroad. The PC Revue journal published the results of an electronic portal evaluation of the leading universities in Slovakia. The evaluation of the website was very positive; it holds the highest position with regard to its design programming and readability.

8.6 Events held on the occasion of 70 Years of FCE STU

This year, we commemorated the 70th anniversary of the commencement of the teaching process at the Faculty of Civil Engineering, STU. On the occasion of this historic event the FCE held the following events:

- Ceremonial Academy of FCE, STU
- Ceremonial Session of the Scientific and Industrial Boards of FCE, STU
- International Scientific Conference
- Social evening accompanied by an artistic concert by the Technik ensemble

Symbolically, on the morning of December 4, the eve of the anniversary, the Ceremonial Academy of FCE, STU was held in the university Hall of Academician Štefan Bella in the presence of First Lady Silvia Gašparovičová, the wife of the President of the Slovak Republic, and other distinguished personalities from social and political life, as well as important representatives of academic, scientific and professional institutions in the fields of civil engineering and geodesy and cartography.

During the Ceremonial Academy, the Dean of the Faculty of Civil Engineering awarded a commemorative medal to Silvia Gašparovičová, the wife of the President of the Slovak Republic; Ján Mikolaj, a Deputy Prime Minister of SR and the Minister of Education, SR; Ľubomír Vážny, the Minister of Transport, Posts and Telecommunications; and Andrej Ďurkovský, the Mayor of Bratislava, the capital city of Slovakia. Awards were also presented to other STU Faculties and partner universities in Slovakia, foreign faculties of civil engineering, and professional chambers and organizations.

In the afternoon, the core of the commemoration was focused on professional discussions in six sections of the International Scientific Conference. Its main aim was to inform the professional public on results in research, scientific and educational activities with regard to the economic development of our country. Moreover, the purpose was to exchange knowledge acquired, experience, and current information mediated by leading domestic and international experts from faculties, research institutes and practice. There were 530 registered participants at the conference. Out of a total of 500 active participants, almost 200 were from FCE, STU; about 120 were Slovak participants, a little more than 130 from the Czech Republic, and about 50 from other countries. The conference proceedings were in two languages (Slovak and English) and contained 370 contributions. The rector of STU awarded the title of Dr.h.c. to Prof. Andrew J. Clark from the University of Strathclyde (Great Britain); the award had been approved by a joint session of the Scientific Board of STU and The Scientific Board of the Faculty.

8.7 Social services

Most activities in the area of social services are performed in cooperation with the Independent Trade Unions of the Faculty in compliance with the Collective Agreement of FCE. The Presidium of the Faculty has a tradition of supporting active cooperation with Trade Unions. The Faculty extended the Collective Agreement signed between the University Trade Unions and the Presidium of STU by adding several points to its supplement. Meetings with teachers, visits to theatre performances, reception of jubilee and retired employees, etc., are among the activities provided on a regular basis. The Faculty of Civil Engineering, STU in cooperation with the Alumni Club of the Faculty of Civil Engineering and the Slovak Association of Construction Entrepreneurs organized its Sixth Representative Ball at the City Hotel Bratislava. The Ball's most-honoured guests are graduates who completed their study at the Faculty of Civil Engineering 25 years ago. Additionally, important personages of Slovak civil engineering, geodesy and cartography, architecture, public life, employees of the Faculty and students participated.

The Faculty continues to organize a ceremony - the 50th Graduation Jubilee from the Faculty of Civil Engineering (red-carpet treatment). The former schoolmates and graduates of the Faculty greatly enjoy the event. The Faculty's employees can exploit the Faculty's sports facilities in the following sports for recreational purposes: swimming, football, basketball, tennis, aerobics with music, yoga, and aqua gymnastics along with the Educational and Recreational Facilities at Kočovce and Bezovec. The UVZ (Educational and Training Facility) at Nižná Boca has been closed for two years for operational reasons. Annually, our employees can go on holiday to the Zuberec facility of Žilinská University. Such stays are based on the principle of mutual exchange. The Faculty provides catering to employees and students at the refectory, along with catering and refreshments at the Employees Club, a snack bar and various types of snack machines located on the premises of the Faculty. Our Faculty enables all pensioners and former employees of the Faculty to dine at STU refectories and contributes to the catering in excess of 55% from non-subsidized funds. Employees can exploit the services of the Faculty GP and the dental surgery. In addition, the Faculty subsidizes its employees' spa treatments and regeneration-rehabilitation stays in spas. A social fund account balance was allocated to the employees of the Faculty as of November 31, 2008, as a contribution for regeneration. It provides SKK 2,000 per full-time employee (on condition the minimum length of employment at the Faculty was one year).

9. INFORMATION AND COMMUNICATION TECHNOLOGIES

9.1 Information technologies

In the area of information technologies, multiple licenses for the Microsoft Windows and Office software products, products of the Autodesk, Micro station, Autodesk, ANSYS companies and others were purchased for the needs of the Faculty. The quality of the Faculty's network lines was improved, and the Faculty was connected to the Sanet node in line with the gradual build up of the STU information system. In 2008, the Faculty purchased computers with software products for demanding numerical calculations at a cost of SKK 500,000 to cover the needs of the individual departments.

9.2 The Faculty's PC network

The basis of the Faculty's network infrastructure in the locality of I. Karvaš meets the requirements of an IT area as formulated in the STU Long-Term Intentions. The connection of the Faculty's network to Sanet and the Internet through optical cables with a transmission speed of 10 Gbit/s is in progress. The network's central components contain a high-performance Cisco Catalyst 3560E router and Cisco Catalyst 2960 switches, which were upgraded at a cost of SKK 1,350,000 in 2008.

This significantly improved network monitoring and administration possibilities. The staff of the IT Center of the Faculty of Civil Engineering regularly expands structured wiring in the LAN (Local Area Network) infrastructure, which is based on fiber optics/UTP (Unshielded Twisted Pair) Cat5e with five network centers -CIT-1x, in Block C of the building-3x, and in Block A of the building-1x. UPSs (Uninterruptible Power Supply) for protecting the centers against power cuts are being installed in the amount of SKK 300,000.

There are presently more than 700 access points installed on the premises of the Faculty. The access points of the specific departments are connected to the network with a UTP Cat5e cabling system. During 2008, critical points of the network were replaced by Cat 6 shielded wiring at a cost of SKK 600,000. All the PCs in the classrooms are connected to the Faculty of Civil Engineering network with Cat5e UTP cables with a transfer rate of 100 Mbit/s. During non-classroom time, the Faculty's Information Center classrooms are accessible to students for the purpose of individual work on PCs or the use of network services, including unlimited Internet access. A total of 20 PC workstands are reserved exclusively for individual student work and are in constant operation. Their installation was completed in 2008.

A wireless WiFi network is available in Faculty classrooms, the Atrium, the Library and Information Center and the Assembly Hall of Academician Bella. On these premises, network access for notebooks is available without the required use of a cable. This is very important to ensure the required comfortable access of students to computers in the STU IS.

A workplace of CAD and GIS graphics inputs/outputs is being installed at a cost of approximately SKK 880,000. The workplace will serve both the students and the individual departments of the Faculty. Workplaces situated outside the area of the Faculty (Trnávka, Kočovce), are connected to its network by a microwave connection with a transfer rate of 16 Mbit/s 24 hours a day.

All the dormitory networks are connected to the STU network with optical cables with a transfer of 100 Mbit/s 24 hours a day.

9.3 The Faculty's IT classrooms

Currently, PC computer technology is in common use for the instruction and individual work of the students at the Faculty. There are six computer classrooms available to students within the entire Faculty. There is a specialized CAD systems classroom at the Faculty.

These classrooms are in operation 12-14 hours a day during the academic term for the purpose of learning or the students' individual work. The PC classrooms fit into the Intel category, min. 2.2 GHz, containing 1-2 GB of operational memory with hard discs of a capacity exceeding 80 GB and 17-22" monitors. Basic instruction in the Windows operational system, Office programs and the AutoCAD and Micro Station graphics programs is provided by the Faculty's Departments. Professional employees of the Center of Information Technologies provide consultations regularly on a daily basis.

Currently, the visitor rate of the CIT computer classrooms reaches 1,500 students per day, i.e., more than 20,000 students during a semester and 40,000 students per year. The PU-03 classroom was completely renovated at a cost of SKK 400,000. In 2008, the PU-02 and PU-06 classrooms were renovated, including the installation of high-performance data projectors, and the network and 220 V wiring were reconstructed at a total cost of SKK one million. Since the 2007/2008 summer semester a mobile PC computer technology laboratory purchased in 2007 at a total cost of SKK 460,000 and equipped with notebooks, a data projector and PC network devices has been in operation.

9.4 Library and Information Center (KIC) of the STU Faculty of Civil Engineering

In 2008, after a successful complete reconstruction and modernization of its technical and computer equipment, the Library and Information Center (KIC), FCE became one of the most modern and progressive academic libraries in Slovakia. The Library and Information Centre celebrated the fifth anniversary of its opening in the presence of several distinguished personalities from abroad, too. They highly praised the quality of the services of the Library and Information Center when compared to the level of advanced European academic libraries and information centers.

On the occasion of the 70th anniversary of the founding of FCE STU in Bratislava, the Faculty gave a warm welcome to First Lady Ing. Silvia Gašparovičová, the wife of the President of SR, on the premises of the Library and Information Center on December 4, 2008. In March 2008, the Library and Information Center became the first academic library in Slovakia (as well as Central Europe) to present a video of the library on You Tube. In this way, KIC FCE has inspired other libraries to make use of information technologies to promote both their services and their universities and faculties.

9.4.1 Visitor rate and utilization of KIC services

The extended offer of services and opening hours at the study room has resulted in increased interest in the Library and Information Center by the Faculty students and teachers. The KIC study room's visitor rate reached record levels during 2008. A total of 29,118 visitors and even more users come with their notebooks and work with the information and scientific databases due to the WiFi zone. Its opening hours are the longest when compared with other Slovak academic libraries. The study room is open daily from 9:00 a.m. to 6:00 p.m.

Table 21 – Visitor rate – KIC study room in 2008

Months	Visitor rate (No. of persons)	Of those, PC-users
January 2008	1,898	648
February 2008	865	317
March 2008	3,031	876
April 2008	3,777	1,034
May 2008	3,177	724
June 2008	1,952	459
September 2008	1,619	1,617
October 2008	5,204	2,109
November 2008	4,767	813
December 2008	2,830	540
Total in 2008	29,118	9,141

9.4.2 Services for teachers and research workers

The Library and Information Center ensure library processes centrally for the entire Faculty and provide a wide range of services to their users.

In 2008, KIC provided personalized services as per the following specializations:

- Safeguarding comfortable and constant access to foreign databases
- Safeguarding free trial access to foreign databases
- Monitoring feedback from pedagogical and research employees in their citation bibliography databases
- Providing retrieval of information on research tasks and grants and information on international projects
- Sending personalized e-mails on new expert publications, journals, databases and information resources as per specialization
- Training for PhD students, and pedagogical and research employees on the possibilities of obtaining information, reviews, and full texts of publications through electronic databases and services provided by KIC to the Faculty of Civil Engineering
- Current information via the web on KIC and the KIC Newsletter
- Electronic Document Delivery Service,
- Organizing expert presentations of databases by foreign instructors

9.4.3 Databases and electronic information sources

On October 10, 2008, KIC FCE organized a one-day specialized course for PhD students on “How to Gain and Maintain Scientific and Research Activities and the Growth of Qualifications.” The participants of the course showed great interest in attending further specialized courses.

The Library and Information Center provide a wide range of expert database titles and electronic information resources to students, teachers and research workers directly online through all the IP addresses of the KIC Specific Database Center and through the IP addresses of all the PCs at the workplaces of the Faculty of Civil Engineering, STU.

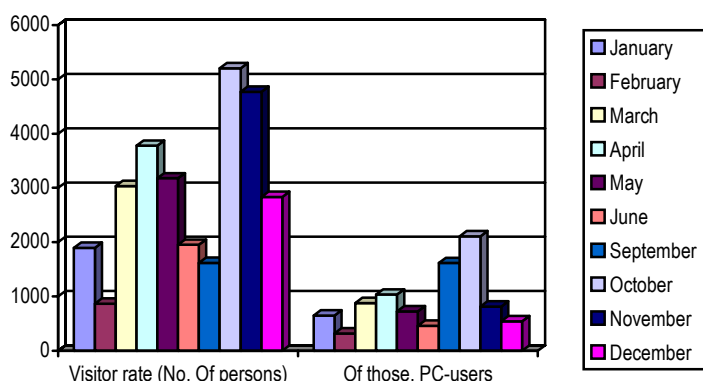
In 2008, KIC made the following titles of databases and electronic information sources accessible:

- **Web of Science** (license for Slovak universities subsidized by SR)
- **EBSCO** (nationwide license subsidized by the SNL and MC SR)
- **Springer Link** (University license from STU funds)
- **Engineering Village 2** (University license from STU funds)
- **Science Direct** (University license from STU funds)
- **ENGnetBASE** (University license from STU funds)
- **ProQuest 5000 International** (license for academic libraries within the IT ME SR central development projects)
- **Knovel Library** (license for academic libraries within the IT ME SR central development projects)
- **SCOPUS** (license for academic libraries within the IT ME SR central development projects)
- **ACM Digital Library** (license for academic libraries within the IT ME SR central development projects)
- **IEEE Computer Science Digital Library** (license for academic libraries within the IT ME SR central development projects)
- **Elektronische Zeitschriftenbibliothek** (access to 15,614 full-text titles of professional electronic periodicals)
- **Slovak National Bibliography** (CD ROM),
- **American Society of Civil Engineers Online Research Library** (Faculty license from FCE STU funds)

The renewal of the annual subscription to the “ASCE Online Library” for access to the full-text scientific library of the ASCE (American Society of Civil Engineers) from the Faculty’s funds represents a significant professional contribution. The ASCE Library provides for on-line access to 30 key journals from all of the Faculty’s computers in the field of civil engineering; 21 are current journals. Moreover, all full-text articles from all the periodical titles are accessible for the preceding 15 years, including the overall production of ASCE scientific proceedings, as well as the archive.

9.4.4 Safeguarding free trial access of KIC to databases
 KIC FCE regularly addresses producers of foreign databases and publishing houses of scientific literature in an electronic form with requests for a free trial access for one month or a longer period of time for students and teachers of the Faculty via the KIC database center or on the basis of IP addresses assigned to workplaces.

Graph 13 - Visitor rate - KIC study room in 2008



In 2008, students and teachers of FCE STU could use the following free trial access to:

12. **AAAS Science Online** (November 2007 – January 2008)
13. **IEEE/IEL Library** (May 2008)
14. Elsevier Science Publisher **GEOBASE** (October 2008)
15. **Gale Military & Intelligence Database** (on-line access until June 6, 2011)
16. **Research Starters** database (Research Starters Education and Research Starters Business) – extension of the licensed EBSCO database (access until June 30, 2009)

9.4.5 Registration of publishing activities and feedback from the employees of FCE STU

Pursuant to the Directive of the Ministry of Education of the Slovak Republic since 2005, the scope of the expert activities of KIC has broadened through its registry and the systematic building of a database of the Publication Activity Registry and feedback from STU employees. Among the faculties of the Slovak University of Technology, it is the Faculty of Civil Engineering that has the highest ratio of publishing activity. As the above information indicates, KIC goes “beyond the call of duty” in taking care of its visitors and making sure the latest and best scientific knowledge is available to the academic community it serves. On its own initiative, KIC has implemented a pilot project for building an EPC digital archive.

Graph 14 - Registration of publishing activity

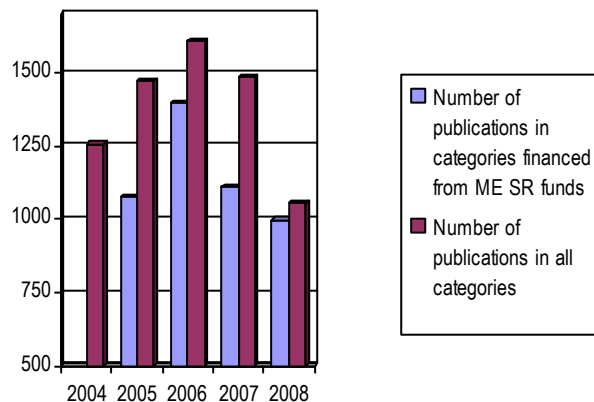


Table 22 – Registration of publishing activity

	2004	2005	2006	2007	2008
Number of publications in categories financed from ME SR funds	928	1074	1397	1112	998
Number of publications in all categories	1257	1470	1606	1487	1055

9.4.6 Expert activities of KIC in Slovakia

On its own initiative KIC held a conference for the directors of academic and university libraries in Slovakia at the Faculty of Civil Engineering. Representatives of the Ministry of Education SR and the CVTI SR Director participated in it. The participants visited the new facilities of KIC FCE, STU.

9.4.7 International activities of KIC

In June 2008, on behalf of STU, KIC STU initiated the visit of two librarian experts to Slovakia and at FCE under the auspices of the European project “Excellent University.” In June 2008, Jens Thorhauge, Director of the Danish Agency for Libraries Media from Copenhagen, Denmark visited KIC. He gave a lecture on “Libraries in the Knowledge-Oriented Society – Challenges and Strategies.”

In September 2008, on the fifth anniversary of KIC’s opening, Duane Webster, the executive manager of the US Scientific Library Association, visited the Library. He stated that the quality of the Library and Information Center of the Faculty of Civil Engineering is at a high professional level.

10. INVESTMENT ACTIVITIES, REPAIRS, RECONSTRUCTIONS

10.1 Classroom modernization and reconstruction

The main auditorium of the Faculty of the Civil Engineering was reconstructed during the summer months of 2008; the reconstruction included a new screen for visual presentations. Moreover, the other auditoriums and meeting rooms received attractive new name plates.

The next significant activity in the modernization of the classrooms was the reconstruction of the B102 seminar room. During its reconstruction a new floor was laid and a partition was removed. Due to the reconstruction, the number of available seats increased to 60; new chairs, a whiteboard and other equipment were provided. The reconstruction cost SKK 690,000.

Window were replaced in the B112, B114, B116, B218, B220 and B222 classrooms in the amount of about SKK 1 million. Reconstruction of the classrooms with windows facing the "small" atrium in the Block B building was completed.

In the first half of the year, air-conditioning (technology) was installed in the Dean's meeting room, its entry hall and adjacent offices, which was worth SKK 1 million.

The Presidium of the Faculty provided a fund for the reconstruction of classrooms and laboratories. About SKK 1 million was allocated for the year 2008 for this purpose. The funds were drawn only in part by the Department of Mathematics and Descriptive Geometry (SKK 28,000) and the Department of Technology of Buildings (SKK 28,000). At the end of the year, the rules for fund allocation were controlled so that workplaces might apply for allocations for laboratories and partially for the equipment of classrooms.

10.2 Relaxation and study areas of FCE

In May, the revitalization of the courtyard of Block A of the Faculty's premises was completed at a cost of SKK 70,000. Study and relaxation areas in the connecting corridors between the Block B building and the Block C building on the second and third floors were reconstructed. Similarly, the areas in the Block B building behind the Assembly Hall were reconstructed too. We would like to encourage our students to take advantage of the reconstructed areas. The reconstruction costs amounted to SKK 370,000.

10.3 Investment activities

The year 2008 was a year of projects. This year the Faculty prepared the project documentation for implementation of investment plans for the foundation of the Regional Technical Education Centre in Kočovce; the project documentation for the planning permission was completed (SKK 250,000) and submitted for approval.

Subsequently, the building plan approval process began, the result of which was the approval of the decision to build an annex building within the Kočovce complex in November. At the end of 2008, the Faculty began to work on the project documentation for the building permit, which was preceded by an engineering-geological survey (SKK 102,000).

The project for the building permit was completed in December (SKK 490,000) and submitted to the building authority right before Christmas. Within the first months of 2009 the design for the park will be completed (SKK 100,000) along with the planned budget for the construction (EUR 200,000) so that the Faculty can apply for the financial means to execute the project through structural funds.

Barrier-free entrances to the Faculty's individual buildings were another project. We submitted a request to the Tatra Bank Foundation to co-finance the project through a subvention grant. In such a way, we obtained one million SKK for the execution of a partial project – a lift for disabled persons next to the refectory in the Block B building.

In the summer months, a project for the reconstruction of the façade, the insulation of the roof structure and the hydraulic adjustment of the heating in the Central Laboratories building at Trnávka was completed. The Faculty obtained a subsidy from the EkoFond valued at 3.6 million SKK for these activities. Currently, the competitive bidding for the building contractor is being developed.

Our employees, especially those from the Department of Building Construction, have truly exerted themselves in the development of our construction program as well as project documentation for the building permit to reconstruct the façades and the heating of the Block B and C buildings.

The project for the permit was completed by the end of 2008 (SKK 250,000). In the meantime, all the required documents were arranged for at the Rector's Office in order to ensure the effective start of the above investment activities. It is worthwhile to mention some of the lesser activities such as the redecoration of the entry hall next to the auditoriums, improvement of the lighting and arrangement of the parking lots in front of the Block C building, the re-design of the exhibition space at the Faculty and the gradual repair of the common and communication areas in the Block B building. All these activities will be carried on in the year 2009, too.

11. ECONOMIC PERFORMANCE

The Faculty's economic performance was in compliance with the Act on Higher Education. Its funds consisted of subsidies and non-subsidy sources for the planned 2008 budget. The Faculty planned to make a profit in the year 2008, and such an outcome is expected.

As in preceding years, making a profit was expected, thanks to the Faculty's economic performance in its entrepreneurial activities and the increased income from foreign students in the year 2008 among the main activities.

Funds for implementation of the accredited study programs were provided to the Faculty of Civil Engineering from the SR Ministry of Education's State Budget for the year 2008 from sub-program **077 11** as well as for research and development activities from sub-program **077 12**, university development from sub-program **077 13** and student social support from sub-program **077 15**.

The total subsidy as of November 14, 2008, consisted of SKK **327,020,000**; the running funds were SKK 318,672,000 and the capital investments SKK 8,348,000.

Running funds from sub-program **077 11** were provided to the Faculty in excess of SKK **243,500,000**; the salaries were SKK 140,502,000, goods and services were SKK 29,607,000 and Doctoral students' grants were SKK 23,936,000.

Running funds from sub-program **077 12** were provided to the Faculty in excess of SKK **39,066,000**; they consisted of 0771201 institutional research SKK 24,350,000 (the salaries were SKK 15,753,000; goods and services were SKK 3,052,000), 077 1202 VEGA SKK 10,389,000, 077 1203 applied research SKK 1,850,000, 077 1204 MVTs SKK 980,000 and 077 1205 KEGA SKK 1,497,000.

Running funds from sub-program **077 13** were provided in excess of SKK **338,000**.

Running funds from sub-program **077 15** were provided in excess of SKK **20,993,000**; social scholarships were SKK 15,793,000 and incentive scholarships were SKK 5,180,000.

The Ministry of Education provided a subsidy to the Faculty in excess of the Non-Subsidy Agreement to sub-program **06K11 APVV**, which was valued at SKK **14,048,000**.

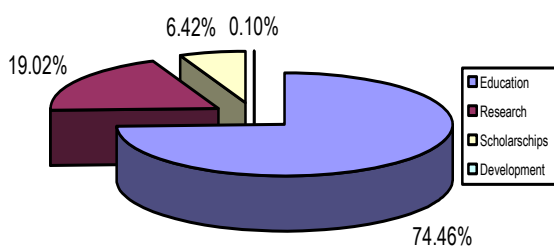
Capital funds from 077 12 consisted of 077 1202 VEGA – SKK 5 605 000, 077 1203 applied research – SKK 350,000, 077 1204 KEGA – SKK 338,000

Capital funds from sub-program **06K11 APVV** were provided in excess of SKK **2,055,000**.

The need for the use of non-subsidy sources proved to be essential in covering running expenses within the sub-program 077 11 – providing university education and the operation of the university. Based on an analysis of the Faculty's drawing of operating funds in previous years and an analysis of possible savings measures, a draft of the financial coverage of the expected Faculty operating costs within the running expenses (goods and services) was prepared and approved by the Academic Senate. The anticipated Faculty operating costs amount to SKK **40,692,000**; the energy costs amount to SKK **22,800,000**. The subsidy covered costs only in the amount of SKK **29,427,000**; the anticipated costs of approximately SKK **11,300,000** were proposed from the following resources:

- resources from entrepreneurial activities
- income from main activities-mainly income from foreign students
- 2007 profits achieved
- allocation of running funds from the University Science and Technology 0077 12 sub-program

Graph 15 - The total Subsidy



DEPARTMENT OF CONCRETE STRUCTURES AND BRIDGES

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1. Education

1.1 Graduate study

Obligatory subjects

Concrete and Masonry Members
Reinforced and Prestressed Concrete Members
Reinforced Concrete Structural Members
Reinforced Concrete Structural Systems
Concrete Structures I
Concrete Structures
Concrete Structures II
Prestressed Concrete
Concrete Bridges
Lifespan and Repair of Concrete Structures
High-Rise Concrete Structures
Execution of Concrete Structures
Special Problems in Concrete Structures II
World Language – English: CAD–FEM Computer – Aided
Design of Concrete
and Steel Structures
Reinforced Concrete Structures

Optional Subjects

Structural Analysis
Precast Concrete Structures
Masonry Structures
Concrete Bridges II
PC Structural Analysis – FEM Models
Experimental Testing of Concrete Structures
Composite Structures

Recommended subjects

Modeling of Concrete Structures

2. Thesis

2.1 Research projects

15

2.2 Graduate thesis

ĎURÁK M.: Design of a Road Bridge Made from High
Performance Concrete
Supervisor: Fillo, Ľ.

GELÁNYI V.: Three-Span Extradosed Bridge
Supervisor: Chandoga, M.

IVAN S.: Design of the Reinforcement of a 2T Shaped Main
Bridge Girder without Cross Beams over Intermediate
Supports
Supervisor: Šoltész, J.

NOVOVESKÝ M.: Design of the Piers and Foundations of a
2T Shaped Bridge Girder without Cross Beams over
Intermediate Supports
Supervisor: Šoltész, J.

SEKERKA J.: Design of a 2T Shaped Main Bridge Girder
without Cross Beams over Intermediate Supports
Supervisor: Šoltész, J.

ŠAVRNOCH L.: Precast Reinforced Concrete Water
Retention Tank
Supervisor: Hudoba, I.

ŠČASNOVIČ M.: Bridge Constructed Using Balanced
Cantilever Concreting Method
Supervisor: Halvoník, J.

ŠTVRTECKÝ R.: Underground Public Garage
Supervisor: Hájek, F.

TÉGLÁS Z.: Design of Hollow Slab of Multifunctional
Building
Supervisor: Šoltész, J.

BAČOVÁ J.: Production and Office Building of
Elektrokomplex. Cast in Situ RC Structure with Stiffening
Core
Supervisor: Harvan, I.

BŮJTIOVÁ J.: Multifunctional Building Generali
Supervisor: Abrahoim, I.

FEHÉR M.: Residential House
Supervisor: Bartók, A.

HOLLÝ I.: City Business Center Bratislava. Cast in Situ RC
Structure Consisting of Slabs and Stiffening Core
Supervisor: Bartók, A.

HÓZ D.: Hotel, Staré Grunty, Bratislava. Cast in Situ RC
Structure with Stiffening Core
Supervisor: Abrahoim, I.

CHEBEŇ R.: High-Rise Office Building
Supervisor: Gramblička, Š.

KÁLLAY J.: Residential House
Supervisor: Bartók, A.

MATUS G.: Cinema Building
Supervisor: Bartók, A.

SZABADOŠOVÁ M.: Shopping Centre in Bratislava
Supervisor: Borzovič, V.

ŠEVČÍKOVÁ M.: Automobile Showroom, Rožňavská,
Bratislava. Cast in Situ RC Structure with Stiffening Core
Supervisor: Abrahoim, I.

ŠTEFÁNEK J.: Structural Analysis of an Office Building
Supervisor: Bilčík, J.

TATALA I.: Block of Houses, Green Park-Vtáčnik,
Bratislava. Cast in Situ RC Wall Structure with Stiffening
Cores
Supervisor: Abrahoim, I.

TÓTH S.: High-Rise Building of Business Centre Bratislava.
Cast in Situ RC Structure with Stiffening Core
Supervisor: Harvan, I.

VYŠEHRADSKÝ A.: Cast in Situ RC Structure of an
Apartment House in Bratislava
Supervisor: Borzovič, V.

2.3 Doctoral thesis

GREŠLÍK P.: Contribution to Complex Assessment of Properties Made of High Performance Fibre-Reinforced Concrete

Supervisor: Hudoba, I.

RALBOVSKÝ M.: Damage Detection in Concrete Structures Using the Modal Force Residual Method

Supervisor: Chandoga, M.

3. Research

3.1 Research projects

VEGA 1/3323/06, Design of Concrete Structures for Durability (2006-2008, Bilčík, J.)

ESF JPD 3 2005/NP1-016, Structural and Transportation Engineering in English.

Common University Study Program. Curriculum (2006-2008, Fillo, L.)

ESF JPD 3 2004/4-056, Renovation of Panel Structures – Complex Solution of Structural, Technological, Sanitary and Energy Problems (2008-2011, Fillo, L.)

MVTS ČR/SR/STU07 Safety Format for Non-Linear Analysis of Concrete Structures (2007-2010, Fillo, L.)

AV 4/0016/07 Analysis of Slender Concrete Prefabricated Members for Alternative Sources of Energy (2007-2009, Fillo, L.)

VEGA 01/0651/08, Non-Linear Methods of Concrete and Composite Structures Design (2008-2010, Fillo, L.)

VEGA1/0180/08, Factors Influencing the Surface Layer Properties of a Concrete Element from the Point of View of Its Execution and Surrounding Environmental Effects (2008-2011, Hudoba, I.)

3.2 International cooperation

Visit of staff members to foreign institution

BELLOVÁ, M.: 5. Conference on Masonry and Composite Structures 2008, Brno, Czech Republic, 30.9.2008

BELLOVÁ, M.: International Conference on Life Cycle Assessment, Optimisation, Behaviour, and Properties of Concrete and Concrete Structures. Brno, Czech Republic, 12.- 13.11. 2008

BILČÍK, J. - FILLO, L. - HALVONÍK, J. - BORZOVIČ, V. - HALÁSZOVÁ, K. - CUPÁKOVÁ, L. - JURÁŠEKOVÁ, M. - HREHA, M. - KÓŇA, D. - VÖRÖS, Š. - REPKA, B.: Concrete Days 2008, Vienna, Austria, 24.-25.04.2008

BILČÍK, J. - FILLO, L.: Symposium on REPAIR 2008, Brno, Czech Republic, 22-23.5.2008

BILČÍK, J. - ŠOLTÉSZ, J.: Conference on Concrete in Buildings and Underground Structures 2008, Prague, Czech Republic, 25-26.3.2008

BILČÍK, J.: Conference on Testing and Quality in the Building Industry, Prague, Czech Republic, 20.-21.10.2008

ČABRÁK, M. - GRAMBLIČKA, Š. - FILLO, L. - HALVONÍK, J.: EUROCODES Background and Applications, Dissemination of Information for Training Workshop, Brussels, Belgium, 18.-20.2.2008

FILLO, L.: Session CEN TC250 SC 2 , Brussels, Belgium, 9.-10.5.2008

FILLO, L.: Session TG1.1 fib, Amsterdam, Holland, 17.-18.5.2008

FILLO, L.: Concrete 08, Prague, Czech Republic, 24.09.2008

FILLO, L.: Session CEN TC250 SC 2 , Torino, Italy, 10.-11.11.2008

GRAMBLIČKA, Š. - HALVONÍK, J. - CHANDOGA, M.: AMCM 2008. Analytical Models and New Concepts in Concrete and Masonry Structures, 6th International Conference, Lodž, Poland, 9.-11.6.2008

HARVAN, I. - FILLO, L. - HALVONÍK, J. - BORZOVIČ, V. - HALÁSZOVÁ, K. - KÓŇA, D. - CUPÁKOVÁ, L. - PRÍTULA, A.: Concrete Days 2008, Hradec Králové, ČR, 26.-28.11.2008

CHANDOGA, M. - ŠOLTÉSZ, J.: 3rd ACF Conference on Sustainable Concrete Technology and Structures in Local Climate and Environmental Conditions, Ho Chi Minh City, Vietnam, 11.-13.11.2008

ŠOLTÉSZ, J.: Training on a Foundation without Insulation, Water Impermeable Concrete Structures, Brno, Czech Republic, May 2008

Membership in international professional organizations

FILLO, L.: Representative of the Slovak Republic in CEN TC 250 – SC2 Eurocodes – Design of concrete structures

FILLO, L.: Member of Task Group fib TG 1.1 Design Application

BILČÍK, J.: American Concrete Institute

CHANDOGA, M.: Member of Technical Committee fib – Task group 9: Reinforcing Materials and Systems

CHANDOGA, M.: Member of Technical Council fib in Lausanne, Switzerland

4. Publications

Books

BILČÍK, J. - FILLO, L. - BENKO, V. - HALVONÍK, J.: Concrete Structures: Design According to STN EN 1992-1-1, STU Publishing Centre, Bratislava, 2008, 374 pp. (in Slovak)

FILLO, L. - CUPÁKOVÁ, L.: Renovation of Panel Structures. Complex Solution of Structural, Technological, Sanitary and Energy Problems. Renovation Impact Analysis, STU Publishing Centre, Bratislava, 2008, 214 pp. (in Slovak)

HARVAN, I.: Analysis of Structural Systems of Large Panel Dwellings, STU Publishing Centre, Bratislava, 2008, 307 pp. (in Slovak)

HUĐOBA, I.: High Performance Concrete: Materials, Properties, Production, Utilization. STU Publishing Centre, Bratislava, 2008, 157 pp. (in Slovak)

Parts of Books

ŠOLTÉSZ, J. - KOVÁCS, Z.: Analysis and Design of RC Structures with Limited Crack Widths. In: Training on Watertight Concrete Tanks – Water Impermeable Concrete Structures, Czech Concrete Society, Prague, 2008, pp. 260-276 (in Slovak)

Textbooks

ČABRÁK, M.: Masonry Structures: Design According to STN EN 1996-1-1, STU Publishing Centre, Bratislava, 2008, 155 pp. (in Slovak)

HARVAN, I.: Prestressed Concrete: Design According to Common European Codes, STU Publishing Centre, Bratislava, 2008, 262 pp. (in Slovak)

Journals

BILČÍK, J.: Restore the Durability of Underground Garages, *BETON Technologie Konstrukce Sanace*, Vol. 8, 2008, No. 3, pp. 28-31 (in Slovak)

FILLO, Ľ. - CUPÁKOVÁ, L.: Introduction of EN 1992-1-1 "Design of Concrete Structures" into Practice - Global Second Order Effects in Buildings, *BETON Technologie Konstrukce Sanace*, - Vol.8, 2008, No.1, pp. 66-73 (in Slovak)

BILČÍK, J.: Extending the Lifespan of Large Panel Buildings, *Stavebné materiály*, Vol. 4, 2008, No. 4, pp. 62-64 (in Slovak)

GRAMBLIČKA, Š.: Detailing of Cast in Situ Reinforced Concrete Structures, *Projekt – stavba*, Vol. 4, 2008, Nos. 3-4, pp. 13-15 (in Slovak)

GRAMBLIČKA, Š.: Scientific Background and Materials for Using Eurocodes. EN 1994 - Eurocode 4 Design of Composite Steel and Concrete Structures, *Projekt – stavba*, Vol. 4, 2008, Nos. 3-4, pp. 36-37 (in Slovak)

GRAMBLIČKA, Š.: Reinforcing of Cast in Situ Reinforced Concrete Bearing Structures, *Stavba*, Vol. 11, 2008, No. 10, pp. 40-43 (in Slovak)

HUDOBA, I.: High Performance Concrete - Specification of the Production and Likelihood of Its Practical Utilization, *Stavebné materiály*, Vol.4, 2008, No.8, pp. 48-50 (in Slovak)

Conferences

BELLOVÁ, M.: Parameters Influencing the Design Resistance of Masonry Members. In: 5th Conference on Masonry and Composite Structures 2008, Brno, Czech Republic, September 2008, pp. 82-87 (in Slovak)

BELLOVÁ, M.: Differences in the Design Value of Masonry Strength Using Various Types of Masonry Mortar. In: 5th Conference on Masonry and Composite Structures 2008, Brno, Czech Republic, September 2008, pp. 88-92 (in Slovak)

BELLOVÁ, M.: Cover for Reinforcement and Its' Influence on the Resistance of Concrete Structural Elements. In: International Conference on Life Cycle Assessment, Optimisation, Behaviour, and Properties of Concrete and Concrete Structures, Brno, Czech Republic, November 2008, pp. 21-26 (in English)

BELLOVÁ, M.: Passive Fire Protection of Structures from the Point of View of the Eurocodes. In: International Conference on Life Cycle Assessment, Optimisation, Behaviour, and Properties of Concrete and Concrete Structures, Brno, Czech Republic, November 2008, pp. 21-26 (in English)

BILČÍK, J.: Quality Control of the Design and Execution of Underground Garages. In: Conference on Testing and Quality in the Building Industry 2008, Prague, Czech Republic, October 2008, pp. 67-73 (in Slovak)

BILČÍK, J.: Verification of the Reliability of Large Panel Buildings. In: 18th International Symposium on Repairs 2008, Brno, Czech Republic, May 2008, pp. 290-296 (in Slovak)

BILČÍK, J.: Failures and Repair of Underground Parking Garages. In: 3rd Conference on Concrete in Underground and Foundation Structures 2008, Prague, Czech Republic, March 2008, pp. 59-62 (in Slovak)

CHANDOGA, M. - HALVONÍK, J.: Cambers of Prestressed Precast Bridge Girders, Prediction vs. Reality. In: International fib Symposium 2008 on Tailor Made Concrete Structures. New Solutions for Our Society, Amsterdam, Holland, May 2008, pp. 223-229 (in English)

CHANDOGA, M. - JAROŠEVIČ, A. - REPÁK, M.: Measurement of Force Distribution Along External Tendons. In: 6th International AMCM'2008 Conference on Analytical Models and New Concepts in Concrete and Masonry Structures, Łódź, Poland, June 2008, pp. 325-326

CHANDOGA, M. - HALVONÍK, J.: Time Dependent Deformation of Pre-Post Tensioned Girders. In: 6th International AMCM 2008 Conference on Analytical Models and New Concepts in Concrete and Masonry Structures, Łódź, Poland, June 2008, pp. 259-261 (in English)

FILLO, Ľ. - ŠTEPÁNEK, P.: Structural Concrete of High-Rise Buildings. In: BETON 08' Conference on the Occasion of the 70th Birthday of prof. Ing. Vladimír Křístek, DrSc., Prague, Czech Republic, September 2008, pp. 117-121 (in Slovak)

FILLO, Ľ. - HALVONÍK, J. - CHANDOGA, M. - BORZOVIČ, V.: Reconstruction of Concrete Slabs with Excessive Deformations and Insufficient Resistance. In: 18th International Symposium on Repairs 2008, Brno, Czech Republic, May 2008, pp. 262-268 (in Slovak)

GRAMBLIČKA, Š. - VALACH, P.: Resistance of Composite Steel-Reinforced Concrete (SRC) Columns. In: 6th International AMCM' 2008 Conference on Analytical Models and New Concepts in Concrete and Masonry Structures, Łódź, Poland, June 2008, pp. 261-263 (in English)

HARVAN, I.: Appraisal of the Bearing Walls of a Panel Dwelling with the Application of European Standard EN 1992-1-1. In: 15th International Conference on Concrete Days 2008, Hradec Králové, Czech Republic, November 2008, pp. 320-326 (in Slovak)

ŠOLTÉSZ, J. - HRUŠTINEC, Ľ. - SEDLÁK, J. - SZÖCS, Š. - KRÁL, E.: Design of Foundation with Consideration of Subgrade Interaction. In: 3rd Conference on Concrete in Underground and Foundation Structures 2008, Prague, Czech Republic, March 2008, pp. 50-57 (in Slovak)

BELLOVÁ, M.: Design Resistance of Masonry Members and the Possibility of Raising Them. In: Concrete Days 2008 Conference, Bratislava, Slovak Republic, November 2008, pp. 411-416 (in Slovak)

BELLOVÁ, M.: Fire Safety of Masonry Structures According to the European Standards. In: Concrete Days 2008 Conference, Bratislava, Slovak Republic, November 2008, pp. 417-422 (in Slovak)

BILČÍK, J.: Failures and Repair of Large Panel Buildings. In: 2nd International Conference on Technology of Structural Repairs and Maintenance. Žilina, Slovak Republic, February 2008, pp. 98-103 (in Slovak)

BILČÍK, J.: Design of Constructions to Prevent Progressive Collapse. In: International Scientific Conference on 70 Years of the Faculty of Civil Engineering, Slovak University of Technology, Bratislava, Slovak Republic, December 2008, (in Slovak)

BILČÍK, J. - OLIVOVÁ, K.: Increasing the Resistance of Concrete Columns. In: Concrete Days 2008 Conference, Bratislava, Slovak Republic, November 2008, pp. 305-310 (in Slovak)

ČABRÁK, M.: Design of Masonry Structures in the Slovak Republic – Contemporary State and Future. In: Concrete Days 2008 Conference, Bratislava, Slovak Republic, November 2008, pp. 407-410 (in Slovak)

- CHANDOGA, M.: Aspects Influencing the Lifetime and Reliability of Prestressed Concrete Bridges. In: 14th Conference on Bridges 2008, Nimnica, Slovak Republic, September 2008, pp. 16-32 (in Slovak)
- GRAMBLIČKA, Š. - MATIAŠKO, S.: Design of Composite Steel Concrete Columns with High Strength Concrete. In: Concrete Days 2008 Conference, Bratislava, Slovak Republic, November 2008, pp. 129-134 (in Slovak)
- GRAMBLIČKA, Š.: Detailing of Cast in Situ Reinforced Concrete Structures. In: 13th Conference on Statics of Buildings 2008, Piešťany, Slovak Republic, March 2008, pp. 113-118 (in Slovak)
- HALÁSZOVÁ, K. - BILČÍK, J.: Increasing the Buckling Resistance of Slender Columns. In: Concrete Days 2008 Conference, Bratislava, Slovak Republic, November 2008, pp. 311-314 (in Slovak)
- HARVAN, I. - ABRAHOIM, I.: Appraisal of Perpendicular Compression Forces on Panels of Prefabricated Residential Buildings. In: 13th Conference on Statics of Buildings 2008, Piešťany, Slovak Republic, March 2008, pp. 97-102 (in Slovak)
- HARVAN, I. - ABRAHOIM, I.: Contemporary Problems of Static Analyses of Prefabricated Residential Buildings. In: 13th Conference on Statics of Buildings 2008, Piešťany, Slovak Republic, March 2008, pp. 59 - 68 (in Slovak)
- HARVAN, I.: Current Static Problems of Panel Dwellings in Their Adjustments and Reconstructions. In: 2nd International Conference on Complex Renovations of Dwelling Houses 2008, Podbanské, Slovak Republic, November 2008, pp. 19-22 (in Slovak)
- HARVAN, I.: Resistance and Yielding of Vertical Joints of the Walls of Large Panel Dwellings According to EN 1992-1-1. In: Concrete Days 2008 Conference, Bratislava, Slovak Republic, November 2008, pp. 375-382 (in Slovak)
- HU DOBA, I.: The Profile of Graduates of the Study Programme in the Field of Structural and Technological Construction in Relation to the Needs of Practice. In: International Scientific Conference on 70 Years of the Faculty of Civil Engineering, Slovak University of Technology, Bratislava, Slovak Republic, December 2008, (in Slovak)
- HU DOBA, I.: Utilization of High Performance Concrete in Load-Bearing Constructions of High-Rise Buildings. In: Concrete Days 2008 Conference, Bratislava, Slovak Republic, November 2008, pp. 50 - 59 (in Slovak)
- HU DOBA, I. - PAULÍK, P.: High Performance Concrete - Production Specifications and Possibilities of Practical Utilization. In: 9th Special Course on Production of Concrete 2008, Banská Bystrica, Slovak Republic, February 2008, p. 112 (in Slovak)
- HU DOBA, I. - PAULÍK, P. - ŠEVČÍK, P.: Air-Permeability of Concrete. In: Concrete Days 2008 Conference, Bratislava, Slovak Republic, November 2008, pp. 161-170 (in Slovak)
- JAROSZEWICZ, M. - GRAMBLIČKA, Š.: Concrete Floor Slabs – Analysis of Longitudinal Shears. In: Concrete Days 2008 Conference, Bratislava, Slovak Republic, November 2008, pp. 135-140 (in Slovak)
- LÖRINCZ, A. - BILČÍK, J.: Comparison of Designs of Large Panel Dwellings to Prevent Collapse. In: Concrete Days 2008 Conference, Bratislava, Slovak Republic, November 2008, pp. 383-390 (in Slovak)

DEPARTMENT OF TRANSPORTATION ENGINEERING

Department Head
Prof. Bystrík Bezák, PhD.

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1. Education

1.1 Graduate study

Obligatory subjects

Airport Infrastructures
Diagnosis and Reconstruction
Diploma Thesis
Environment and Transport
Excursions
Modeling and Graphics in Road Construction
Project: Road Constructions
Railways
Roads in Urban Areas
Road Intersections
Atelier of Urban Planning I
Atelier of Urban Planning II
Atelier of Spatial Planning
Prognoses and Scenarios for the Development of Transport
Transport and Technical Infrastructures

Optional Subjects

Experiment and Testing
Ecology of Urban Settlements and Urban Transportation
Planning
Selected Chapters on Roads and Motorways
Selected Chapters from Airports
Pavement Mechanics
Transport Construction
Urban Transportation Planning
Urban Planning I

2. Theses

2.1 Bachelor's theses

16

2.2 Graduate theses

BUZALKA P.: Study of the Enlargement of the Airstrip System at MRŠ Airport
Supervisor: Bartošová, L.

KÖROŠ K.: Assessment of Pavement Surfaces on Selected Parts of Road Networks
Supervisor: Bačová, K.

OZÁBALOVÁ L.: Influence of a Temperature Regime on the Stress and Deformation of Concrete Pavements
Supervisor: Gschwendt I.

PIATRIKOVÁ K.: Assessment of Pavement Surfaces on Selected Parts of Road Networks
Supervisor: Bačová, K.

KUNA P.: Utilization of Traffic Calming Elements on the Through Road at Zavar
Supervisor: Bezák, B.

NAĎ R.: Influence of Pavement Surface on Rolling Noise
Supervisor: Nemček, M.

PARÁK L.: Study of Road Between Bratislava and Senec
Supervisor: Bartošová, L.

VALIŠ P.: Traffic Safety in the Town of Krupina
Supervisor: Kapusta, V.

MUCHA T.: Assignment of Mechanical Power of Pavement Construction on a Selected Part
Supervisor: Bačová, K.

2.3 Doctoral thesis

GÁBOR P.: Characteristics of Mixtures with Recycled Material in Pavement Base Layers
Supervisor: Bačová, K.

3. Research

3.1 Research projects

The Environmental Capacity Parameters of Transport Infrastructures (Bezák) (Contract No.: 1/3314/06)

Using recycling materials in asphalt mixtures in order to reduce the quantity of waste and improve the environment (Grünner) (Contract No.: 1/3318/06)

SNOWBALL, 6th FP Demonstration, taking-up and further dissemination of sustainable integrated planning methods in European cities (Rakšányi) (Contract No.: EIE/105/SI2.419575)

SNOWBALL, Integrated planning methods for saving the environment, energy in transport and policy in European cities. MŠ SR Grant (Rakšányi) (Contract No.: EIE/105/SI2.419575 Code 602)

3.2 International cooperation

Visit of staff members to foreign institutions

Rakšányi, P. Budapest, Hungary
Bezák, B. Vienna, Austria
Bezák, B. Vienna, Austria
Bezák, B. Győr, Hungary HU
Bezák, B. Kroměříž, Czech Republic
Bartošová, L. Brno, Czech Republic
Bezák, B. Prague, Czech Republic
Bartošová, L. Vienna, Austria
Bačová, K. Vienna, Austria
Bezák, B. Ostrava, Czech Republic
Bartošová, L. Ostrava, Czech Republic
Štefunková, S. Prague, Czech Republic
Gábor, P. Prague, Czech Republic
Rakšányi, P. Liverpool, Great Britain
Bezák, B. Vienna, Austria
Rakšányi, P. Brussels, Belgium
Rakšányi, P. San Fernando, Spain
Bačová, K. Nebřich, Czech Republic
Ondrovič, M. San Fernando, Spain
Bezák, B. Cologne, Germany
Rakšányi, P. Cologne, Germany
Bezák, B. Mikulov, Czech Republic
Ondrovič, M. Erfurt, Germany
Nemček, M. Erfurt, Germany
Šunková, S. Neum, Bosnia
Nemček, M. Nebřich, Czech Republic
Gábor, P. Nebřich, Czech Republic
Ondrovič, M. Nebřich, Czech Republic

Bezák, B. Vienna, Austria
Bezák, B. Vienna, Austria
Bezák, B. Budapest, Hungary HU
Bezák, B. Vienna, Austria
Gschwendt, I. Prague, Czech Republic
Bartošová, L. Prague, Czech Republic
Štefunková, S. Prague, Czech Republic
Gábor, P. Prague, Czech Republic
Rakšányi, P. Ludwigsburg, Germany
Bezák, B. Ostrava, Czech Republic
Ondrovič, M. Ludwigsburg, Germany
Bezák, B. Vienna, Austria
Rakšányi, P. Weimar, Germany

Membership in international professional organizations

Bezák, B.: Member of the PIARC - C 2.3 Technical Committee on Urban Areas and Integrated Transport, Paris, France

Bezák, B.: Member of the Southeast European Transport Research Forum, SETREF, Thessaloniki, Greece

Bezák, B.: Member of the Editorial Board -Transport Review, London, UK

Bezák, B.: Member of the Editorial Board – Acta Technica Jaurinensis, Győr, Hungary

Bezák, B.: CEI Vienna - Central European Initiative – Subgroup for Transport and the Environment, Austrian Federal Ministry of Agriculture, Forestry, the Environment and Water Management, Vienna

Grünner, K.: Slovak National Accrediting Service (SNAS)

Gschwendt, I.: Member of the PIARC – C7/8 – World Road Association (Road Pavements)

Gschwendt, I.: Member of the Editorial Board – Silniční obzor, Prague

Gschwendt, I.: The American Bibliographical Institute: Research Board of Advisors

Gschwendt, I.: Czech Association for Mechanics, ČSM Prague, Czech Republic

Rakšányi, P.: CEI Vienna - Central European Initiative – Subgroup for Transport and the Environment, Austrian Federal Ministry of Agriculture, Forestry, the Environment and Water Management, Vienna

Rakšányi, P.: DASL (German Academy of Spatial and Landscape Planning, Committee for Transport and the Environment), Landesgruppe Niedersachsen-Bremen, Hannover, Member-Correspondent

Rakšányi, P.: IFHP International Federation for Housing and Planning, The Hague, The Netherlands, Member-delegate

Ondrovič, M.: Member of the PIARC - A.1 Technical Committee on Preserving the Environment, Paris, France

4. Publications

Bezák, Bystrík - Mauroit, Christian - Ghaman, Raj - Kamali, Farshid - Kurosaka, Tsuyoshi - Talens, Hillie - Gerlach, Jürgen - Prat, Dominique: Human - Powered Transport. - Paris : PIARC - World Road Association, 2008. - 60 pp. - ISBN 2-84060-210-5

Bezák, Bystrík: Free Motion and Sustainable Mobility. In: Beiträge zu einer ökologisch und sozial verträglichen Verkehrsplanung. - Vienna : Technical University of Vienna, 2008. - ISBN 978-3-950190-6-0. -pp. 41 -52

Bačová, Katarína: Effectiveness and Results of Reusing Materials in Road Constructions. In: 70th Anniversary of FCE STU : International Scientific Conference. Bratislava, Slovakia, 4.-5.12.2008. - Bratislava : STU in Bratislava FCE, 2008. - ISBN 978-80-227-2979-6. - unpaginated

Bačová, Katarína: Construction of Road Embankment with Protection of Slopes Under Difficult Climate Conditions. In: Influence of Climate Conditions on Road Constructions and Technology : 13th International Ivan Poliaček Colloquium. Bratislava, Slovakia, 20.-21.11.2008. - Bratislava : KONGRES management, 2008. - ISBN 978-80-89275-13-7. -pp. 184-188

Bačová, Katarína: Reusing Waste Materials in Road Construction. In: TOP 2008. Technologies for Protecting the Environment : Proceedings of Conference on 14th International Conference. Častá Papiernička, 25.-27.6.2008. - Bratislava : STU in Bratislava, 2008. - ISBN 978-80-227-2896-6. - pp. 17-22

Bartošová, Ľudmila: Evaluation of Reliability of Rigid Airport Pavements In: 70th Anniversary of FCE STU : International Scientific Conference. Bratislava, Slovakia, 4.-5.12.2008. - Bratislava : STU in Bratislava FCE, 2008. - ISBN 978-80-227-2979-6. - unpaginated

Bartošová, Ľudmila: Airport Roadway Stress According to Thermal Changes. In: Influence of Climate Conditions on Road Constructions and Technology : 13th International Ivan Poliaček Seminar. Bratislava, Slovakia, 20.-21.11.2008. - Bratislava : KONGRES management, 2008. - ISBN 978-80-89275-13-7. -pp. 133 – 138

Bartošová, Ľudmila - Stolárik, František: Progress and Future of Infrastructure of Slovak Airports. In: 70th Anniversary of FCE STU : International Scientific Conference. Bratislava, Slovakia, 4.-5.12.2008. - Bratislava : STU in Bratislava FCE, 2008. - ISBN 978-80-227-2979-6. - unpaginated

Bezák, Bystrík - Ondrovič, Milan - Příkladová, Miroslava: Changes in Territorial and Traffic Variations of Settlements. In: 70th Anniversary of FCE STU : International Scientific Conference. Bratislava, Slovakia, 4.-5.12.2008. Bratislava : STU in Bratislava FCE, 2008. - ISBN 978-80-227-2979-6. - unpaginated

Gschwendt, Ivan - Zuzulová, Andrea: Temperature Regime of Concrete Cement Pavements. In: Influence of Climate Conditions on Road Constructions and Technology : 13th International Ivan Poliaček Seminar. Bratislava, Slovakia, 20.-21.11.2008. - Bratislava : KONGRES management, 2008. - ISBN 978-80-89275-13-7. -pp. 126- 132

Rakšányi, Peter: Public Space Parameters of a Railway Station. In: 4th Forum on Rail Transport : Proceedings of International Conference, Slovakia, Bratislava, 11.-12.3.2008. 2008. - unpaginated

Bezák, Bystrík - Ondrovič, Milan - Rakšányi, Peter: Zemplin Waterway - State of the Art Analysis of Transport Infrastructure in a Region. Bratislava : STU Bratislava, 2008. – 63 pp.

Bezák, Bystrík - Ondrovič, Milan - Rakšányi, Peter: Zemplin Waterway – Study of Effects in the Transport Sector. - Bratislava : STU Bratislava, 2008. – 39 pp.

Gschwendt, Ivan - Bačová, Katarína - Bartošová, Ľudmila - Zuzulová, Andrea: Pavement Mechanics : Exercises. Bratislava : STU Bratislava, 2008. – 113 pp. - ISBN 978-80-227-2921-5

Bartošová, Ľudmila: The Infrastructure and Capacity of Airports. In: Stavba. - ISSN 1335-5406. - Vol.11, no. 1-2 (2008), pp. 58-61

Rakšányi, Peter: First In-line Road in Slovakia.
In: Construction. - ISSN 1335-5406. - Vol.11, no.5 (2008),
pp. 44-47

Rakšányi, Peter: Slovak Boulevards in the Snowball Project.
In: Project - Buildings. - ISBN 1336-6327. - Vol. 4, no. 3-4
(2008), pp. 18-20

Báčová, Katarína - Gábor, Peter: Practical Requirements for
Road Construction Students. Lessons Learned from a
Structural Study. In: Actual Trends in Road Construction
Pedagogy : Workshop 2008. Prague, 9.-10.9.2008. - Prague :
Czech Technical University in Prague, 2008. - ISBN 978-80-
01-04074-4. unpaginated

DEPARTMENT OF THEORETICAL GEODESY

Department Head
Prof. Ján Hefty, PhD.

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Fax: + 421 2 52925 476
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1. Education

1.1 Graduate study

Obligatory subjects

Information Technologies
Processing and Analysis of Measurements 1
Processing and Analysis of Measurements 2
Programming
Local Geodetic Networks
Geometric Geodesy
Geoinformatics
Geodesy and Cartography (Faculty of Architecture)
Physical Geodesy 1
Spherical Astronomy and Space Geodesy
Global Navigation Systems
Field Education in Geodetic Controls
Global Geodesy
Space Geodesy
Geographical Information Systems
Physical Geodesy 2
Analysis of Measurements
Metrology in Geodesy
Specialized Field Education

Optional Subjects

Digital Modeling of Spatial Structures
Satellite Geodesy
Gravimetry
Three-Dimensional Geodesy
GIS Design and Implementation
Geodynamics
Analysis of Geodata Quality
Geographic Information Systems

1.2 Postgraduate courses

Determination of Spatial Position of Points and Objects
Using GNSS Permanent Networks
Supervisor: Hefty, Gerháťová
March 2008, 3 days
Determination of Spatial Position of Points and Objects
Using GNSS Permanent Networks
Supervisor: Hefty, Gerháťová
November 2008, 4 days

2. Theses

2.1 Research projects

16

2.2 Graduate theses

BARTOŠEK, G.: Updating Geometric and Attribute Part of a
Spatial Database Using GPS
Supervisor: Igondová, M.
BÉRES, G.: Monitoring a Stability of GPS Permanent
Stations Using a Kalman Filter
Supervisor: Hefty, J.

CIBULKA, D.: Possibilities of Using Open Source
Geographic Software and Its Application in Creating a
Special-Purpose Information System
Supervisor: Kováč, M.

ČERVENEC, A.: Application of Tidal Models in Geodetic
Reference Systems
Supervisor: Mojzeš, M.

ČIERNA, E.: Visualization of Three-Dimensional Models
Based on Discrete Data
Supervisor: Igondová, M.

GÁLOVÁ, L.: Using Geoinformation Systems for Crisis
Management Support
Supervisor: Faixová Chalachanová, J.

JANKECHOVÁ, I.: Quality of a Digital Relief Model
According to Relief Parameters
Supervisor: Faixová Chalachanová, J.

PAULIS, I.: Analysis of Variation of Daily Velocity of Earth's
Rotation
Supervisor: Janák, J.

2.3 Doctoral thesis

VALKO M.: Variations in the Earth's Parameters and Their
Effect on Geodetic Reference Systems
Supervisor: Mojzeš, M.

3. Research

3.1 Research projects

Tropospheric Modelling on the Territory of Slovakia Using
Permanent GNSS Observations for Near Real Time
Applications (Hefty, APVV LPP-0176-06)

Prediction of Archeological Sites (Faixová Chalachanová,
APVV-0249-07)

Evaluation of Quality of a Cadastral Domain (Faixová
Chalachanová, VEGA 1/4025/07)

Use of New and Modernised Global Navigation Satellite
Systems for Precise Positioning and Determination of
Temporal Changes of Positions (Hefty, VEGA 1/4089/07)

Refinement of Gravity Field Models of the Earth Using
Gradiometric Measurements (Janák, VEGA 1/0775/08)

Using Satellite Observations and Gravimetric
Measurements for Determining Geoid, Quasigeoid and
Physical Heights (Mojzeš, VEGA 1/0882/08)

3.2 International cooperation

Visit of staff members to foreign institutions

Šprlák, M. – University of Trieste, Department of Earth
Sciences, Italy (3 months)

Papčo, J. – International Course on ArchaeoGeophysics
(European Union Intensive Programme), Iznik, Turkey 20
July – 5 August 2008

Papčo, J. - ESA Radar Remote Sensing Course 2008 in Prague, 27 - 31 October 2008 at the Department of Applied Geoinformatics and Cartography, Charles University, Prague, Czech Republic

Membership in international professional organizations

International Astronomical Union (IAU) – Hefty, J.

International Association of Geodesy (IAG) – Hefty, J., Mojzeš, M.

European Geosciences Union (EGU) – Hefty, J., Mojzeš, M., Janák, J., Igondová, M.

American Geophysical Union (AGU) – Hefty, J., Mojzeš, M.

CEGRN Consortium – Mojzeš, M.

4. Publications

Books and Textbooks

Hefty J., Husár L.: *Satellite Geodesy, Global Positioning System*. STU Bratislava, 2008, 186 pp, 2nd edition (in Slovak).

Journals

Caporali A., Aichhorn C., Becker M., Fejes I., Gerhatova L., Ghitau D., Grenczy G., Hefty J., Krauss S., Medak D., Milev G., Mojzes M., Mulic M., Nardo A., Pesec P., Rus T., Simek J., Sledzinski J., Solaric M., Stangl G., Vespe F., Virag G., Vodopivec F., Zablotzkyi F.: Geokinematics of Central Europe: New Insights from the CERGOP-2/Environment Project. *Journal of Geodynamics*, 45, 4-5, 2008, pp. 246-256.

Čunderlík R., Mikula K., Mojzeš M.: Numerical Solution of a Linearized Fixed Gravimetric Boundary-Value Problem. *Journal of Geodesy*, 82, 1, 2008, pp. 15-29.

Vaľko M., Mojzeš M., Janák J., Papčo J.: Comparison of Two Different Solutions to Molodensky's G_1 Term. *Studia Geophysica et Geodaetica*, 52, 1, 2008, pp. 71-86.

Hefty J.: Geo-Kinematics of Central and Southeast Europe Resulting from a Combination of Various Regional GPS Velocity Fields. *Acta Geodynamica et Geomaterialia*, 4, 4 (148), 2007, pp. 173-189.

Hefty J.: Geo-Kinematics of Central Europe Inferred from Long-Term Monitored Regional and Local GPS Networks. *Reports on Geodesy*, 85, 2, 2008, pp. 9-18.

Igondová M., Hefty J.: Continuous Precipitable Water Vapor Monitoring Using GNSS. *Contributions to Geophysics and Geodesy*, 38, 1, 2008, pp. 17-24.

Hefty J., Igondová M.: The Network of Permanent GPS Stations in Central Europe Analyzed for the Purpose of Regional Geodynamics and Troposphere Studies. *Contributions to Geophysics and Geodesy*, 38, 2, 2008, pp. 151-167.

Kuzma I., Lieskovský T.: Analysis of Roundel Visibility in a GIS Environment. *Ve službách archeologie*, 2/2008, pp. 7-13 (in Slovak).

Hefty J., Kováč M., Burgan J.: Precise Absolute Point Positioning Using Global Satellite Navigation Systems. *Geodetický a kartografický obzor*, 54 (96), 11, pp. 209-216 (in Slovak).

Husár L.: Transformation of Oblique Coordinates in 2D and 3D Spaces. *Geodetický a kartografický obzor*, 54 (96), 11, pp. 217-224 (in Slovak).

Kliment T., Ďuračiová R.: Searching for Geodata in a Spatial Information Infrastructure. *Geodetický a kartografický obzor*, 54 (96), 11, pp. 229-235 (in Slovak).

Conferences

Mojzeš M., Kováčik J.: Absolute Gravity Measurement and Its Future. In: 14th International Polish-Czech-Slovak Geodetic Days. Polish Geodetic Association, Warsaw, pp. 61-71.

Vaľko M.: Effect of a Point Thermal Source on Measured Geodetic Parameters. In: 14th International Polish-Czech-Slovak Geodetic Days. Polish Geodetic Association, Warsaw, pp. 131-149.

Pitoňák M.: Adjustment of Gravimetric Networks. In: 14th International Polish-Czech-Slovak Geodetic Days. Polish Geodetic Association, Warsaw, pp. 89-97 (in Slovak).

Faixová Chalachanová J., Lieskovský T.: Preparation of Source Data for Predictive Modeling in Archaeology. In: GIS Ostrava 2008. (http://gis.vsb.cz/GIS_Ostrava/GIS_Ova_2008/sbornik/index.htm), Tanager s.r.o., TŮ Ostrava, 2008 (in Slovak).

Hefty J., Kováč M., Burgan J.: Possibilities of Absolute Point Positioning Using Precise Parameters of Clocks and Ephemerides of GNSS Satellites. In: Družicové metody v geodetickej praxi. VUT Brno, 2008, pp. 46-50 (in Slovak).

Mojzeš M.: Determining Physical Heights Using a Geopotential Model of the Earth, GPS/GNSS Observations and Gravimetric Measurements. In: Družicové metody v geodetickej praxi. VUT Brno, 2008, pp. 82-86 (in Slovak).

Mojzeš M.: Satellite and Gravimetric Measurements – The Perspective of Geodesy. In: 44th geodetickej informační dny. Brno, 2008, pp.110-116 (in Slovak).

Vaľko M.: Effect of a Point Thermal Source on Measured Geodetic Parameters. In: Juniorstav 2008, 10th Professional Conference of Postgraduate Students, Brno 2008 (in Slovak).

Kliment T.: Catalogue Service in a Metadata Domain for Geodata. In: Juniorstav 2008, 10th Professional Conference of Postgraduate Students, Brno 2008 (in Slovak).

Hipmanová L.: Geo-Kinematics of Central Europe Based on an Integration of Epoch and Permanent Networks. In: Juniorstav 2008, 10th Professional Conference of Postgraduate Students, Brno 2008 (in Slovak).

Bezručka J., Hefty J.: Real-Time GPS Network Analysis Using IGS Ultra-Rapid Satellite Orbits Applied for Monitoring Displacements. In: INGEO 2008: 4th International Conference on Engineering Surveying. STU Bratislava, SvF, 2008.

Hefty J., Gerhátová L., Papčo J.: Recent Kinematics in the Area of the Mochovce Nuclear Power Plant Inferred from GPS Epoch Observations. In: INGEO 2008: 4th International Conference on Engineering Surveying. STU Bratislava, SvF, 2008.

Igondová M., Hefty J.: The Boundary of Geodesy and Meteorology. In: International Conference on 70 Years of FCE STU. STU Bratislava, SvF, 2008. pp. 45-54 (in Slovak).

Janák J., Mojzeš M., Šprlák M., Fašková Z.: European Satellite Mission GOCE – New Possibilities for Particularization of Models of a Gravity Field. In: International Conference on 70 Years of FCE STU. STU Bratislava, SvF, 2008. pp. 55-62 (in Slovak).

Kollár P., Mojzeš M., Vaľko M.: Deformation of a Ground Surface Caused by Large Buildings. In: International Conference on 70 Years of FCE STU. STU Bratislava, SvF, 2008. pp. 87-96 (in Slovak).

Mojzeš M.: Absolute Gravimetric Measurements in Slovakia. In: International Conference on 70 Years of FCE STU. STU Bratislava, SvF, 2008. pp. 118-127 (in Slovak).

Mojzeš M., Kalafut M., Pánisová J., Vajda P.: Results and Future of Combined GNSS and Gravimetric Measurements. In: International Conference on 70 Years of FCE STU. STU Bratislava, SvF, 2008. pp. 128-139 (in Slovak).

Mojzeš M., Papčo J.: Monitoring of Movements of the High Tatra Mountains Using Geodetic Techniques. In: International Conference 70 on Years of FCE STU. STU Bratislava, SvF, 2008. pp. 140-148 (in Slovak).

DEPARTMENT OF SURVEYING

Department Head
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1. Education

1.1 Graduate study

Obligatory subjects

Surveying I
Surveying in Building Construction (branch of study:
Building Constructions and Architecture)
History of Civil Engineering and Surveying
Surveying II
Surveying in Civil Engineering
Surveying Camp
Surveying for Water Management
Surveying in Building Construction (branch of study:
(Engineering Constructions and Transportation Structures)
Surveying Camp for Engineering Constructions
Geodesy, Cartography and Cadastre
Surveying III
Engineering Surveying I
Engineering Surveying Camp
Professional Practice
Photogrammetry and Remote Sensing
B. Sc. Project
Engineering Surveying II
Special Seminar
Photogrammetry and Remote Sensing
Engineering Surveying Camp
Geodetic Work Legislation
Diploma Work

Optional Subjects

Applied Analytical Photogrammetry
Surveying in Underground Areas
Measuring Systems in Engineering Surveying
Industrial Surveying
Geographic and Information Technologies
Spatial Technologies in Engineering Surveying

2. Thesis

2.1 Research projects

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2.2 Graduate thesis

BACIGÁLOVÁ I.: Testing Stability of Digital Levelling
Instruments
Supervisor: Sokol, Š.

ĎAĎAN O.: Geodetic Activities Associated with Building of
Multifunctional Object
Supervisor: Kopáček, A.

HOLEŠA O.: Geodetic Activities in Complex Restoration of
Railway Superstructure
Supervisor: Kopáček, A.

KL'UČKA Z.: Analysis of Displacements and Deformations of
Dam of Ružín Hydroengineering Structure
Supervisor: Kopáček, A.

ONDREJKOV J.: Creating Detailed Model of a Facade
Supervisor: Fraštia, M.

KOTÚL J.: Measurement of Displacements and
Deformations of Bridge Structures Using Universal
Measuring Instruments
Supervisor: Kopáček, A.

POLLÁK M.: Geodetic Assurance of Construction and
Operation of Highway Tunnels
Supervisor: Staněk, V.

PRAŽENKA J.: Measurement of Displacements of Bridge
Structures
Supervisor: Ježko, J.

RINDOŠOVÁ J.: Long-Term Measurement and Processing
of Vertical Displacements of Highway Bridge Structures
Supervisor: Ježko, J.

TUKA M.: Monitoring Vertical Displacements of Existing
Buildings in the Realization of New Buildings
Supervisor: Bajtala, M.

TURANOVÁ J.: Loading Test of Bridge Structures and
Monitoring Its Operation
Supervisor: Staněk, V.

VIŠNIAROVÁ K.: Measuring and Analysis of Horizontal
Displacements of Lock of Čučovo Waterworks
Supervisor: Staněk, V.

3. Research

3.1 Research projects

Application of precise navigating algorithms and systems for
monitoring building structures (Kopáček) (Research Grant
Registration No. 1/3308/06)

Monitoring deformations of building and local geodynamic
processes with automated measurement systems (Sokol)
(Research Grant Registration No. 1/4206/07)

3.2 International cooperation

Visit of staff members to foreign institution

Staněk, V. – CTU Prague, Czech Republic, 2 days (January
2008)

Kopáček, A. – CTU Prague, Czech Republic, 2 days
(January 2008)

Lukáč, Š. – ČZGaK Brno, Czech Republic, 1 day (April
2008)

Kopáček, A. – LNEC Lisbon, Portugal, 4 days (May 2008)

Haličková, J. – LNEC Lisbon, Portugal, 5 days (May 2008)

Staněk, V. – CTU Prague, Czech Republic, 1 days (June
2008)

Staněk, V. – VUT Brno, Czech Republic, 1 day (June 2008)

Kopáček, A. – VUT Brno, Czech Republic, 1 day (June 2008)

Bartoš, P. – VUT Brno, Czech Republic, 1 day (June 2008)

Sokol, Š. – VUT Brno, Czech Republic, 3 day (June 2008)

Kopáček, A. – FIG Working Week Stockholm, Sweden, 7
days (June 2008)

Hostinová, A. – FIG Working Week Stockholm, Sweden, 6
days (June 2008)

Lukáč, Š. – FIG Working Week Stockholm, Sweden, 6 days
(June 2008)

Kopáček, A. – RWTH Aachen, Germany, 3 day (July 2008)

Kopáček, A. – VUT Brno, Czech Republic, 1 day (August 2008)
 Haličková, J. – CTU Prague, Czech Republic, 6 days (September 2008)
 Sokol, Š. – TU Ostrava, Czech Republic, 2 day (September 2008)
 Kyrinovič, P. – VŠB Ostrava, Czech Republic, 3 days (September 2008)
 Haličková, J. – CTU Prague, Czech Republic, 7 days (September 2008)
 Sokol, Š. – VUT Brno, Czech Republic, 1 day (September 2008)
 Staněk, V. – VUT Brno, Czech Republic, 1 day (September 2008)
 Kopáček, A. – VUT Brno, Czech Republic, 1 day (November 2008)
 Kopáček, A. – BAV Munich, Germany, 3 day (November 2008)
 Haličková, J. – Atlas, spol. s.r.o. Prague, Czech Republic, 4 days (November 2008)
 Ježko, J. – NTM Prague, Czech Republic, 2 day (December 2008)

Membership in international professional organizations

Deutsche Geodätische Kommission bei der Bayerischen Akademie der Wissenschaften -Correspondent – *Kopáček*

FIG – International Federation of Surveyors :

National delegate to FIG Commission 1: "Professional Standards & Practice" - *Lukáč*

National delegate to FIG Commission 2: "Professional Education" – *Kopáček*

Chair of Commission 6: "Engineering Surveying" - *Kopáček*
 member of WG 6.1: "Deformation Measurements" - *Lukáč*

Vice Chair of WG 6.2 "Engineering Survey for Industry and Research" - *Kyrinovič*

FIG Advisory Committee of Commission Officers (ACCO) - member- *Kopáček*

ISPRS – International Society for Photogrammetry and Remote Sensing- Ordinary Members - *Bartoš, Fraštia*

EEGECs - European Education in Geodesic Engineering, Cartography and Surveying – WG1 "Pregradual Education" - *Kopáček*

4. Publications

Books and Textbooks

FRAŠTIA, M.: Calibration and Testing of Digital Cameras for Close Range Photogrammetry Applications. Monograph. Bratislava, 2008, Publisher SUT, ISBN 978-80-227-2812-6, p. 114 (in Slovak)

Journals

BAJTALA, M. - SOKOL, Š.: Issue of Measurement Inspection of the Current State of a Clinker Silo. In: Building Scope 3/2008. Prague, 2008, Faculty of Civil Engineering CTU, ISSN 1210-4027, pp. 88-93 (in Slovak)

PUKANSKÁ, K. - FRAŠTIA, M.: Testing of Laser Scanner Technology on the Bellgoundry Artifacts. In: Metalurgija 3/2008, Vol. 47. Zagreb, 2008, Croatian Metallurgical Society, ISSN 0543-5846, pp. 275-284 (in English)

PUKANSKÁ, K. - FRAŠTIA, M. - SABOVÁ, J.: Observation of Morphological Terrain Changes with Using Terrestrial Laser Skener and Digital Photogrammetry. In: Metalurgija 3/2008, Vol. 47. Zagreb, 2008, Croatian Metallurgical Society, ISSN 0543-5846, pp. 275-284 (in English)

DOLEŽAL, M. - KYRINOVIČ, P. - KOPÁČEK, A.: Testing of Robotic Universal Measuring Stations in Laboratory Conditions. In: Geodetic and Cartographic Scope 5/2008, ČÚZK and ÚGKK SR, Prague, 2008, ISSN 0016-7096, pp. 81-91 (in Slovak)

PUKANSKÁ, K. - FRAŠTIA, M. – GEMBICKÝ, J.: New Technologies for Documenting Monuments. In: Monuments and Museums, 4/2008, Vol. 57. Bratislava, 2008, Slovak National Museum and Monument Office in Bratislava SR, ISSN 1335-4353, pp. 56-59 (in Slovak)

KOPÁČEK, A.: 70 Years of Education in Geodesy and Cartography at the Faculty of Civil Engineering. In: Geodetic and Cartographic Scope, 11/2008, pp. 201-209, ISSN 0016-7096 (in Slovak)

KYRINOVIČ, P.: All Life Changes. In: Civil Engineering and Living 2/2008. Žilina, 2008, MEDIA/ST s.r.o., pp. 18-21 (in Slovak)

KYRINOVIČ, P.: Distances. In: Civil Engineering and Living 4/2008. Žilina, 2008, MEDIA/ST s.r.o., pp. 18-19 (in Slovak)

LIPTÁK, M.: SOKOL, Š.: Possibilities of the Elimination of the Effect of Vertical Refraction by Trigonometric Measurements of Elevations. In: Geodetic and Cartographic Scope, 11/2008, pp. 224-229, ISSN 0016-7096 (in Slovak)

Conferences

NIČ, M. - FRAŠTIA, M.: Documentation of Real Estate Using Photogrammetry. In: Progress in the Field of Forensic Engineering and Estate Assessment - Ostrava: VŠB – Technical University of Ostrava, 2008. ISBN 978-80-248-1778-1 (in Slovak)

HOSTINOVÁ, A. - KOPÁČEK, A.: Monitoring of High-Rise Building. In: Proceedings of FIG Working Week. Integrating Generations. Stockholm, 2008, CD ROM, ISBN 978-87-90907-67-9, p.11 (in English)

HOSTINOVÁ, A. - KOPÁČEK, A. - KYRINOVIČ, P.: Using New Measuring Technologies during the Loading Test of a Bridge. In: Geodesy and Cartography in Transport. 10th International Conference, Ostrava, 2008. Prague, Czech Union of Surveyors and Cartographers 2008, CD ROM, ISBN 978-80-02-02073-8, p. 7 (in Slovak)

JEŽKO, J. - SOKOL, Š. - BAJTALA, M.: Geodetic Documentations for the Restoration and Reconstruction of Bridge Structures over the River Ipeř. In: Geodesy and Cartography in Transport. 10th International Conference, Ostrava, 2008. Prague, Czech Union of Surveyors and Cartographers 2008, CD ROM, ISBN 978-80-02-02073-8, p. 8 (in Slovak)

JEŽKO, J.: 70 Years of Education in Geodesy and Cartography at the Faculty of Civil Engineering and Department of Surveying SUT in Bratislava. 19th Symposium on the History of Geodesy and Cartography, Prague, Publisher: National Technical Museum, Prague, XII/2008, p. 7 (in Slovak)

KOSKA, B. - KŘEMEN, T. - POSPÍŠIL, J.- KYRINOVIČ, P. - HALIČKOVÁ, J.: Monitoring of Lock Chamber Dynamic Deformation. In: Measuring the Changes. 13th FIG Symposium on Deformation Measurement and Analysis, 4th IAG Symposium on Geodesy for Geotechnical and Structural Engineering. Lisbon, Portugal, Laboratório Nacional de Engenharia Civil, 2008, CD ROM, p. 10 (in English)

- KŘEMEN, T. - KOSKA, B. - POSPÍŠIL, J. - KYRINOVIČ, P. - HALIČKOVÁ, J. - KOPÁČIK, A.: Checking of Crane Rails by Terrestrial Laser Scanning Technology. In: Measuring the Changes. 13th FIG Symposium on Deformation Measurement and Analysis, 4th IAG Symposium of Geodesy for Geotechnical and Structural Engineering. Lisbon, Portugal, Laboratório Nacional de Engenharia Civil, 2008, CD ROM, p. 10 (in English)
- LIPTÁK, M.: Eliminating the Effect of the Environment on the Estimation of Elevations Using a Regression Model. In: JUNIORSTAV 2008. 10th Technical Conference of Doctoral Study. Brno, 2008, BUT, Faculty of Civil Engineering, ISBN 978-80-86433-45-5, p. 4 (in Slovak)
- LUKÁČ, Š.: Millau Viaduct, France – The Worlds Highest Bridge. In: Geodesy and Cartography in Transport. 10th International Conference, Ostrava, 2008. Prague, Czech Union of Surveyors and Cartographers 2008, CD ROM, ISBN 978-80-02-02073-8, p. 13 (in Slovak)
- BAJTALA, M.: Staking Out a Modular Axis for the Needs of a Building Production Hall at HYUNDAI Factory Ostrava. In: Interdisciplinary Applications of Geodesy, Engineering Surveying and Photogrammetry. Bratislava, Department of Surveying, Faculty of Civil Engineering SUT, 2008, CD ROM, ISBN 978-80-227-2938-3, pp. 29-39 (in Slovak)
- FRAŠTIA, M.: Close Range Photogrammetry - Effective Tool for Creating Detailed Models of Historical Facades. In: Interdisciplinary Applications of Geodesy, Engineering Surveying and Photogrammetry. Bratislava, Department of Surveying, Faculty of Civil Engineering SUT, 2008, CD ROM, ISBN 978-80-227-2938-3, pp. 20-28 (in Slovak)
- FRAŠTIA, M.: Creating Detailed Spatial Models of Historic Objects Using a Close Range Photogrammetry Method. In: Geodesy, Cartography and GIS 2008. Stará Lesná, Institute of Geodesy, Cartography and GIS F BERG TU Košice, 2008, CD ROM, ISBN 978-80-553-0079-5, p. 7 (in Slovak)
- FRAŠTIA, M.: Deformation Measurements of Lock Gates by an Inexpensive Photogrammetric Method. In: INGEO2008. Proceedings of 4th International Conference on Engineering Surveying, Bratislava 2008. Department of Surveying, Faculty of Civil Engineering SUT, 2008, ISBN 978-80-227-2971-0, p. 9 (in English)
- FRAŠTIA, M.: Possibilities of the Measurement and Visualization of Objects with Affordably Priced Photogrammetric Software. In: Modelling and Visualization of Spatial Data. Bratislava, Department of Mapping and Land Consolidation, Faculty of Civil Engineering SUT, 2008, CD ROM, ISBN 978-80-227-2988-8, p. 8 (in Slovak)
- HOSTINOVÁ, A. - KYRINOVIČ, P. – HALIČKOVÁ, J. - KOPÁČIK, A.: Loading Test of the New Bridge over the Danube in Bratislava. In: INGEO2008. Proceedings of 4th International Conference on Engineering Surveying, Bratislava 2008. Department of Surveying, Faculty of Civil Engineering SUT Bratislava, 2008, ISBN 978-80-227-2971-0, pp. 11 (in English)
- PUKANSKÁ, K. - SABOVÁ, J. – CHLEPKOVÁ, M. - GAJDOŠÍK, J.: New Technologies in the Documentation of Historical Monuments. In: MONUMENTORUM TUTELA – Preservation of Monuments 19, Monument Office of SR, Bratislava - 2008. ISSN 978-80-89175-25-3, pp. 310-319 (in Slovak)
- JEŽKO, J.: Testing and Calibration of Geodetic Instruments in Conformity with Technical Standards. In: Interdisciplinary Applications of Geodesy, Engineering Surveying and Photogrammetry. Bratislava, Department of Surveying, Faculty of Civil Engineering SUT, 2008, CD ROM, ISBN 978-80-227-2938-3, pp. 10-19 (in Slovak)
- JEŽKO, J. - SOKOL, Š. - BAJTALA, M.: Reconstruction of Bridge Structures over the River Ipeľ. In: Interdisciplinary Applications of Geodesy, Engineering Surveying and Photogrammetry. Bratislava, Department of Surveying, Faculty of Civil Engineering SUT, 2008, CD ROM, ISBN 978-80-227-2938-3, pp. 48-54 (in Slovak)
- JEŽKO, J. - STANĚK, V.: Measuring the Vertical Displacements of the Apollo Bridge Structure in Bratislava. In: Geodesy, Cartography and GIS 2008. Stará Lesná, Institute of Geodesy, Cartography and GIS F BERG TU Košice, 2008, CD ROM, ISBN 978-80-553-0079-5, p. 8 (in Slovak)
- JEŽKO, J. - KOPÁČIK, A.: Technical Standards and Normative Activities in the Field of Geodesy and Cartography. In: 70 Years of the Faculty of Civil Engineering SUT. Section 4: Geodesy and Cartography. International Scientific Conference. Bratislava, Faculty of Civil Engineering SUT, 2008, ISBN 978-80-227-2979-6, pp. 63-73 (in Slovak)
- JEŽKO, J. - SOKOL, Š. - VYBÍRAL, P.: Department of Surveying – History and the Present. In: 70 Years of the Faculty of Civil Engineering SUT. Section 4: Geodesy and Cartography. International Scientific Conference. Bratislava, Faculty of Civil Engineering SUT, 2008, ISBN 978-80-227-2979-6, pp. 74-85 (in Slovak)
- KOPÁČIK, A.: 70 Years of Education in Geodesy and Cartography at the Faculty of Civil Engineering. In: 16th Slovak Geodetic Days - CD, Bratislava, 2008, ISBN 978-80-9669809-1-8, p. 8 (in Slovak)
- KOPÁČIK, A.- JEŽKO, J. : Normative Activities in the Field of Geodesy and Cartography. In: 16th Slovak Geodetic Days - CD, Bratislava, 2008, ISBN 978-80-9669809-1-8, p. 8 (in Slovak)
- KYRINOVIČ, P.: Monitoring Deformations of a Lock Chamber Using a Slope Sensor. In: Interdisciplinary Applications of Geodesy, Engineering Surveying and Photogrammetry. Bratislava, Department of Surveying, Faculty of Civil Engineering SUT, 2008, CD ROM, ISBN 978-80-227-2938-3, pp. 40-47 (in Slovak)
- LIPTÁK, M. - HAŠKOVÁ, V.: Vertical Refraction – Theoretical Formula Derivations. In: Interdisciplinary Applications of Geodesy, Engineering Surveying and Photogrammetry. Bratislava, Department of Surveying, Faculty of Civil Engineering SUT, 2008, CD ROM, ISBN 978-80-227-2938-3, pp. 5-9 (in Slovak)
- LIPTÁK, M. - SOKOL, Š.: Analysis of Trigonometric Determinations of Elevations. In: Geodesy, Cartography and GIS 2008. Stará Lesná, Institute of Geodesy, Cartography and GIS F BERG TU Košice, 2008, CD ROM, ISBN 978-80-553-0079-5, p. 6 (in Slovak).
- LUKÁČ, Š.: Measurement and Interpretation of Displacements of Structure of Nuclear Power Plant During an Integral Strength Test. In: Interdisciplinary Applications of Geodesy, Engineering Surveying and Photogrammetry. Bratislava, Department of Surveying, Faculty of Civil Engineering SUT, 2008, CD ROM, ISBN 978-80-227-2938-3, pp. 55-66 (in Slovak)
- LUKÁČ, Š - ŽÁK, M.: Zero Epoch Measurement of Displacements and Deformations of New Highway Bridge Structures in Slovakia. In: INGEO2008. Proceedings of 4th International Conference on Engineering Surveying, Bratislava 2008. Department of Surveying, Faculty of Civil Engineering SUT, 2008, ISBN 978-80-227-2971-0, p. 15 (in English)

MICHALČÁK, S.: Analysis of the Historical Transformations in the Field of Geodesy and Cartography. In: 70 Years of the Faculty of Civil Engineering SUT. Section 4: Geodesy and Cartography. International Scientific Conference. Bratislava, Faculty of Civil Engineering SUT, 2008, ISBN 978-80-227-2979-6, pp. 108-117 (in Slovak)

PAŠKO, M. - FRAŠTIA, M.: Acceleration and Simplification of Engineering Tasks Using Digital Photogrammetry. In: INGENEO2008. Proceedings of 4th International Conference on Engineering Surveying, Bratislava 2008. Department of Surveying, Faculty of Civil Engineering SUT, 2008, 2008, ISBN 978-80-227-2971-0, p. 8 (in English)

SOKOL, Š.: Effect of the Environment on the Accuracy of Elevation Determinations. In: Interdisciplinary Applications of Geodesy, Engineering Surveying and Photogrammetry. Bratislava, Department of Surveying, Faculty of Civil Engineering SUT, 2008, CD ROM, ISBN 978-80-227-2938-3, pp. 67-75 (in Slovak)

DEPARTMENT OF GEOTECHNICS

Department Head
Prof. RNDr. František Baliak, PhD.

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Fax: + 421 2 52925 642
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1. Education

1.1 Graduate study

Obligatory subjects

Geology
Geology and Geomorphology
Soil Mechanics
Soil Mechanics and Foundations
Building Foundations
Building Foundations and Underground Structures
Engineering Geology and Rock Mechanics
Properties of Rocks and Soils
Water Reservoirs and Dams
Underground Constructions
Plane and Deep Foundations
Soil Construction

Optional subjects

Geology
Geology and Geomorphology
Soil Mechanics
Soil Mechanics and Foundations
Building Foundations
Building Foundations and Underground Structures
Engineering Geology and Rock Mechanics
Properties of Rocks and Soils
Water Reservoirs and Dams
Underground Constructions
Plane and Deep Foundations
Soil Construction

Recommended subjects

Dam Design
Foundation of Water Structures
Selected Topics in Soil Mechanics
Complex Dam Projects
Diploma Seminar
Special Engineering Geology and Hydrogeology
Soil Properties
Geomechanics

1.2 Postgraduate courses

Foundation of Water Structures
Selected Topics in Soil Mechanics
Complex Dam Projects

2. Thesis

2.1 Bachelor's theses

7

2.2 Graduate theses

BARTOŠ V.: Geotechnical Design and Static Analysis of Tunnel Construction in Považský Chlmec Using New Austrian Method
Supervisor: Hruštinec, Ľ.

ÉCSIOVÁ K.: Design and Review of Cross Section of Lower Reservoir Embankment of PVE Ipeľ
Supervisor: Hruštinec, Ľ.

GREGORIK D.: Evaluation of Geotechnical Properties of Neogene in Central Part Of Bratislava
Supervisor: Masarovičová, M.

HLIVOVÁ K.: Filtration Regime on the Abutments of Dams
Supervisor: Bednárová, E.

JURÍK P.: Design of Deep Excavation Scaffolding in Constraint Conditions
Supervisor: Turček, P.

KAČUR T.: Geotechnical Review of Selected Problems of Proposed Upper Reservoir of PVE Ipeľ
Supervisor: Hruštinec, Ľ.

MARUŠIC M.: Design of Combined Foundations
Supervisor: Turček, P.

PALEČEKOVÁ P.: Evaluation of Rozgrund Dam Reconstruction
Supervisor: Minárik, M.

PULLMANN T.: Analysis of Seepage Regime on Klenovec Dam
Supervisor: Bednárová, E.

SADÁKOVÁ B.: Hriňová Water Structure 15 Years After Reconstruction
Supervisor: Bednárová, E.

SIHELNÍKOVÁ M.: Design of the Instrumentation of an Embankment Dam
Supervisor: Minárik, M.

VLČEK B.: Lozorno Dam – Lessons Learned from Operation and What Next?
Supervisor: Bednárová, E.

3. Research

3.1 Research projects

An Analysis of the Effect Human Activity on the Stability of Slopes in Slovakia (Baliak) (project number: 1/0599/08)

Problems of the Interaction Between a Water Structure and Environment and Ways to Minimize Them (Bednárová) (project number: 1/3315/06)

Soil Structure Interaction in Layered Subsoil (Kuzma) (project number: 1/0578/08)

Geotechnical Audit of Environmental Structures and Burdens (Masarovičová) (project number: 1/3311/06)

Interaction Between Selected Geotechnical Structures and a Ground Environment (Turček) (project number: 1/3320/06)

3.2 International cooperation

Visits of staff members to foreign institutions

ČVUT Prague (Bednárová, Turček)
VUT Brno (Bednárová, Hulla, Súľovská, Masarovičová, Marikovičová, Turček, Pivarč, Gužík)
UNIGEO Ostrava (Hulla)

TU Graz (Turček, Galliková, Bráz, Gužík)
UNI Graz (Pivarč, Turček)
Schrobenhausener Tag (Turček, Súľovská, Bartošová
Hulla)
Eurometro Budapest (Černý, Kuzma, Hruštinec)
VŠB Ostrava (Ravinger)
Stavební geologie Prague (Baliak)
ILF Innsbruck (Turček, Ravinger)
IGI Hranice (Baliak)
ÚK Faculty of Natural Sciences Prague (Masarovičová)
D2 Consult Prague (Ledényiová)
Heriott Watt UNI (Turček)
NTNU Trondheim (Galliková)
Povodie Vltavy (Marikovičová, Meszároš, Minárik)
Amberg Brno (Chabroňová, Ledényiová)
UK Prague (Masarovičová)

Membership in international professional organizations

HRUŠTINEC, L.: Member of the Czech and Slovak Committee of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE)

HULLA, J.: Member of Czech and Slovak Committee of International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE)

KOPECKÝ, M.: Member of Slovak Committee of International Association of Engineering Geology (IAEG)

KUZMA, J.: Member of the Czech and Slovak Committee of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE)

MASAROVIČOVÁ, M.: Member of the Regional Committee of the International Association for Computer Methods and Advances in Geomechanics (IACMAG)

MASAROVIČOVÁ, M.: Vice – Chair Czech and Slovak Committee of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE)

MINÁRIK, M.: Member of the International Committee of ICOLD (International Commission on Large Dams) – Groundwater Dams.

ONDRÁŠIK M.: International Association for Engineering Geology and the Environment (IAEG) – Secretary of National Group.

RAVINGER, R.: Member of the Czech and Slovak Committee of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE)

SLÁVIK, I.: Member of the Czech and Slovak Committee of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE)

TURČEK, P.: Member of the Czech and Slovak Committee of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE)

TURČEK, P.: Member of CEN – TC 250/SC7 Geotechnics

4. Publications

Parts of Books

PETRO, L., FRANKOVSKÁ, J., MATYS, M., WAGNER, P., et al.: Engineering geological and geotechnical terminological dictionary. Authors: Bednárik, M., Frankovská, J., Grunner, K., Holzer, R., Hrašna, M., Hulla, J., Jánová, V., Kováčik, M., Kováčiková, M., Liščák, P., Matys, M., Modlitba, I., ONDRÁŠIK, M., Ondrášik, R., Pauditš, P., Petro, L., Slivovský, M., Vlčko, J., Wagner, P. Štátny geologický ústav Dionýza Štúra, Bratislava, Slovakia, 2008, 465 p. (in Slovak)

Journals

BALIAK, F.: Specifics of Geological Engineering Survey by the Construction of Civil Buildings on a Slope. In: Stavebné materiály. Vol. 4, Nos. 1-2/2008, pp. 28-30 (in Slovak)

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DEPARTMENT OF LAND AND WATER RESOURCES MANAGEMENT

Department Head
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1. Education

1.1 Graduate study

Obligatory subjects

Hydrology
Landscape Ecology
Landscape Ecology and Bioecology
Meteorology and Hydrology
Landscape Engineering
Engineering Structures in a Landscape
River Training
Pedology
River Restoration
Integrated River Basin Management
Water Management
Hydrological Field Measurements
CAD Systems in Landscape Engineering
Water Regime of a Landscape
Irrigation and Drainage
GIS in Water Management

Optional Subjects

Project 1 – Sustainable Landscape Development
Basics of the Design of Landscape Structures
CAD Systems in Water Management
Project Work
Computer Modelling in Water Management
Design of Small Water Reservoirs
Revitalization of Wetlands
CAD Systems in Environmental Engi

1.2 Postgraduate courses

Hydrology, J. Szolgay
Hydrology of Surface Waters, J. Szolgay
Hydrology of Sub-Surface Waters, J. Skalová
Hydrodynamics of Porous Media, J. Skalová
Methods of Field and Laboratory Experiments in Hydrology,
J. Skalová
Mathematical Modelling of Hydrological and Hydraulic
Processes, J. Szolgay
Simulation Methods, Algorithms and Programming, J.
Szolgay
Geoinformatics, K. Hlavčová
Landscape Planning, V. Macura
Revitalization of Rivers, V. Macura
Soil Water Regime, V. Macura
Hydrochemistry and Hydrobiology, V. Macura

2. Theses

2.1 Graduate theses

BALÁŽOVÁ M.: Regulation of the Demänovka River in
Demänová
Supervisor: Macura, V.

BEDNÁRIK T.: Impact of Climate Change on the Runoff
Regime in the Hron River Basin
Supervisor: Hlavčová, K.

BENKOVSÁ M.: Analysis of Changes in the Seasonal
Distribution of Runoff in a Selected Basin in Slovakia
Supervisor: Hlavčová, K.

BISTÁKOVÁ D.: Regulation of the Nitra River from km 142 -
143.7
Supervisor: Macura, V.

BUKOVČÁKOVÁ D.: Water Management and Ecological
Evaluation of the Abrod Wetland
Supervisor: Skalová, J.

ČIERNIK M.: Design of Irrigation System for a Golf Course
Supervisor: Čistý, M.

JANČOVIČOVÁ D.: Regulation of the Vlára River at Horné
Srníe
Supervisor: Macura, V.

JANÍKOVÁ L.: Seasonality of Low Flows in Slovakia
Supervisor: Kohnová, S.

KRIŠTOFIČ B.: Impact of Climate Change on the Soil Water
Regime in the Zelenka Wetland
Supervisor: Skalová, J.

MINÁRIK M.: Computing Program for a Conceptual
Proposal for Polders
Supervisor: Szolgay, J.

PAPAJ M.: Proposal for Artificial Snowing of the Ski Slope at
Veterná Poruba
Supervisor: Szolgay, J.

RANDJAK L.: Regulation of the Štiavnica River at Liptovský
Ján
Supervisor: Macura, V.

SPÁL P.: Parameterization of a Model for the
Transformation of Flood Waves
Supervisor: Szolgay, J.

ŠTEFANČIN P.: Seasonality Analysis of Mean Monthly
Discharges in Slovakia
Supervisor: Kohnová, S.

SUCHÁR M.: Application of Neural Networks in Water
Resources Management
Supervisor: Čistý, M.

2.2 Doctoral theses

DANÁČOVÁ M.: Multilinear Modelling of Transformation of
Flood Waves
Supervisor: Szolgay, J.

JAROŠ B.: Effect of Management on the Water Regimes of
Wetlands
Supervisor: Skalová, J.

SVETLÍKOVÁ D.: Hybrid Methods in Hydrological
Forecasting
Supervisor: Kohnová, S.

ZAČKA T.: Evaluation of the Quality of the Aquatic Habitat
of a Stream During a Period of Minimal Flow Using the
Bioindicators Method
Supervisor: Macura, V.

3. Research

3.1 Research projects

Hydrometeorological Data Resources and Technologies for Effective Flash Flood Forecasting (HYDRATE) (Szolgay) (Research Project of the Commission of the European Communities, 6th FP, No. 037024)

Conservation, Restoration and Wise Use of Rich Fens in the Slovak Republic (Skalová) (United Nations Development Programme SLO/03/G35/A/1G/72)

Hydrological Drought and Its Impact on Exploitable Groundwater Resources (Macura) (Research Project of APVV-0335-06)

Hybrid Flow Forecasting Model (Szolgay) (Research Project of APVV-0443-07)

Soil Water Storage Diagnosis and Prediction with Regard to the Aspects of the Optimal Water Supply of Vegetation (Skalová) (Research Project of APVV-0271-07)

Geographically Oriented Distributed Runoff Model (Kočícký, Szolgay) (Research Project of APVV-0378-07)

Improvement of the Representation of Processes in Hydrological Modelling (Hlavčová) (Research Project of LPP-0254-07)

Regionalization of the Quality of Aquatic Parts of Rivers by Bioindicative Methods (Macura) (Research project of AV 4/0110/06)

Study of the Relationships and Spatial Properties of Joint Hydrometeorological and Hydrological Extremes in Mountainous Regions in Slovakia (Kohnová) (Research Grant of the Slovak Grant Agency VEGA 1/4024/07)

Hybrid Flood Modelling and Forecasting Framework for the Real Time Control of Water Resource Systems and Flood Risk Estimation (Szolgay) (Research Grant of the Slovak Grant Agency VEGA 1/4209/07)

Comparative Analysis of the Natural and Anthropogenic Variability of a Hydrometeorological Series (Miklánek, Hlavčová) (Research Grant of the Slovak Grant Agency VEGA 2/0096/08)

Combined Deterministic – Statistical Modelling Approach to Hydrological Forecasts (Szolgay) (Research Grant of the Slovak Grant Agency VEGA 1/0496/08)

Evaluation of Water Bodies and Optimisation of Water Management Measures in Landscape (Research Grant of the Slovak Grant Agency VEGA 1/0585/08)

Hydrological Regionalisation – Towards a Coherent Framework. (Szolgay) (Subcontract of a research project of the Austrian Foundation for Research FWF P 18993)

Evaluation of Low Flows Using the Regional Typology Method (Kohnová) (Research Project for the Ministry of the Environment of the SR, HZ 04-296-07)

Analysis of Potential Changes in Runoff Due to Land Use Changes and Retention Properties of the Bodrog River Basin (Hlavčová) (Research Project for the Ministry of the Environment of the SR, HZ 04-306-04)

3.2 International cooperation

Department of Hydraulic Engineering, Faculty of Civil Engineering, Czech Technical University, Prague, Czech Republic

Department of Landscape and Water Management, Faculty of Civil Engineering, Technical University, Brno, Czech Republic

Institute of Hydraulics, Hydrology and Water Management, Faculty of Civil Engineering, Vienna University of Technology, Vienna, Austria
Department of Hydraulic Structures, Warsaw Agricultural University, Poland
VITUKI – Water Research Centre, Budapest, Hungary
University of Uppsala, Sweden
Delft Hydraulics, Delft, The Netherlands
European Joint Research Centre, ISPRA, Italy
University of Bologna, Italy
Institute of Hydromechanics and Water Resources Management, Swiss Federal Institute of Technology, Zürich, Switzerland
University of Padova, Department of Land and Agroforest Environments, Italy
University of Jean Moulin Lyon 3, Lyon, France

Visit of staff members to foreign institutions

Szolgay, J., Hlavčová, K., Kohnová, S., Horvát, O., Gaál, L. Institute for Hydraulic and Water Resources Engineering, Vienna University of Technology, Vienna, Austria

Szolgay, J., Hlavčová, Macura, V. Technical University in Brno, Faculty of Civil Engineering, Brno, Czech Republic
Technical University in Prague, Faculty of Civil Engineering, Prague, Czech Republic

Szolgay, J., Hlavčová, K., Kohnová, S., Horvát, O. University of Barcelona, Barcelona, Spain

Horvát, O. Department of Land and Agroforest Environments, University of Padova, Legnaro (PD), Italy

Gaál, L. LCPC (Laboratoire Central des Ponts et Chaussées), Division Eau et Environnement, LCPC - Centre de Nantes, Nantes, France

Gaál, L. Institute of Atmospheric Physics of the Czech Academy of Sciences

Jalčovičová, M. Faculty of Civil Engineering, Catholic University of Leuven, Belgium

Membership in international professional organizations

Hlavčová, K.: Member of International Association of Hydrological Sciences

Hlavčová, K.: Member of European Geosciences Union

Kohnová, S.: Member of European Geosciences Union

Kohnová, S.: Member of International Association of Hydrological Sciences

Szolgay, J.: Member of Editorial Board of Journal of River Basin Management

Szolgay, J.: Member of Editorial Board of Water Resources Management

Szolgay, J.: Member of Editorial Board of Journal of Hydrology

Szolgay, J.: Member of Editorial Board of Journal of Hydrological Sciences

Szolgay, J.: National Correspondent of IAHS for Water Management Systems

Szolgay, J.: National Representative of International Association for Hydrological Sciences

Szolgay, J.: Chairman of Subdivision of Hydrological Division of EGU for Hydrological Forecasting

Szolgay, J.: Member of Association of Hydrological Sciences

4. Publications

Journals and books

BARA, M. - GAÁL, L. - KOHNOVÁ, S. - SZOLGAY, J. - HLAVČOVÁ, K.: Simple Scaling of Extreme Rainfall in Slovakia: A Case Study. *Meteorological Journal*, Vol. 11, 2008, No. 4, pp. 153-157

BRUŠKOVÁ, V.: Assessment of the Base Flow in the Upper Part of the Torysa River Catchment. *Slovak Journal of Civil Engineering*, Vol. 16, 2008, No. 2, pp. 6-12

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JAROŠ, B. – SKALOVÁ, J.: Analyses of Groundwater Regimes in Wetlands. *Slovak Journal of Civil Engineering*, Vol. 16, 2008, No. 4, pp. 8-16

JURÁKOVÁ, M. - LAPIN, M. - SKALOVÁ, J.: Impact of Climate Change on the Groundwater Level in the Zelenka Locality. *Acta Hydrologica Slovaca*, Vol. 9, 2008, No. 2, pp. 208-217

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SZOLGAY, J. – ŠUREK, P.: Calibration of a Multilinear Transformation Model with a Hypothetical Flood Wave by a Genetic Algorithm. *Acta Hydrologica Slovaca*, Vol. 9, 2008, No. 2, pp. 236-242 (in Slovak)

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ZVOLENSKÝ, M. - KOHNOVÁ, S. - HLAVČOVÁ, K. - SZOLGAY, J. - PARAJKA, J.: Regionalisation of Rainfall-Runoff Model Parameters Based on the Geographical Location of Gauged Catchments. *Journal of Hydrology and Hydromechanics*, Vol. 56, 2008, No. 3, pp. 176-189

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- HLAVČOVÁ, K. - SZOLGAY, J. - KOHNOVÁ, S. - BÁLINT, G.: Hydrological Scenarios of Future Seasonal Runoff Distribution in Central Slovakia. In: Brily, M., ed.: On the Hydrological Forecasting and Hydrological Bases of Water Management. 24th Conference of the Danubian Countries, Bled, Slovenia, ISBN 978-961-91090-2-1
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- JAROŠ, B. - SKALOVÁ, J. - VITKOVÁ, J.: Effect of Management Practice on the Water Regime in the Kláštorské Lúky Wetland. In: Smolenice Challenge IV: Cultural Landscape as an Object of Research in Sustainable Development. Proceedings of Conference, Smolenice, 9.-10.10. 2008. ILE SAS, Bratislava 2008, pp. 113-117 (in Slovak)
- JAROŠ, B. - SKALOVÁ, J. - NOVÁK, V.: Effect of Different Vegetation Covers on the Characteristics of a Water Regime. In: Impact of Anthropogenic Activities on the Water Regime of Lowlands. Proceedings of the 7th Scientific Conference with international participation). Vinianske Lake, 27.-29. 5. 2008. IH SAS, Bratislava 2008, ISBN 978-80-89139-15-6 (in Slovak)
- JAROŠ, B. - SKALOVÁ, J. - NOVÁK, V.: Effect of Different Vegetation Covers on the Characteristics of a Water Regime. In: Impact of Anthropogenic Activities on the Water Regime of Lowlands. Proceedings of the 7th Scientific Conference with international participation). Vinianske Lake, 27.-29. 5. 2008. IH SAS, Bratislava 2008, ISBN 978-80-89139-15-6 (in Slovak)
- MACURA, V. - ŠKRINÁR, A. - JALČOVÍKOVÁ, M.: Modelling Preferences of Selected Abiotic Parameters of the Fish Habitat of Mountainous Rivers in Slovakia. In: 11th Czech Ichthyologic Conference. Proceedings of Conference (with international participation). MZLU, Brno 2008, ISBN 978-80-7375-246-0, pp. 156-160
- REMIÁŠOVÁ, R.: Application of Different Methods in Searching for Hidden Transfers of Ground Water to Surface Flows. In: Čelková, A., ed.: Transport of Water, Chemicals and Energy in a Soil-Crop Canopy-Atmosphere System. 16th International Poster Day, 13. 11. 2008, Bratislava. IH SAS, GPI SAS, Bratislava 2008, ISBN 978-80-89139-16-3, pp. 436-445
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- SKALOVÁ, J. - JAROŠ, B. - NOVÁK, V.: Evaluating Groundwater Level Regimes Under Various Vegetation Covers. In: Impact of Anthropogenic Activities on the Water Regimes of Lowlands. Proceedings of the 7th Scientific Conference (with international participation). Vinianske Lake, 27.-29. 5. 2008. IH SAS, Bratislava 2008, ISBN 978-80-89139-15-6 (in Slovak)
- SKALOVÁ, J. - JAROŠ, B.: Evaluation of Management Practices on Groundwater Level Regimes. In: Natural Environment and Hydrological Processes. Proceedings of International Workshop. Nitra, 30. 5. 2008. SPU in Nitra, Nitra 2008, ISBN 978-80-552-0128-3, pp. 101-111 (in Slovak)
- SKALOVÁ, J. - JURÁKOVÁ, M. - LAPIN, M.: Impact of Climate Change on the Groundwater Level in an Interdune Wetland. In: Impact of Anthropogenic Activities on the Water Regimes of Lowlands. Proceedings of the 7th Scientific Conference (with international participation). Vinianske Lake, 27.-29. 5. 2008. IH SAS, Bratislava 2008, ISBN 978-80-89139-15-6 (in Slovak)
- SKALOVÁ, J. - JURÁKOVÁ, M.: Impact of the Climate on the Water Regimes of Wetlands. In: Natural Environments and Hydrological Processes. Proceedings of International Workshop. Nitra, 30. 5. 2008. SPU in Nitra, Nitra 2008, pp. 112-120 (in Slovak)
- SKALOVÁ, J. - JAROŠ, B.: Impact of Changes in Vegetation Covers on Groundwater Levels. In: Kopáček, A.: 70 Years of FCE STU. Proceedings of International Scientific Conference. Bratislava, SR, 4. - 5. 12. 2008. FC SUT, Bratislava 2008, ISBN 978-80-227-2979-6 (in Slovak)
- SUCHÁR, M. - ČISTÝ, M.: Application of Multilayer Perceptron in Forecasts of Discharges. In: Čelková, A., ed.: Transport of Water, Chemicals and Energy in a Soil-Crop Canopy-Atmosphere System. 16th International Poster Day, 13. 11. 2008, Bratislava. IH SAS, GPI SAS, Bratislava 2008, ISBN 978-80-89139-16-3
- SVETLÍKOVÁ, D. - KOMORNÍKOVÁ, M. - SZOLGAY, J. - KOHNOVÁ, S. - HLAVČOVÁ, K.: Analysis of Discharge and Rainfall Time Series in the Region of the Kláštorské Lúky Wetland in Slovakia. In: Brily, M., ed.: On the Hydrological Forecasting and Hydrological Bases of Water Management. 24th Conference of the Danubian Countries. Bled, Slovenia, 2009, ISBN 978-961-91090-2-1
- KOHNOVÁ, S. - SVETLÍKOVÁ, D.: Analysis of the Systematic Components of Mean Monthly Discharges in Selected Wetlands in Slovakia. In: Smolenice Challenge IV: Cultural Landscape as an Object of Research in Sustainable Development. Proceedings of Conference. Smolenice, 9.-10.10. 2008. ILE SAS, Bratislava 2008, pp. 108-112 (in Slovak)
- KOHNOVÁ, S. - SZOLGAY, J. - HLAVČOVÁ, K. - GAÁL, L. - PARAJKA, J.: Extreme Precipitation Mapping for Flood Risk Assessment in Ungauged Basins of the Upper Hron River Basin in Slovakia. In: Flood Risk Management: Research and Practice. Proceedings of European Conference. Oxford, UK, 30.9.-2.10.2008. Taylor & Francis, London 2008, ISBN 978-0-415-48507-4, pp. 1033-1038

MACURA, V. - ŠKRINÁR, A. - JALČOVÍKOVÁ, M.: Evaluation of the Quality of a Habitat in the Torysa River During a Minimal Discharges Season. In: Kopáčik, A.: 70 Years of FCE STU. Proceedings of International Scientific Conference. Bratislava, SR, 4. - 5. 12. 2008. FC SUT, Bratislava 2008, ISBN 978-80-227-2979-6 (in Slovak)

MACURA, V. - ŠKRINÁR, A. - ANDO, M. - JALČOVÍKOVÁ, MONIKA: Modelling Preferences of Selected Abiotic Parameters of Fish Habitats in Mountainous Rivers in Slovakia. In: Natural Environment and Hydrological Processes. Proceedings of International Workshop. Nitra, 30. 5. 2008. SAU in Nitra, Nitra 2008, ISBN 978-80-552-0128-3, pp. 84-92 (in Slovak)

MACURA, V. - ŠKRINÁR, A. - JALČOVÍKOVÁ, M.: Effect of River Training on the Biological Environments of the Aquatic Parts of Rivers. In: Impact of Anthropogenic Activities on the Water Regimes of Lowlands. Proceedings of the 7th Scientific Conference (with international participation). Vinianske Lake, 27.-29. 5. 2008. IH SAS, Bratislava 2008, ISBN 978-80-89139-15-6 (in Slovak)

MIKLÁNEK, P. - PEKÁROVÁ, P. - MESZÁROŠ, I. - KOHNOVÁ, S.: Influence of Forestation on Runoff in a Small Experimental Basin. In: Hydrological Extremes in Small Basins. 12th Biennial International Conference. Jagiellonian University, Cracow 2008, ISBN 978-83-88424-38-0, pp. 233-236

SZOLGAY, J. - DANÁČOVÁ, M.: Detection of Changes in Flood Celerity by Multilinear Routing on the Morava River. In: Brily, M., ed.: On the Hydrological Forecasting and Hydrological Bases of Water Management. 24th Conference of the Danubian Countries. Bled, Slovenia, 2009, ISBN 978-961-91090-2-1

DEPARTMENT OF HYDRAULIC ENGINEERING

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1. Education

1.1 Graduate study

Obligatory subjects

Hydraulics I.
Hydraulics II.
Water Management Structures
Weirs
Groundwater Hydraulics
Inland Waterways
Computer Exploitation in Engineering
Special Issues of Weirs
Special Issues of Waterways
Operation and Reconstruction of Hydraulic Structures
Small Water Power Plants
Stability and Static Solutions of Hydraulic Structures
Water Power Utilization
Field Measurements
Hydroenergetics
Construction of Metallic Hydraulic Structures
Hydraulic Research
Engineering Networks and Water Structures
Automation of Engineering Problems
Special Issues of Hydraulic Engineering
Numerical Modelling of Hydraulic Processes
Water and Road Constructions

2. Theses

2.1 Research projects

17

2.2 Graduate theses

BARTKO, J.: Assessment of Flood Protection at the Lipiansky Stream
Supervisor: Šoltész, A.

BILČÍK, S.: Maintenance Project of the Stilling Basin at the Trenčianske Biskupice Water Structure
Supervisor: Gramblička, M.

BLAHUTA, M.: Filling and Emptying of Lock Chambers of the Gabčíkovo Water Structure
Supervisor: Možešik, Ľ.

BOBÍKOVÁ, E.: Assessment of Water Management Arrangements in the Čierna Voda River Basin
Supervisor: Šoltész, A.

BRÉDA, P.: Flood Protection of the Village of Trstfany
Supervisor: Šoltész, A.

CIPOVOVÁ, K.: Flood Protection Solution for the Village of Adamovské Kochanovce
Supervisor: Šoltész, A.

ČERNAJ, J.: Water Management and Energy Plan of the Mŕťová HPP for Long-Term Discharge Regulation Variant
Supervisor: Dušička, P.

FÁBRYOVÁ, J.: Hydraulic Design of the Malejov Dry Reservoir at the Myjava River
Supervisor: Šoltész, A.

GREGOR, M.: Mathematical Model of the Water Management System in the Medzibodrožie Region
Supervisor: Květon, R.

JUSTOVÁ, M.: Waterway on the Bodrog, Latorica and Laborec Rivers – A Study
Supervisor: Cabadaj, R.

KISS, R.: Assessment of the Capacity of the River Bed of the Kamenec Stream in the Village of Sveržov
Supervisor: Šoltész, A.

KOVAL', M.: Hydraulic Solution for the Lateral Spillway on the Trnávka River
Supervisor: Šoltész, A.

KOVÁČ, J.: Maintenance Project for the Stilling Basin at the Kráľová Water Structure
Supervisor: Gramblička, M.

KRISTAN, S.: Assessment of the Water Level Regime at the Svinka River – Present State
Supervisor: Čubanová, L.

KUPČA, P.: Effect of the Construction and Operation of the Veľké Kozmálovce Water Structure on the Groundwater Level Regime
Supervisor: Baroková, D.

KURUC, Š.: Possibilities of Flood Protection for the Village of Čechy
Supervisor: Šoltész, A.

MAZÁČ, A.: Hydraulic Assessment of the Flood Protection of the City of Košice
Supervisor: Šoltész, A.

NÁTER, A.: Design of Ladmovce Small Hydropower Plant on the Bodrog River
Supervisor: Šulek, P.

ORFÁNUS, M.: Optimization of the Operation of the Dry-Reservoir System in the Bardejov Region
Supervisor: Šoltész, A.

PREŠINSKÝ, Z.: Model Solution to the Problems Related to the Interconnection of the Railway Corridor TENT-T with the Airport and Railway Network in Bratislava on the Groundwater Flow and Regime
Supervisor: Baroková, D.

PRŠO, A.: Supplying the Rusovce Branch with Water via a Siphon Tube Over a Protective Dike of the Danube River
Supervisor: Hulík, F.

TÚRY, M.: Design of a Movable Weir at the Latorica River
Supervisor: Gramblička, M.

VEREB, V.: Water Level Regime of the Ondava River During Floods at the Stage from Horovce to PS Hraň
Supervisor: Šoltész, A.

2.3 Doctoral thesis

KAMEL, A., H.: Numerical Modeling of Flood Waves in Rivers in a GIS Environment

3. Research

3.1 Research projects

Research on Flood Diversion Through the Hydropower Plants of the Váh Cascade. (Dušička) (Research Grant No. 1/3316/06)

Effect of Drought on a Water Regime and the Biodiversity of Valleys in Slovakia and Proposed Countermeasures. (Šoltész) (Research Grant No. APVV-51-044802)

Research on Design Parameters and Functions of Biocorridors in Water Structures. (Čubanová) (Research Grant No. APVV-20-003705)

Hydraulic Research on Structures of an Artificial Water Sports Channel (Physical Model). (Kamenský) (Research Grant No. AV/4/0017/07)

3.2 International cooperation

Visit of staff members to foreign institution

Czech Technical University, Prague, Faculty of Civil Engineering, Department of Hydraulic Engineering, Czech Republic (Dušička, Šoltész, Možiešik)

Technical University of Brno, Faculty of Civil Engineering, Institute of Water Structures, Czech Republic (Dušička, Šoltész, Možiešik)

Technical University of Brno, Faculty of Civil Engineering, Institute of Water Structures, Czech Republic (Ozábál, Eliáš)

Membership in international professional organizations

International Commission on Irrigation and Drainage (ICID) – Vice President of ICID Slovak Committee, Member of European Workgroup (ERWG) (Šoltész, A.)

International Association of Hydrological Sciences (IAHS) – National Correspondent of Ground Water Workgroup (Šoltész, A.)

4. Publications

POPOV, N., S., KOZACHEK, A., V., ŠOLTÉSZ, A.: Watershed Management and Protection, Julis, Tambov 2007

LÁSZLÓ, L., ŠOLTÉSZ, A., BAROKOVÁ, D.: Hydrogeology, Miskolci Egyetem, Miskolc, 2008

HAŠKOVÁ, L.: Verification of a Single Stone Design in a Bio-Corridor Riverbed by Means of One and Two-Dimensional Models, In: Pollack Periodica, An International Journal for Engineering and Information Sciences, Vol. 2, No. 3, 2007, Akadémiai Kiadó, Budapest

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HAŠKOVÁ, L.: Possibilities of Effecting a Water Level Regime in Fishpasses via Boulder Elements, In: Slovak Journal of Civil Engineering, Vol. XVI/1/2008, Slovak University of Technology, Bratislava

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KAMENSKÝ, J., HAŠKOVÁ, L.: Hydrologic and Hydraulic Evaluation of the Water Level and Discharge Regime of the Latorica River, In: Development of Methodology for Integrated River Basin Planning, Proceedings of International Conference, 2008, IMI Print Nyomda, Nyíregyháza

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DUŠIČKA, P., ŠULEK, P., HODÁK, T.: Utilization of the Primary Hydropower Potential in Slovakia, In: TzB Haustechnik, XVI., 5/2008, JAGA Group, Bratislava

MALÍK, P., ŠVASTA, J., BAROKOVÁ, D.: Attempted Reconstruction and Extension of the Muránska Planina Plateau Water Balance for the Period of 1971-1985, In: Podzemná voda XIV, 1/2008, Slovak Association of Hydrogeologists, Bratislava

BAROKOVÁ, D., ŠOLTÉSZ, A.: The Zemplin Waterway - Influence on the Groundwater Level Regime, In: Acta Hydrologica Slovaca, Vol. 9, 1/2008, Institute of Hydrology SAS, ASCO, Bratislava

DUŠIČKA, P., HODÁK, T., ŠULEK, P.: Small Hydropower Plants - Conceptual Solution and Preparation, In: Inžinierske stavby, Vol. 56, 3/2008, JAGA Group, Bratislava

KAMEL, A., H.: Application of a Hydrodynamic MIKE 11 Model for the Euphrates River in Iraq, In: Slovak Journal of Civil Engineering, Vol. XVI, 2/2008, Slovak University of Technology Bratislava, Bratislava

DUŠIČKA, P., ŠULEK, P., HODÁK, T., RUMANN, J., HRNČÍŘ, J., TÓTH, L.: Possibilities of the Utilization of Additional Discharges Into the Old Danube Riverbed at the Čunovo Water Structure, In: Hydroturbo 2008, Proceedings of 19.-th International Conference on Water Power, 2008, TOP Partners, s.r.o.

MOŽIEŠIK, Ľ., CABADAJ, R., ČEPCOVÁ, Z.: Interaction of Regulatory Power Operations and Navigation on Water Structures, In: Hydroturbo 2008, Proceedings of 19.-th International Conference on Water Power, 2008, TOP Partners, s.r.o.

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ŠOLTÉSZ, A., BAROKOVÁ, D.: Groundwater Modelling for Improving the Groundwater-Surface Water Regime in the Slovak Part of the Medzibodrožie Region, In: HydroPredict'2008, Proceedings of International Interdisciplinary Conference on Predictions for Hydrology, Ecology, and Water Resources Management: Using Data and Models to Benefit Society, 2008, Czech Association of Hydrogeologists, Prague

DUŠIČKA, P., ŠULEK, P., RUMANN, J., HRNČÍŘ, J., TÓTH, L.: Possibilities of the Additional Utilization of Hydropower Potential at the Čunovo Water Structure, In: Proceedings of People, Constructions and Nature 2008 International Conference, 2008, CERM R, s.r.o., Brno

BAROKOVÁ, D.: Design of the Drainage of the Stará Lesná Sportcamp - a Tourist Recreation Complex, In: Proceedings of People, Constructions and Nature 2008 International Conference, 2008, CERM R, s.r.o., Brno

ČUBANOVÁ, L.: New Type of Fishpass with Brushy Elements, In: Proceedings of People, Constructions and Nature 2008 International Conference, 2008, CERM R, s.r.o., Brno

GRAMBLIČKA, M.: Hydraulic Hammer-Based Device Used for Pumping Water – A Hydraulic Ram, In: Proceedings of People, Constructions and Nature 2008 International Conference, 2008, CERM R, s.r.o., Brno

KVĚTON, R., HULÍK, F., CABADAJ, R., RUMANN, J.: Hydraulic Research of the Dobrohošť Small Hydropower Plant, In: Proceedings of People, Constructions and Nature 2008 International Conference, 2008, CERM R, s.r.o., Brno

KVĚTON, R.: Modelling of the Water Management System of the Tice River, In: Proceedings of People, Constructions and Nature 2008 International Conference, 2008, CERM R, s.r.o., Brno

OZÁBAL, M.: Intake Structures of Hydropower Plants, In: Proceedings of People, Constructions and Nature 2008 International Conference, 2008, CERM R, s.r.o., Brno

ŠOLTÉSZ, A., BAROKOVÁ, D.: Impact Assessment of the Planned Underground Railway in Bratislava – Stage I., In: Proceedings of People, Constructions and Nature 2008 International Conference, 2008, CERM R, s.r.o., Brno

ŠULEK, P., DUŠIČKA, P.: The Use of Simulation Models for the Operative Control of Hydropower Plants, In: Proceedings of People, Constructions and Nature 2008 International Conference, 2008, CERM R, s.r.o., Brno

RUMANN, J.: Zemplin Water Way Project - Effectivity Assessment, In: Proceedings of 70 Years of FCE STU International Scientific Conference (CD), 2008, Slovak University of Technology in Bratislava, Bratislava

ČUBANOVÁ, L.: Design of a Brush-Furnished Fishway, In: Proceedings of 70 Years of FCE STU International Scientific Conference (CD), 2008, Slovak University of Technology in Bratislava, Bratislava

GRAMBLIČKA, M.: Flood Protection of the Small Danube River, In: Proceedings of 70 Years of FCE STU International Scientific Conference (CD), 2008, Slovak University of Technology in Bratislava, Bratislava

HULÍK, F.: Assessment of Several Ecological Impacts on Water Structures Via Means of a 2D Model, In: Proceedings of 70 Years of FCE STU International Scientific Conference (CD), 2008, Slovak University of Technology in Bratislava, Bratislava

MOŽIEŠIK, Ľ., ŠULEK, P., CABADAJ, R.: Canalization of Bodrog, Latorica and Laborec Rivers - Zemplin Water Way, In: Proceedings of 70 Years of FCE STU International Scientific Conference (CD), 2008, Slovak University of Technology in Bratislava, Bratislava

MOŽIEŠIK, Ľ., ŠULEK, P., VALENTA, P., SLABÁ, V.: Simulation of Vessel Movement in a Vector Field of a Water Flow, In: Proceedings of 70 Years of FCE STU International Scientific Conference (CD), 2008, Slovak University of Technology in Bratislava, Bratislava

ŠULEK, P., DUŠIČKA, P.: Operational Planning of Hydropower Plants in the Electric Power System of the Slovak Republic - Simulation Model, In: Proceedings of 70 Years of FCE STU International Scientific Conference (CD), 2008, Slovak University of Technology in Bratislava, Bratislava

ŠULEK, P., MOŽIEŠIK, Ľ., CABADAJ, R.: Navigation-Energy Project on the Lower Bodrog River, In: Proceedings of 70 Years of FCE STU International Scientific Conference (CD), 2008, Slovak University of Technology in Bratislava, Bratislava

DEPARTMENT OF BUILDING STRUCTURES

Department Head
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1. Education

1.1 Graduate study

Obligatory subjects

Technical Drawing
Building Construction 1
Building Construction 2
Building Construction 3
Building Construction 4
Building Construction 5
Project KPS
Physics of Indoor Environments
Thermal Engineering of Buildings
Building Acoustics and Illumination
Fire Safety of Buildings
Design Studio 1
Design Studio 2
Design Studio 3
Design Studio 4
Special Practice
Final Project
Building Construction
Architectural-Constructional Design Studio 1
Architectural-Constructional Design Studio 2
Architectural-Constructional Design Studio 3
Architectural-Constructional Design Studio 4
Building and Energy
Fire Engineering of Buildings
Pathology of Buildings
Simulations of Energy and Indoor Environments of Buildings
Special Building Construction
Thesis Seminar
Thesis
Methodology of Scientific Experiments
Excursion
Acoustics in Architecture
Solar Technology and Illumination of Buildings
Special Building Materials and Constructions
Building-Physical Experiment
Project 3
Design Studio
Defects and Reconstructions of Building Constructions
Selected Articles from Building Construction
Low-Energy and Ecological Architecture
Pathology of Constructions
Ecological Architecture
Constructions in Architecture 1 (in English)
Constructions in Architecture 2 (in English)
Constructions in Architecture 3 (in English)
Constructions in Architecture 4 (in English)
Constructions in Architecture 5 (in English)
Building Physics (in English)

Optional Subjects

Project 1: Low-Energy Buildings
Building Acoustics and Illumination
Building Construction 4
Building Construction 2
Aerodynamics and Hydrodynamics of Buildings
Thermal Protection of Buildings

Construction-Physical Design
Computer Graphics and Visualizations
Facade Technology of Intelligent Buildings
Information Technologies
Lifespan of Building Constructions
Architecture-Constructional Design
Physics of Buildings in a European Context
Building Construction
Fire Safety of Buildings
Urban and Building Acoustics
Simulations of Energy and Indoor Environments of Buildings
Acoustics in Architecture
Solar Technology and Illumination of Buildings
Building Construction 5
Thermal Engineering, Acoustics and Illumination
Renewal and Modernization of Buildings

2. Theses

2.1 Bachelor Theses

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2.2 Graduate Theses

KÓKAI, P.: Mountain Hotel
Supervisor: Jamnický, M.

MICHALOVÝCHOVÁ, V.: Mountain Hotel
Supervisor: Tomašovič, P.

ČINČURÁK, V.: Europa Business Center
Supervisor: Gieciová, M.

NAVRÁTIL, M.: Europa Shopping Center
Supervisor: Gieciová, M.

MIHOK, T.: Mountain Sanatorium
Supervisor: Žilinský, J.

MELUŠ, Ľ.: Gallery
Supervisor: Žilinský, J.

SENKO, M.: Office Building
Supervisor: Bielek, B.

MIKLE, S.: Hotel
Supervisor: Bielek, B.

RAZGYELOVÁ, S.: Residential Building
Supervisor: Držka, M.

MRAVEC, Ľ.: Office Building
Supervisor: Držka, M.

MÚLLER, M.: Automotive Service Station
Supervisor: Adamská, G.

KOLOMY, M.: Multifunctional Residential Building
Supervisor: Miklósiová, T.

SIEKEL, P.: Office Building
Supervisor: Miklósiová, T.

ZOLVÍKOVÁ, M.: Retirement Home – Reconstruction and Extension of the Building

Supervisor: Vargová, A.

GAJDOŠÍKOVÁ, S.: Family Farm

Supervisor: Mikolaj, I.

MAKULA, J.: Church

Supervisor: Oláh, J.

SZABÓ, P.: Office Building

Supervisor: Hraška, J.

MINÁR, P.: Multifunctional Residential Building

Supervisor: Minarovičová, K.

JANEGOVÁ, V.: Additional Building for a Tuberculosis Treatment Pavilion in Dolný Smokovec

Supervisor: Zajac, J.

MICHÁLEK, V.: Low-Energy Residential Building

Supervisor: Jakeš, E.

CAPEK, J.: Swimming Pool – Transparent Facade - Optimization by Computer Simulation of Energy and Indoor Environments of Buildings

Supervisor: Janák, M.

2.3 Doctoral Theses

ŠMEHYL, R.: Strength of a Joint of Asphalted Roofing

Supervisor: Oláh, J.

PAVČEKOVÁ, M.: The Use of a Simulation Method for the Design of the Reconstruction of Classrooms from a Speech Intelligibility Point of View

Supervisor: Tomašovič, P., Rychtáriková, M.

PONECHAL, R.: Experimental Study and Numerical Simulations of Impact Phase Change Materials on the Thermal Behaviour of an Indoor Office Environment

Supervisor: Hraška, J.

3. Research

3.1 Research Projects

Facade Technology of Intelligent Buildings with the Application of Natural Physical Inter-Spaces. (Bielek) (VEGA 1/3319/06)

Building Simulation in the Climatic Conditions of the Slovak Republic. (Hraška) (VEGA 1/3324/06)

Theory, Experiment and Structural Detail of Newly Designed and Renovated Separating Construction. (Zajac) (VEGA 1/4207/07)

Window Constructions in Low-Energy and Passive Houses. (Puškár) (VEGA 1/0748/08)

The Theory of the Design of Intelligent Facade Elements with the Utilization of Natural Physical Phenomena and their Application in the Modernization of Light Facades. (M. Bielek) (APVV-20-044405)

Modern Architecture as a Monument: Energy-Saving Renewal. (Puškár) (APVV-0204-07)

Reduction of the Use of the Rural Areas by Activating the Potential of Existing Urban Spaces. (Rabenseifer) (MVTS Bil/Nem/SR/STU/06)

Computer-Aided Physical Modelling of Buildings. (Rabenseifer) (MVTS 6RP/42472/07)

The Renewal of Selected Countrysides in the Slovak Republic. (Turček) (MVTS Nem/SR/STU3/07)

Agenda 21 – Sustainable Development of Rural Areas. (Rabenseifer, Húsenicová) (14130200075)

3.2 International cooperation

TU Vienna, Austria

Wolfen WIRN, Austria

ČVUT Prague, Czech Republic

VUT Brno, Czech Republic

KEB Berlin, Germany

IFT Rosenheim, Germany

Planungsinstitut für ländliche Siedlung, Stuttgart, Germany

TU Budapest, Hungary

TU Győr, Hungary

CE Haifa, Israel

TU Eindhoven, The Netherlands

TU Delft, The Netherlands

KU Leuven, Belgium

MISI Moscow, Russia

TU Kharkov, Ukraine

University of Strathclyde, United Kingdom

4. Publications

Journals and books

PUŠKÁR, ANTON - HRAŠKA, JOZEF - ŽILINSKÝ, JURAJ - PAVČEKOVÁ, MONIKA - MACHÁČ, KAROL: Refurbishment of Elementary School Buildings. A Case Study. Bratislava: Institute for Adult Education and Services, 2008. - 96 pp. ISBN 978-80-89073-16-0 (in Slovak)

MENĎAN, RASTISLAV - VAVROVIČ, BORIS: Renewal of Prefabricated Residential Buildings. Complex Solution of Structural, Technological, Hygienic and Energy Problems: 5. Thermal Assessment of Panel Residential Buildings and Elimination of Hygienic Defects. Bratislava : STU in Bratislava, 2008. - 219 pp. ISBN 978-80-227-2872-0 (in Slovak)

JELÍNEK, MICHAL - RYCHTÁRIKOVÁ, MONIKA - VERMEIR, GERRIT: Distribution of Background Noise Levels and Their Influence on Speech Intelligibility in Classrooms. In: Akustika. ISSN 1801-9064. Vol. 9, March (2008), pp. 28-35

BIELEK, BORIS - BIELEK, MILAN: Double-Skin Transparent Facade in the Modernization of the Východočeská energetika Office Building in Hradec Králové (1st part) In: Střechy, fasády, izolace. ISSN 1212-0111. Vol. 15, No. 6 (2008), pp. 22-23 (in Slovak)

CHMÚRNY, IVAN: Energy Rating of Family Houses in Energy Certification. In: Tepelná ochrana budov. ISSN 1213-0907. Vol. 11, No. 4 (2008), pp. 23-26 (in Slovak)

OLÁH, JOZEF: Journey Across South America and Roofs. In: Střechy, fasády, izolace. ISSN 1212-0111. Vol. 15, No. 5 (2008), pp. 12-17 (in Slovak)

PUŠKÁR, ANTON - FILIP, ĽUBOMÍR - RAPČAN, JÁN: Defects of Skylights and Roofs Made from Polycarbonate. In: Střechy, fasády, izolace. ISSN 1212-0111. Vol. 15, No. 5 (2008), pp. 36-37 (in Slovak)

BIELEK, BORIS - BIELEK, MILAN - SZABÓ, DANIEL - PALKO, MILAN: Decisive Aerodynamic Coefficients of Local Resistances along an Air Flow Trajectory in the Natural Physical Cavities of Double-Skin Transparent Facades. In: Building Research Journal. ISSN 1335-8863. Vol. 56, No. 2-3 (2008), pp. 59-112

GIECIOVÁ, MÁRIA: Drawing of Drawings in Field of Building Structure in Accordance with the National Standard STN 01 3420. In: Stavba. ISSN 1335-5406. Vol.11, No.10 (2008), pp. 58 – 59 (in Slovak)

HRAŠKA, JOZEF: External Walls and the Energy Efficiency of Buildings. In: Eurostav. ISSN 1335-1249. Vol.14, No.4 (2008), pp. 18-21 (in Slovak)

MINAROVIČOVÁ, KATARÍNA: Design and Construction in an Existing Context - Modern Curriculum of European Engineer. In: Stavba. ISSN 1335-5406. Vol.11, No.6 (2008), p. 17 (in Slovak)

OHRABLO, FRANTIŠEK: Prof. Ing. arch. Štefan Lukačovič: Acts are Like a Boomerang. In: Stavba. ISSN 1335-5406. Vol.11, No.6 (2008), pp. 60-64 (in Slovak)

OLÁH, JOZEF: Pitfalls in the Reconstruction of Flat Roofs. In: Stavebníctvo a bývanie. ISSN 1336-0191. Vol.10, No.6 (2008), pp. 154-156 (in Slovak)

PERNIŠOVÁ, ALENA: Barrier-Free Kitchen. In: Stavba. ISSN 1335-5406. Vol.11, No.6 (2008), pp. 32 – 34 (in Slovak)

ZAJAC, JOZEF: Assessment of Airborn Sound Insulation of Separating Plasterboard Constructions. In: Znalectvo. ISSN 1335-809X. Vol. 13, No. 1-2 (2008), pp. 44-45 (in Slovak)

ŽILINSKÝ, JURAJ: Not This Way! Do Not Make Thermal Bridges. In: Dom a byt. ISSN 1335-6615. Vol. 14, No. 1-2 (2008), p. 129 (in Slovak)

Conferences

BIELEK, BORIS - BIELEK, MILAN - SZABÓ, DANIEL: Natural Physical Cavity and Quantification of Its Parameters by Experimental In-Situ Method. In: ENERGOPOM 2008. Problemy projektowania, realizacji a eksploatacji budynków o niskim zapotrzebowaniu na energię : IX Międzynarodowe seminarium naukowo-techniczne. Cracow,15.-17.10.2008. Cracow : ASTERIAS, 2008. ISBN 83-86161-05-1. pp. 37-44

HRAŠKA, JOZEF: Daylighting and Urban Forms - Synergy or Contradiction? In: Proceedings of First International Conference on Building Energy and the Environment : /Dalian, China, 13.-16.7.2008. - Dalian : Dalian University of Technology, 2008. pp. 1116-1123

KORONTHÁLYOVÁ, OLGA - MATIAŠOVSKÝ, PETER - VESELSKÝ, JURAJ - SZABÓ, DANIEL - PUŠKÁR, ANTON: Simulation of Dynamic Moisture Response of Autoclaved Aerated Concrete. In: NSB 2008 - Nordic Symposium on Building Physics 2008 : Proceedings of the 8th Symposium on Building Physics in the Nordic Countries, Vol. 2, Copenhagen, Denmark, 16.-18.6.2008. - : Technical University of Denmark, 2008. ISBN 978-87-7877-265-7. pp. 685-691

RYCHTÁRIKOVÁ, MONIKA - VERMEIR, GERRIT - DOMECKA, MARKIETA: The Application of the Soundscape Approach in the Evaluation of Urban Public Spaces. In: Acoustics 2008 Paris : EUROpean Conference on NOISE control, euronoise/Paris, 29.6.-4.7.2008. - Paris, 2008. - ISBN 978-2-9521105-4-9.

OLBŘÍMEK, JURAJ: More Resistant Door to Burglary on a Fire Fighting Route of Fire Brigade. In: Fire Protection 2008 : Proceedings of the XVII. International Conference. Ostrava, VŠB-TU 10.-11. September 2008. Ostrava : VŠB - Technical University of Ostrava, 2008. ISBN 978-80-7385-040-1. pp. 677-680 (in Slovak)

BEŤKO, BOHUMÍR: Defects of the External Cladding of an Office Building and Their Rectification. In: Proceedings of Railway Building Constructions 2008 : 36th Anniversary, International Conference, Tatranské Zruby, SR, 9.-10.10.2008. Žilina : University of Žilina, 2008. ISBN 978-80-968847-8-0. pp. 41-49 (in Slovak)

DLHÝ, DUŠAN: Simplified Methods of the Determination of Airborne Sound Insulation and Impact Sound Insulation of Building Constructions. In: Building Acoustics. The Heard Topic. Proceedings of Slovak Seminar, Senec, 23.4.2008. Zlaté Moravce: Wienerberger. Slovenské tehelne, 2008. pp. 37-45 (in Slovak)

DRŽKA, MILAN: New Trends in the Damp-Proof Membrane Technology of Buildings. In: Proceedings of 32th International Conference of Departments/Institutes of Building Constructions of SR and ČR: Košice, SR, 17.-19.9.2008. Košice: Technical University of Košice, 2008. ISBN 978-80-553-0088-7. pp. 31-34 (in Slovak)

GAŠPAROVIČOVÁ, VIERA: Perspectives of Research Team Goals of the Department of Building Structures in the Field of Architectural Acoustics. In: Noise and Vibration in Practice. Proceedings of the 13th International Acoustic Conference. Kočovce, June 2-3, 2008. Bratislava: STU in Bratislava, 2008. ISBN 978-80-227-2885-0. pp. 53-56 (in Slovak)

HRAŠKA, JOZEF: Computer Simulation of a Passive House's Thermal Performance. In: Computer-Aided Physical Modeling of Buildings: Proceedings of the Central European Regional IBPSA Conference. Bratislava 5.6.2008. Bratislava: STU in Bratislava, 2008. ISBN 978-80-227-2888-1. pp. 34-37

JAMNICKÝ, MARTIN: CAD – Possible Application in Building Physics. In: Computer-Aided Physical Modeling of Buildings: Proceedings of the Central European Regional IBPSA Conference. Bratislava 5.6.2008. Bratislava: STU in Bratislava, 2008. ISBN 978-80-227-2888-1. pp. 74-77

JANÁK, MILAN - BUDAY, PETER: Transient CFD Simulation of Smoke Removal System in a Shopping Mall. In: Computer-Aided Physical Modeling of Buildings: Proceedings of the Central European Regional IBPSA Conference. Bratislava 5.6.2008. Bratislava: STU in Bratislava, 2008. ISBN 978-80-227-2888-1. pp. 90-93

JELÍNEK, MICHAL - TOMAŠOVIČ, PETER - NIJS, LAU: Comparison of Acoustical Measurements of an Open Space Theatre by Measurements of a Scaled Model, Measurements in a Real Theatre and Computer Simulations. In: Material - Acoustics - Place 2008 : Proceedings of the 4th International Symposium, Zvolen, Slovakia, September 17-19, 2008. Zvolen: Technical University in Zvolen, 2008. ISBN 978-80-228-1911-4. pp. 57-60 (in Slovak)

KUCSEROVÁ, ERIKA - JANÁK, MILAN: Assessment of an Equivalent Shading Angle with the Global Illumination Method. In: Computer-Aided Physical Modeling of Buildings: Proceedings of the Central European Regional IBPSA Conference. Bratislava 5.6.2008. Bratislava: STU in Bratislava, 2008. ISBN 978-80-227-2888-1. pp. 69-73

MAŇKOVÁ, LUCIA: Utilization of Daylight Simulation in Assessment of Light-Pipe Efficacy. In: Computer-Aided Physical Modeling of Buildings: Proceedings of the Central European Regional IBPSA Conference. Bratislava 5.6.2008. Bratislava: STU in Bratislava, 2008. ISBN 978-80-227-2888-1. pp. 65-68

MENĎAN, RASTISLAV - VAVROVIČ, BORIS: Complete Analysis of Thermal Bridges in Prefabricated Residential Buildings. In: Building Construction – Buildings for Living and Their Energy Demands 2008: Proceedings of Scientific Conference. Nitra, 17.4.2008. Bratislava: STU in Bratislava, 2008. ISBN 978-80-227-2859-1. pp. 24-27 (in Slovak)

OLBŘÍMEK, JURAJ: The Power of Fire and Need for Extinguishing and Water Cooling. In: Sanhyga 2008: 13th International Conference, Piešťany, 16.-17.10.2008. Bratislava: Slovak Society for Environmental Technology, 2008. ISBN 978-80-89216-24-6. pp. 61-66 (in Slovak)

PUŠKÁR, ANTON: Windows for Low - Energy Buildings. In: Building Construction – Buildings for Living and Their Energy Demands 2008: Proceedings of Scientific Conference. Nitra, 17.4.2008. Bratislava: STU in Bratislava, 2008. ISBN 978-80-227-2859-1. pp. 9 -13 (in Slovak)

RABENSEIFER, ROMAN: Generic Models as Scientific Tools for Inexperienced Users. In: Computer-Aided Physical Modeling of Buildings: Proceedings of the Central European Regional IBPSA Conference. Bratislava 5.6.2008. Bratislava: STU in Bratislava, 2008. ISBN 978-80-227-2888-1. pp. 86-89

RYCHTÁRIKOVÁ, MONIKA - VERMEIR, GERRIT: Acoustical Categorisation of Urban Public Places. In: Material - Acoustics - Place 2008: Proceedings of 4th International Symposium, Zvolen, Slovakia, September 17-19, 2008. Zvolen: Technical University in Zvolen, 2008. ISBN 978-80-228-1911-4. pp. 127-130

TOMAŠOVIČ, PETER: Analysis of STN EN ISO 140-1-18 Standards, Regulation MZ SR No. 549/2007 for Architects. In: Building Acoustics. The Heard Topic. Proceedings of Slovak Seminar, Senec, 23.4.2008. Zlaté Moravce: Wienerberger. Slovenské tehelne, 2008. pp. 2-36 (in Slovak)

VAVROVIČ, BORIS: Renewal of External Cladding in Prefabricated Residential Buildings. In: 32th International Conference of Departments/Institutes of Building Constructions of the SR and ČR: Proceedings. Košice, SR, 17.-19.9.2008. Košice: Technical University of Košice, 2008. ISBN 978-80-553-0088-7. pp. 85-88 (in Slovak)

ZAJAC, JOZEF - SZABÓ, DANIEL: Acoustic Quality of Windows. In: Material - Acoustics - Place 2008: Proceedings of 4th international symposium, Zvolen, Slovakia, September 17-19, 2008. Zvolen: Technical University in Zvolen, 2008. ISBN 978-80-228-1911-4. pp. 157-160

ŽILINSKÝ, JURAJ: Selected Problems of Low-Energy Rural Buildings. In: Rural Buildings 2008. Architecture - Construction - Technology: International Scientific Conference, Nitra, 18.9.2008. Bratislava: STU in Bratislava, 2008. ISBN 978-80-227-2941-3. pp. 127-130

DEPARTMENT OF STEEL AND TIMBER STRUCTURES

Department Head
Assoc. Prof. Ján Brodniansky, PhD.

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E-mail: jan.brodniansky@stuba.sk

1. Education

1.1 Graduate study

Obligatory subjects

Steel Structures
Preparation of the First Degree Thesis
Steel and Timber Structures
Construction Project
High-Rise and Long-Span Steel Structures
Timber Structures
Special Seminar
Steel and Timber Members
Metal and Timber Structures
Steel Bridges I
Metal and Timber for Buildings
Steel, Timber and Glass in Architecture
Steel Structures and Bridges
Stability and Plasticity of Metal Structures
High-Rise and Long-Span Steel Structures
Stability and Plasticity of Steel and Timber Structures
Special Timber Structures

Optional Subjects

Execution of Steel and Timber Structures
Steel Bridges II
High-Rise and Long-Span Steel Structures
Diagnosis and Reconstruction of Steel and Timber Structures
Thin-Walled Steel Structures
Composite Structures

Recommended subjects

Composite Steel-Concrete Structures
Special Timber Structures
Structures of Ecological Buildings
Technological Steel Structures
Diagnosis and Reconstruction of Steel and Timber Structures
Diagnosis and Reconstruction of Steel and Timber Structures
Advanced Steel and Timber Structures

2. Thesis

2.1 Bachelor theses

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2.2 Graduate theses

BRIGANT I.: Multi-Purpose Sport Hall in Bratislava
Supervisor: Brodniansky, J.
DURĎÁK L.: Sport Hall in Trnava
Supervisor: Brodniansky, J.
FAŠANG M.: Hall in Jur pri Bratislave
Supervisor: Brodniansky, J.
FUCSEK L.: Production Hall in Žiar nad Hronom
Supervisor: Brodniansky, J.

HALVOŇ M.: High-Rise Building in Bratislava
Supervisor: Brodniansky, J.

KÁNOVÁ L.: Shopping Centre in Finland
Supervisor: Brodniansky, J.

KOWALSKI L.: Multi-Purpose Hall with Retractable Roof
Supervisor: Agócs, Z.

SENKO I.: Load-Carrying Structure of a Sport Hall in Prievidza
Supervisor: Sandanus, J.

2.3 Doctoral theses

BUČEK P.: Stability Problems of Thin-Walled Constructions Investigated by GBT
Supervisor: Baláž, I.

ŽIVNER T.: Stability Problems of Beams Subjected to Bending
Supervisor: Baláž, I.

3. Research

3.1 Research projects

Stability Problems of One-Dimensional and Plane Structures Made from Aluminium Alloys and Steels of Various Strengths (including High-Strength Steels). Verification and Improvement of Methods Used in Eurocodes (Baláž) (VEGA 1/3310/06)

Combined Timber Beams – Real Behaviour, Development, Reconstructions (Draškovič) (VEGA 1/3309/06)

Theoretical and Experimental Analysis of Modern Light Structural Systems Made from Steel, Glass, Membranes and Cables. Diagnoses and Reconstruction of Important Structures and Pipelines (Brodniansky) (VEGA 1/3317/06)

EURING - Development of ICT supported, flexible training to enable designers to apply Eurocodes in accordance with the national regulations of different member states (Ároch, Štujberová) (Leonardo da Vinci Project)

3.2 International cooperation

Visit of staff members to foreign institution

Klas, Magura, Conference Juniorstav, Brno, Czech Republic, Jan. 22-24, 2008
Ároch, PhD. Thesis Defence, VUT Brno, Czech Republic, Feb. 11, 2008
Ároch, Štujberová, EURING Partner Meeting, Barcelona, Spain, Feb. 13-17, 2008
Baláž, Eurocodes workshop, Brussels, Belgium, Feb. 18-20, 2008
Sandanus, Timber Structures Seminar, Volyně, Czech Republic, March 18-20, 2008
Agócs, Bridges on the Ipeľ River Meeting, Szecsény, Hungary, April 4, 2008
Baláž, CEN TC 250/SC3 Meeting, Lisbon, Portugal, April 17-19, 2008
Baláž, Future in Construction Sector Workshop, Brussels, Belgium, May 6-8, 2008

Ároch, Štjuberová, EURING Partner Meeting, London, UK, May 15-18, 2008

Agócs, DrSc. Thesis Defence, Budapest, Hungary, May 21, 2008

Ároch, Baláz, ECCS TWG 7.5 Meeting, Diekirch, Luxembourg, May, 28-30, 2008

Baláz, ENC workshop and Astron meeting, Brussels and Diekirch, Belgium and Luxembourg, June 29 – July 5, 2008

Agócs, Bridges on the Ipeľ River Meeting, Szecsény, Hungary, June 27, 2008

Sandanus, Sógel, GraHFT 08 Conference, Graz, Austria, Sept. 26-29, 2008

Baláz, CEN TC 250/SC3 Meeting, Helsinki, Finland, Oct. 2-4, 2008

Agócs, Brodniansky, Symposium IASS 2008, Acapulco, Mexico, Oct. 24 - Nov. 2, 2008

Baláz, CEN TC 250/SC3 Meeting, Düsseldorf, Germany, Nov. 2-5, 2008

Membership in international professional organizations

AGÓCS Z.: IASS (International Association for Shell and Spatial Structures)

ÁROCH R.: ECCS (European Convention for Constructional Steelwork), TC 7 Thin-Walled Structures

BALÁŽ I.: IABSE (International Association for Bridge and Structural Engineering)

BALÁŽ I.: ECCS (European Convention for Constructional Steelwork), TC 7 Thin-Walled Structures

BALÁŽ I.: Eurocode National Correspondents working group

BALÁŽ I.: CEN TC 250 SC3 Design of Steel Structures

BALÁŽ I.: CEN TC 250 SC9 Design of Aluminium Structures

BALÁŽ I.: WG of SC3 for creating list of errors to EN 1993

BRODNIANSKY J.: IASS (International Association for Shell and Spatial Structures)

4. Publications

Journals

AGÓCS, Z., MAŤAŠČÍK, M.: Apollo: a New Danube Bridge in Bratislava. In: Magyar Tudomány. ISSN 0025-0325. No. 4 (2008), pp. 429-434 (in Hungarian)

AGÓCS, Z., BRODNIANSKY, J.: Steel Structures with Long Spans. In: Stavebné materiály. ISSN 1336-7617. Vol.4, No.8 (2008), pp. 40-41 (in Slovak)

Books

ÁROCH, R., PENA, A.A., BELICA, A., BRUNE, B., KATHAGE, K., PEKOZ, T., NAGY, Z., TOMA, A.W., SOKOL, L., UNGERMANN, D., VRANÝ, T., SALMI, P.: Worked Examples According to EN 1993-1-3. No. 123. Mem Martins, Portugal: ECCS Technical Committee 7 Cold-Formed Steel, 2008. 235 pp. ISBN 92-9147-000-86 (in English)

Textbooks

TATARKO, P.: Steel and Timber Structures I: a Serious or Not So Serious Treatment of Steel and Timber Structural Members. Bratislava: Vydavateľstvo STU, 2008. 494 p. ISBN 978-80-227-2924-6 (in Slovak)

Patents and Standards

ÁROCH, R.: STN EN 1993-1-8/NA Eurocode 3. Design of Steel Structures: Part 1-8: Design of Joints. National Annex. Bratislava: SÚTN, 2008. 4 pp. (in Slovak)

AGÓCS, Z., BRODNIANSKY, J., VANKO, M., SÓGEL, K., SLIVANSKÝ, M., KOVÁČ, M.: Reconstruction of Steel Bridges. In: Stavba. ISSN 1335-5406. Vol.11, No. 1-2 (2008), pp. 45-49 (in Slovak)

ÁROCH, R.: Orthotropic Steel Bridge Deck. In: Stavba. ISSN 1335-5406. Vol.11, No.10 (2008), pp. 34-38 (in Slovak)

BALÁŽ, I.: Further Information on the CEN Event, Brussels 2008. In: Eurostav. ISSN 1335-1249. Vol.14, No.4 (2008), pp. 66-67 (in Slovak)

BALÁŽ, I.: Eurocodes - Scientific Exploitation and Their Usage. In: Eurostav. ISSN 1335-1249. Vol.14, No.3 (2008), p. 96 (in Slovak)

BALÁŽ, I.: Implementation of Eurocodes in the EU. In: Eurostav. ISSN 1335-1249. Vol.14, No.12 (2008), p. 86 (in Slovak)

BALÁŽ, I., DUAN, X., DING, D.: Bridge over Jang-C'-Ťiangin v Čchung-Čching, China. In: Eurostav. ISSN 1335-1249. Vol. 14, No. 11 (2008), p. 76 (in Slovak)

BALÁŽ, I., TÖLGYESSYOVÁ, H.: New Methodical Regulation for Eurocode Use in Slovakia. In: Eurostav. ISSN 1335-1249. Vol.14, No.12 (2008), pp. 84-85 (in Slovak)

BALÁŽ, I.: Work on Eurocodes in Years 2008-2010. In: Eurostav. ISSN 1335-1249. Vol.14, No.1-2 (2008), pp. 76-77 (in Slovak)

BALÁŽ, I.: Present State of EC in Europe. In: Eurostav. ISSN 1335-1249. Vol. 14, No. 11 (2008), p. 82 (in Slovak)

BRODNIANSKY, J.: Professor Zoltán Agócs: 70 Years Old. In: Konstrukce. ISSN 1213-8762. Vol.7, No.2 (2008), p. 101 (in Slovak)

SANDANUS, J.: Timber Structures in Vienna-Schwechat Airport. In: Materiály pro stavbu. ISSN 1213-0311. Vol.14, No.1 (2008), pp. 29-31 (in Slovak)

VANÍK, P.: Problems of Design of Composite Membranes. In: Konstrukce. ISSN 1213-8762. Vol.7, No.6 (2008), pp. 18-20 (in Slovak)

Reviews published in Journals

BALÁŽ, I.: Book Review: Aluminium Lieferverzeichnis 2008, Aluminium Suppliers Directory 2008. In: Konstrukce. ISSN 1213-8762. Vol.7, No.1 (2008), p. 29 (in Slovak)

BALÁŽ, I.: Book Review: Karl-Eugen Kurrer: The History of the Theory of Structures - From Arch Analysis to Computational Mechanics (Geschichte der Baustatik). In: Zváranie - Svařování. ISSN 0044-5525. Vol. 57, No. 6-7 (2008), p. 171 (in Slovak)

BALÁŽ, I.: Book Review: Rolf Kindmann - Matthiaus Kraus: Finite-Elemente Methoden im Stahlbau. In: Zváranie - Svařování. ISSN 0044-5525. Vol. 57, No. 3 (2008), p. 86 (in Slovak)

BALÁŽ, I.: Book Review: Rolf Kindmann: Stahlbau - Teil 2: Stabilität und Theorie II. Ordnung. In: Zváranie - Svařování. ISSN 0044-5525. Vol. 57, No. 6-7 (2008), p. 197 (in Slovak)

BALÁŽ, I.: Book Review: Stahlbau-Kalender 2008. In: Eurostav. ISSN 1335-1249. Vol.14, No.9 (2008), p. 60 (in Slovak)

BALÁŽ, I.: Book Review: The History of the Theory of Structures. In: Eurostav. ISSN 1335-1249. Vol.14, No.9 (2008), p. 60

BALÁŽ, I.: Book Review: Transition in Engineering. In: Eurostav. ISSN 1335-1249. Vol.14, No.9 (2008), p. 60 (in Slovak)

BALÁŽ, I.: Book Review: Wendehorst: Beispiele aus der Baupraxis. In: Eurostav. ISSN 1335-1249. Vol.14, No.3 (2008), p. 86 (in Slovak)

BALÁŽ, I.: Stahlbau Kalender 2008. In: Zváranie - Svařování. ISSN 0044-5525. Vol. 57, No. 9 (2008), p. 255 (in Slovak)

Conferences

AGÓCS, Z., BRODNIANSKY, J.: Examples of Recent Extraordinary Cable Bridges in Slovakia: CD. In: IASS-SLTE 2008: International Symposium. Acapulco, Mexico, Oct. 27-31, 2008. Madrid: IASS, 2008.

AGÓCS, Z., BRODNIANSKY, J.: Steel Structures of Halls with Long Spans. In: Stavební ročenka 2009: Haly a průmyslové objekty. Bratislava: Jaga Group, 2008. ISBN 978-80-8076-068-7. pp. 16-17 (in Slovak)

ÁROCH, R., ŠTUJBEROVÁ, M.: E-learning in Steel Structures. In: 70 Years of the Faculty of Civil Engineering of the Slovak University of Technology. International Scientific Conference. Bratislava, Slovakia, Dec. 4-5, 2008. Bratislava: STU v Bratislave SvF, 2008. ISBN 978-80-227-2979-6 (in Slovak)

ÁROCH, R., ŠTUJBEROVÁ, M.: Pilot Project of Design of Steel Structures According to Eurocodes. In: Theoretical and Constructional Problems of Steel and Timber Structures and Bridges: Proceedings of the 34th Meeting of Experts on Steel Structures, Pezinok, Oct. 16-17, 2008, STU in Bratislava, 2008. ISBN 978-80-227-2950-5. pp. 13-16 (in Slovak)

BALÁŽ, I.: Determination of the Flexural Buckling Resistance of Frames with Members with a Non-Uniform Cross-Section and Non-Uniform Axial Compression Forces. In: Theoretical and Constructional Problems of Steel and Timber Structures and Bridges: Proceedings of the 34th Meeting of Experts on Steel Structures, Pezinok, Oct. 16-17, 2008, STU in Bratislava, 2008. ISBN 978-80-227-2950-5. pp. 17-22 (in English)

BALÁŽ, I., KOLEKOVÁ, Y.: Resistance of Aluminium and Steel Beams in Lateral Torsional Buckling. In: 70 Years of the Faculty of Civil Engineering of the Slovak University of Technology. International Scientific Conference. Bratislava, Slovakia, Dec. 4-5, 2008. Bratislava: STU in Bratislava SvF, 2008. ISBN 978-80-227-2979-6 (in Slovak)

BEZÁK, I., AGÓCS, Z.: Design of Pin Joints According to Slovak Codes. In: 70 Years of the Faculty of Civil Engineering of the Slovak University of Technology. International Scientific Conference. Bratislava, Slovakia, Dec. 4-5, 2008. Bratislava: STU in Bratislava SvF, 2008. ISBN 978-80-227-2979-6 (in Slovak)

BEZÁK, I., AGÓCS, Z.: Comparison of the Design of Pin Joints According to STN 731401 and STN EN 1993-1-8. In: Theoretical and Constructional Problems of Steel and Timber Structures and Bridges: Proceedings of the 34th Meeting of Experts on Steel Structures, Pezinok, Oct. 16-17, 2008, STU in Bratislava, 2008. ISBN 978-80-227-2950-5. pp. 23-28 (in Slovak)

BUČEK, P., DARUĽA, I.: Combined Production of Electric Energy and Heat. In: ŠVOČ 2008: Proceedings of Best Papers. Bratislava, Slovak Republic, April 23, 2008. Bratislava: STU in Bratislava FEI, 2008. ISBN 978-80-227-2865-2. CD-Rom (in Slovak)

CSÖLLEOVÁ, Z., BRODNIANSKY, J.: Intelligent Superstructures. In: Theoretical and Constructional Problems of Steel and Timber Structures and Bridges: Proceedings of the 34th Meeting of Experts on Steel Structures, Pezinok, Oct. 16-17, 2008, STU in Bratislava, 2008. ISBN 978-80-227-2950-5. pp. 31-36 (in Slovak)

CSÖLLEOVÁ, Z., BRODNIANSKY, J.: Tensegrity System. In: 70 Years of the Faculty of Civil Engineering Slovak University of Technology. International Scientific Conference. Bratislava, Slovakia, Dec. 4-5, 2008. Bratislava: STU in Bratislava SvF, 2008. ISBN 978-80-227-2979-6 (in Slovak)

DRAŠKOVIČ, F., SANDANUS, J., SÓGEL, K.: Circular Timber Structure of a Sport Hall. In: Theoretical and Constructional Problems of Steel and Timber Structures and Bridges: Proceedings of the 34th Meeting of Experts on Steel Structures, Pezinok, Oct. 16-17, 2008, STU in Bratislava, 2008. ISBN 978-80-227-2950-5. pp. 43-48 (in Slovak)

DRAŠKOVIČ, F., IVÁNKOVÁ, O., GUGUTSIDZE, G.: Analysis of Action of Glued Timber Beams. In: 70 Years of the Faculty of Civil Engineering of the Slovak University of Technology. International Scientific Conference. Bratislava, Slovakia, Dec. 4-5, 2008. Bratislava: STU in Bratislava SvF, 2008. ISBN 978-80-227-2979-6 (in Slovak)

DRAŠKOVIČ, F., SANDANUS, J., SÓGEL, K.: Timber Structure with 105m Span - Present and Future. In: Statika stavieb 2008: Proceedings of the 13th Conference, Piešťany, March 6-7, 2008. Piešťany: Spolok statikov Slovenska, 2008. ISBN 978-80-969127-9-7. pp. 125-130 (in Slovak)

DRAŠKOVIČ, F., IVÁNKOVÁ, O., GUGUTSIDZE, G.: Influence of the Anisotropy and Material Properties on Glued Reinforced Timber Beams. In: Jubilee International Scientific Conference VSU 2008: Proceedings Vol.2. Sofia, Bulgaria, May 29-30, 2008. Sofia: L. Karavelov Civil Engineering Higher School Sofia, 2008. ISBN 978-954-331-020-3. p. 95-100 (in German)

DRAŠKOVIČ, F., IVÁNKOVÁ, O., GUGUTSIDZE, G.: Modelling of Timber Laminated Girders Using ANSYS Software. In: 16th ANSYS Users' Meeting & 14th ANSYS CFD Users' Meeting: Proceedings. Luhačovice, Czech Republic, Nov. 5-7, 2008. Brno: SVS FEM, 2008. ISBN 978-80-254-3355-3 (in Slovak)

DRAŠKOVIČ, F., GUGUTSIDZE, G., IVÁNKOVÁ, O.: Influence of the Properties of Glued Reinforced Beams on the Variability of Material and Timber Orthotropy. In: Theoretical and Constructional Problems of Steel and Timber Structures and Bridges: Proceedings of the 34th Meeting of Experts on Steel Structures, Pezinok, Oct. 16-17, 2008, STU in Bratislava, 2008. ISBN 978-80-227-2950-5. pp. 37-42 (in Slovak)

IVÁNKOVÁ, O., DRAŠKOVIČ, F., GUGUTSIDZE, G.: Effect of Anisotropy and the Material Variability on Timber Glued Reinforced Beams. In: Current Problems of Mechanics: Proceedings of International Scientific Conference, Sept. 10-12, 2008, Gabčíkovo, Slovakia. Bratislava: STU v Bratislave, 2008. ISBN 978-80-227-2935-2 (in Slovak)

KLAS, T., BALÁŽ, I.: Resistance of Orthotropic Walls Made from Aluminium. In: Theoretical and Constructional Problems of Steel and Timber Structures and Bridges: Proceedings of the 34th Meeting of Experts on Steel Structures, Pezinok, Oct. 16-17, 2008, STU in Bratislava, 2008. ISBN 978-80-227-2950-5. p. 95-100 (in Slovak)

- KLAS, T.: Resistance of Cross-Sections Made of Thin Plates According to STN and EC: 10th Scientific Conference of the PhD. Study. In: Juniorstav 2008: Jan. 23, 2008. Brno: Vysoké učení technické in Brno, 2008. ISBN 978-80-86433-45-5 (in Slovak)
- KLAS, T., BALÁŽ, I.: Orthotropic Plates Made of Aluminium. In: 70 Years of the Faculty of Civil Engineering of the Slovak University of Technology. International Scientific Conference. Bratislava, Slovakia, Dec. 4-5, 2008. Bratislava: STU in Bratislava SvF, 2008. ISBN 978-80-227-2979-6 (in Slovak)
- KOVÁČ, M., BALÁŽ, I.: Resistance of Compressed Aluminium Welded Beams. In: 70 Years of the Faculty of Civil Engineering of the Slovak University of Technology. International Scientific Conference. Bratislava, Slovakia, Dec. 4-5, 2008. Bratislava: STU in Bratislava SvF, 2008. ISBN 978-80-227-2979-6 (in Slovak)
- KOVÁČ, M.: Global Stability of Centric Compressed Members: 10th Scientific Conference of the PhD. Study. In: Juniorstav 2008: Jan. 23, 2008. Brno: Vysoké učení technické in Brno, 2008. ISBN 978-80-86433-45-5 (in Slovak)
- KOVÁČ, M., BALÁŽ, I.: Buckling Resistance of Welded Members Made of Aluminium According to EN 1999-1-1. In: Theoretical and Constructional Problems of Steel and Timber Structures and Bridges: Proceedings of the 34th Meeting of Experts on Steel Structures, Pezinok, Oct. 16-17, 2008, STU in Bratislava, 2008. ISBN 978-80-227-2950-5. pp. 113-118 (in Slovak)
- MAGURA, M., BRODNIANSKY, J.: Analysis of a Gas Pipeline in Sliding Slopes - Nenince. In: Theoretical and Constructional Problems of Steel and Timber Structures and Bridges: Proceedings of the 34th Meeting of Experts on Steel Structures, Pezinok, Oct. 16-17, 2008, STU in Bratislava, 2008. ISBN 978-80-227-2950-5. pp. 125-130 (in Slovak)
- MAGURA, M.: Pipe - Soil Interaction: 10th Scientific Conference of the PhD. Study. In: Juniorstav 2008: Jan. 23, 2008. Brno, 2008. ISBN 978-80-86433-45-5 (in Slovak)
- MAGURA, M., BRODNIANSKY, J.: Gas Pipelines in Sliding Slopes. In: 70 Years of the Faculty of Civil Engineering of the Slovak University of Technology. International Scientific Conference. Bratislava, Slovakia, Dec. 4-5, 2008. Bratislava: STU in Bratislava SvF, 2008. ISBN 978-80-227-2979-6 (in Slovak)
- PÁSZTOROVÁ, M., BRODNIANSKY, J.: Combined Structures Made from Steel and Timber. In: 70 Years of the Faculty of Civil Engineering Slovak of the University of Technology. International Scientific Conference. Bratislava, Slovakia, Dec. 4-5, 2008. Bratislava: STU in Bratislava SvF, 2008. ISBN 978-80-227-2979-6 (in Slovak)
- PÁSZTOROVÁ, M., BRODNIANSKY, J.: Load-Bearing Structures Made from Timber and Steel in Practice. In: Theoretical and Constructional Problems of Steel and Timber Structures and Bridges: Proceedings of the 34th Meeting of Experts on Steel Structures, Pezinok, Oct. 16-17, 2008, STU in Bratislava, 2008. ISBN 978-80-227-2950-5. pp. 131-134 (in Slovak)
- SANDANUS, J., SÓGEL, K.: Analysis of a Historical Structure - Timber Structure of Cloister Towers in Jasov. In: 70 Years of the Faculty of Civil Engineering of the Slovak University of Technology. International Scientific Conference. Bratislava, Slovakia, Dec. 4-5, 2008. Bratislava: STU in Bratislava SvF, 2008. ISBN 978-80-227-2979-6 (in Slovak)
- SANDANUS, J., DRAŠKOVIČ, F., SÓGEL, K.: Timber Structure of Sport Hall in Žilina. In: Dřevostavby 2008: Proceedings of Seminar (with international participation), Volyně, Czech Republic, March 19-20, 2008. Volyně, 2008. ISBN 978-80-86837-18-5. pp. 25-30 (in Slovak)
- SÓGEL, K., DRAŠKOVIČ, F.: Experimental Investigation of Rheology of Timber Beams. In: Theoretical and Constructional Problems of Steel and Timber Structures and Bridges: Proceedings of the 34th Meeting of Experts on Steel Structures, Pezinok, Oct. 16-17, 2008, STU in Bratislava, 2008. ISBN 978-80-227-2950-5. pp. 147-152 (in Slovak)
- SÓGEL, K.: Actions on Timber Structures under Long-Time Loading. In: 70 Years of the Faculty of Civil Engineering of the Slovak University of Technology. International Scientific Conference. Bratislava, Slovakia, Dec. 4-5, 2008. Bratislava: STU in Bratislava SvF, 2008. ISBN 978-80-227-2979-6 (in Slovak)
- ŠTUJBEROVÁ, M., WALD, F., KALLEROVÁ, P.: Experimental Verification of the Fire Resistance of an Actual Building. In: 70 Years of the Faculty of Civil Engineering of the Slovak University of Technology. International Scientific Conference. Bratislava, Slovakia, Dec. 4-5, 2008. Bratislava: STU in Bratislava SvF, 2008. ISBN 978-80-227-2979-6 (in Slovak)
- ŠTUJBEROVÁ, M., WALD, F., KALLEROVÁ, P.: Fire Experiment in Mokrsko. In: Theoretical and Constructional Problems of Steel and Timber Structures and Bridges: Proceedings of the 34th Meeting of Experts on Steel Structures, Pezinok, Oct. 16-17, 2008, STU in Bratislava, 2008. ISBN 978-80-227-2950-5. pp. 153-158 (in Slovak)
- ŠTUJBEROVÁ, M.: Steel Structures of Halls with Long Spans. In: Stavební ročenka 2009: Haly a průmyslové objekty. Bratislava: Jaga Group, 2008. ISBN 978-80-8076-068-7. pp. 20-22 (in Czech)
- VANÍK, P.: Design of Composite Membranes. In: Theoretical and Constructional Problems of Steel and Timber Structures and Bridges: Proceedings of the 34th Meeting of Experts on Steel Structures, Pezinok, Oct. 16-17, 2008, STU in Bratislava, 2008. ISBN 978-80-227-2950-5. pp. 159-164 (in Slovak)

DEPARTMENT OF MAPPING AND LAND CONSOLIDATION

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1. Education

1.1 Graduate study

Obligatory subjects

Cartographic Techniques and Norms
Topography
Cadastral Mapping
Cartographic Creation and Reproduction
Land Surveying, Cartography and Cadastre of Real Estate
Cadastre of Real Estate
Land Consolidation
Field Practise in Cadastre of Real Estate
Land Consolidation 2
Mathematical Cartography
Realisation of Land Consolidation
Specialised Field Practise
Soil Construction

Optional Subjects

Geology
Environmental Landscape Model
Cartometry
Cadastral Data Analysis Methods
Value and Cost of Land
Digital Cartographic Model

2. Thesis

2.1 Research projects

10 projects

2.2 Graduate Thesis

BLANÁRIK T.: Elementary Land Consolidation Project
Supervisor: Geisse, R.

GEJDOŠ S.: Spatial Database for Flood Protection
Supervisor: Čižmár, J.

HANZLÍK M.: The Creation of Flood Maps
Supervisor: Čižmár, J.

HUDEC R.: Selection of an Interpolation Method Depending on a Broken Terrain
Supervisor: Vajsáblová, M.

CHANASOVÁ E.: Catalogue of Objects for the Creation of a Spatial Database
Supervisor: Čižmár, J.

IGAZ J.: 3D Model of a Leisure Centre
Supervisor: Geisse, R.

JANÍK V.: Elementary Land Consolidation Project
Supervisor: Geisse, R.

KOZLOVSKÝ O.: 3D Landscape Model in the GRASS System
Supervisor: Fencík, R.

PANÁKOVÁ G.: Management Processing of Land Consolidation Project
Supervisor: Geisse, R.

PROKOP V.: Georeferencing of Maps of 1st Military Mapping

Supervisor: Fencík, R.

RUŽIČKOVÁ M.: Analysis of Accuracy of the Creation of a Large Scale Thematic Map

Supervisor: Bartaloš, J.

SKLADANÝ B.: The Creation of a Town by Digital Technology

Supervisor: Čižmár, J.

VARGA R.: Cartographical Modelling of Geo-Objects in a GIS Environment

Supervisor: Čižmár, J.

VINCEOVÁ L.: The Creation of a Derived Map in a GIS Environment

Supervisor: Čižmár, J.

3. Research

3.1 Research projects

Model of Common Systems in a Land Consolidation Project (Geisse) (project No.: VEGA 1/4364/07)

Multi-Criterial Analysis of Risks of Floodplains during Floods (Šoltész, Čižmár) (project No.: VEGA 1/4210/07)

3.2 International cooperation

Visits of staff members to foreign institutions

Universidad del País Vasco, Spain

4. Publications

Books and Textbooks

FENCÍK, R.: Data Capture Survey for Land Information Systems. Bratislava, Slovak University of Technology, 2008, 125 pp.

GEISSE, R.: Digital Model of Agricultural Landscape from a Land Consolidation Point of View. Bratislava, Slovak University of Technology, 2008, 130 pp.

Journals

HUDEC, P.- FENCÍK, R.: Tematické mapy pre potreby ochrany pred povodňami. Geodetický a kartografický obzor, Praha, roč. 54/96, 2008, č. 11, s.235 -241.

Conferences

HRNČÁROVÁ, P.: Využitie DMR pri projekte poľnej cesty v pozemkových úpravách. In: 10. Odborná konferencia doktorského studia - díl 6 Geodézie a kartografie, Sborník anotací konference Juniorstav 2008. Brno: Vysoké učení technické v Brně, Fakulta stavební, 2008, 392 s. a CD 7 s.

ČIŽMÁR, J.: Kartografické výstupy zo ZB GIS. In: Aktivity v kartografii 2008. Bratislava: Kartografická spoločnosť Slovenskej republiky a Geografický ústav SAV, 2008, s.15 - 21. ISBN 978-80-89060-13-9.

BARTALOŠ, J.: Grafické zdroje geoinformácií v aplikáciách trvalého rozvoja vidieka. In: Zborník Pilotné projekty Smolenice, Dunajská Lužná, Bratislava: Slovenská technická univerzita v Bratislave, 2008, s. 51 – 58.

FENCÍK, R.- HUDEC, P.: Analýza výškovej presnosti digitálneho modelu reliéfu územia Medzibodrožia. In: Aktivity v kartografii 2008. Bratislava: Kartografická spoločnosť Slovenskej republiky a Geografický ústav SAV, 2008, s.40 - 47.

BARTALOŠ, J.: Projekt pozemkových úprav a ochranné pásma prírodných a liečivých vôd. In: Zborník referátov zo seminára: Digitálne projektovanie spoločných zariadení a opatrení, Pedagogické listy 15/2008. Editor: Robert Gesse. Bratislava: STU, 2008, s. 43 – 51.

ČIŽMÁR, J.: Účelové mapovanie polohopisu a ZB GIS. In: Zborník referátov zo seminára: Digitálne projektovanie spoločných zariadení a opatrení, Pedagogické listy 15/2008. Bratislava: STU, 2008, s. 37-42.

ČIŽMÁR, J.: Z histórie kartografickej výroby na Slovensku. In: Zborník referátov: 16. slovenské geodetické dni, Bratislava: Komora geodetov a kartografov, 2008, CD 6 s.

GEISSE, R.: 3D model rekreačného zariadenia. In: Zborník referátov zo seminára: Digitálne projektovanie spoločných zariadení a opatrení, Pedagogické listy 15/2008, Bratislava: STU, 2008, s. 7 – 20.

GEISSE, R.- HRNČÁROVÁ, P.: 3D model spoločných a verejných zariadení. In: Zborník referátov z medzinárodnej konferencie 70 rokov SvF STU. Bratislava: STU, 2008, CD 9 s.

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SCHVÁB, M.: Metódy vyhotovenia polohopisu a výškopisu v pozemkových úpravách. In: Zborník referátov zo seminára: Digitálne projektovanie spoločných zariadení a opatrení, Pedagogické listy 15/2008, Bratislava, STU, 2008, s. 53 – 57.

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DEPARTMENT OF MATHEMATICS AND DESCRIPTIVE GEOMETRY

Department Head
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2. Education

1.1 Graduate study

Obligatory subjects

Mathematics I
Mathematics II
Descriptive Geometry
Descriptive Geometry
Mathematics I
Mathematics II
Mathematics II
Descriptive Geometry
Mathematics I
Mathematics II
Mathematics III
Descriptive Geometry
Descriptive Geometry
Mathematics III
Mathematics IV
Informatics
Informatics
Mathematics
Mathematical Statistics
Mathematical Statistics
Mathematical Cartography
Mathematical Analysis I
Engineering Geometry and AutoCAD I
Engineering Geometry and AutoCAD II
Geometry
Algebraic Structures and Math. Logic
Programming in C Language
Software
Software
Probability Theory
Numerical Mathematics
Modelling and Data Analysis
Finite Element Methods
Functional Analysis and Variational Methods
Stochastic and Differential Equations
Fluid Flow
Time Series Analysis
Financial Mathematics
Software (ANSYS)

Optional Subjects

Mathematical Statistics
Architecture Mathematics
Numerical and Stochastic Methods
Informatics and Statistics

Recommended subjects

Computer Graphics
Fuzzy Management

1.2 Postgraduate courses

Linear Models of Time Series, M. Komorníková, 26 h.
Nonlinear Models of Time Series, M. Komorníková, 26h.
Mathematical Methods in Fluid Flow, Diffusion and Heat Transfer, K. Mikula, 26 h.

Mathematical Basis of a Finite Element Method I, K. Mikula, 26 h.

Mathematical Basis of a Finite Element Method II, K. Mikula, 26 h.

Stochastic Processes I, M. Kalina, 26 h.

Probability and Statistical Estimation, O. Nánásiová, 26 h.

Multidimensional Statistics, O. Nánásiová, 26 h.

Statistical Methods in Geodesy, O. Nánásiová, 26 h.

Mathematics, R. Mesiar, 26 h.

Decision Theory, R. Mesiar, 26 h.

Aggregation Operators, R. Mesiar, 26 h.

Proposed Experiment in Optimisation, M. Komorníková, 26h.

Time Series Analysis in Civil Engineering, M. Komorníková, 26 h.

Dynamic and Stochastic Optimisation, J. Širáň, 26 h.

Discrete Mathematics, J. Širáň, 26 h.

Graph Theory, J. Širáň, 26 h.

2. Thesis

2.3 Doctoral thesis

DRBLÍKOVÁ, O.: Computational Methods Based on Nonlinear Tensor Anisotropic Diffusion in Image Processing, supervisor: MIKULA, K.

HORVÁTHOVÁ, M.: Distance in Graphs - the (k, l) -radius, supervisor: KNOR, M.

KYSELOVÁ, D.: Applications of Aggregation Operators in Multicriterial Decision Making, supervisor: MESIAR, R.

ŠÍPOŠOVÁ, A.: Scalarization Methods in Multicriteria Optimization, supervisor: MESIAR, R.

VETRÍK, T.: Selected Topics in the Extremal Theory of Graphs with a Given Diameter, supervisor: ŠIRÁŇ, J.

3 Research

3.1 Research projects

VEGA 1/3014/06, Fuzzy Relations and Conditioning (2006-2008, Kalina M.)

VEGA 1/3006/06, Uncertainty Modelling, Theory and Applications (2006-2008, Komorníková M.)

VEGA 1/4209/07, Hybrid Flood Modelling and Forecasting Framework for Real Time Control of Water Resources Systems and Flood Risk Estimation (2007-2009, Mesiar R.)

VEGA 1/3321/06, Modern Methods of Mathematical and Computer Modelling in Civil Engineering Applications (2006-2008, Mikula K.)

VEGA 1/0489/08, Topological Methods of the Study of Discrete Structures and Their Symmetry Groups (2008-2010, Širáň J.)

VEGA 1/4026/07, Uncertainty in the Representation of a Landscape Element in Spatial Modelling (2007-2009, Vajsáblová M.)

APVV 0375-06, Joint States and Conditioning (2007-2009, Mesiar R.)

APVV 0012-07, Development of Methods for Decision Making Aids (2008-2010, Mesiar R.)

APVV LPP-0216-06, Effective Numerical Methods for Modelling the Earth's Gravitation (2005-2008, Mikula K.)

APVV 0104-07, Maps with a High Level of Symmetry (2008-2010, Širáň J.)

APVV 0040-06, Large Graphs and Communication Networks of a Given Degree and Diameter (2007-2009, Širáň J.)

LPP 0004-07, Copula Based Modeling of Non-Exchangeable Random Vector Distributions and Its Applications (2008-2010, Mesiar R.)

SK-SRB-0019-07, Modeling by Computational Intelligence under Uncertainty in Information Systems (2008, Mesiar R.)

SK-CN-0016-07 Fuzzy Integrals as Tools for Multicriteria Decision Making (2008, Mesiar R.)

LPP 0203-06, Symmetries of Graphs and Maps (2006-2009, Širáň J.)

LPP 0145-06, Exponents of Cayley Maps (2006-2009, Širáň J.)

RPEU-004-06, Image Analysis by Nonlinear Diffusion Equations (2007-2009, Mikula K.)

EMBRYOMICS, EU Project No. 012916, Part of 6th European Programme (2005-2008, Mikula K., Contractor)

BioEmergencies, EU Project, Part of 6th European Programme (2005-2008, Mikula K., Contractor)

3.2 International cooperation

University of Linz, Austria
University of Novi Sad, Yugoslavia
University of Haifa, Israel
CTU Prague, Czech Republic
University of Ostrava, Czech Republic
University of Liberec, Czech Republic
WB University, Plzeň, Czech Republic
Czech Academy of Sciences, Czech Republic
University of Ghent, Belgium
TU Budapest, Hungary
University of Waterloo, Canada
University of Freiburg, Germany
University of Bremen, Germany
University of Heidelberg, Germany
University of Newcastle, Australia
University of Bologna, Italy
University of Ljubljana, Slovenia
CINECA – Supercomputing Centre, Bologna, Italy
CNRS, Paris, France
ICS, Paris, France
University of Groningen, The Netherlands
University of the Balearic Islands, Palma de Mallorca, Spain
La Sapienza University, Rome, Italy
Open UNI London, Great Britain
University of Dortmund, Germany
Weierstrass Institute for Applied Analysis and Stochastics, Berlin, Germany

Western Australia University, Perth, Australia
University of Auckland, New Zealand
TU Cracow, Poland
Pohang University of Science and Technology, South Korea
Western Washington University, Bellingham, WA, USA

Visit of staff members to foreign institutions

BACIGÁL, T. – UNI Linz, Austria

DRBLÍKOVÁ, O. - CNRS Paris, France; ICS Paris, France

FROLKOVIČ, P. – UNI IWR Heidelberg, Germany; CNRS Strasbourg, France; CNRS Paris, France; ICS Paris, France; ČVUT Prague, Czech Republic

KALINA, M. – VUT Brno, Czech Republic

KNOR, M. – AGH Cracow, Poland; Open UNI Milton Keynes, United Kingdom; UNI Ljubljana, Slovenia

KOMORNÍKOVÁ, M. – UMŠ, PŘF MU Brno, Czech Republic

MESIAR, R. – UNI Salzburg, Austria; JKU Linz, Austria; UNI Ostrava, Czech Republic; UTIA AV ČR Prague, Czech Republic; ČVUT Prague, Czech Republic; Trinity College Dublin, Ireland; UIB Palma de Mallorca, Spain

MIKULA, K. – UNI Innsbruck, Austria; CNRS Paris, France; UNI Munster, Germany;

UNI Ghent, Belgium; ICS Paris, France; ČVUT Prague, Czech Republic

REMEŠÍKOVÁ, M. - CNRS Strasbourg, France; CNRS Paris, France; ICS Paris, France

ŠIRÁŇ, J. – UNI Auckland, New Zealand; Open UNI Milton Keynes, United Kingdom; Open UNI London, United Kingdom

Membership in international professional organizations

MIKULA, K. - Member Embryomics Steering Committee; Member BioEmergencies Steering Committee

4. Publications

Books

BACIGÁL, T.: Advanced Methods of Time Series Modelling and Their Application in Geodesy, PhD. Thesis, STU Publishing Centre, Bratislava, 2008, 98 pp. (in English)

KNOR, M.: Mathematical Logic and Discrete Structures, STU Publishing Centre, Bratislava, 2008, 95 pp. (in Slovak)

KNOR, M.: Graph Theory, STU Publishing Centre, Bratislava, 2008, 98 pp. (in Slovak)

ŠIAGIOVÁ, J.: Advanced Mathematics : Textbook, STU Publishing Centre, Bratislava, 2008, 73 pp. (in English)

STRUK, P.: Special Classes of Fuzzy Measures and Their Identification, PhD. Thesis STU Publishing Centre, Bratislava, 2008, 66 pp. (in Slovak)

DURANTE, F. - KOLESÁROVÁ, A. - MESIAR, R.- SEMPI, C.: Semilinear Copulas, Fuzzy Sets and Systems, Vol. 159, Issue 1, 2008, pp. 63-76 (in English)

DURANTE, F. - MESIAR, R. - PAPINI, P., L.: The Lattice-Theoretic Structure of the Sets of Triangular Norms and Semi-Copulas, Nonlinear Analysis: Theory, Methods and Applications. Vol. 69, No. 1, 2008, pp. 46-52 (in English)

FROLKOVIČ, P.: Flux-Based Level Set Method on Rectangular Grids and Computation of First Arrival Time Functions, Computing and Visualization in Science, Vol. 11, Online First, 2008, (in English)

Parts of Books

KLEMENT, E., P. - MESIAR, R. - MESIAROVÁ, A. - SAMINGER-PLATZ, S.: Logical Connectives for Granular Computing, Handbook of Granular Computing, Chichester Wiley & Sons, 2008, pp. 205-224 (in English)

MESIAR, R. - KOLESÁROVÁ, A. - KOMORNÍKOVÁ, M. - CALVO, T.: A Review of Aggregation Functions, Studies in Fuzziness and Soft Computing, Vol. 220: Fuzzy Sets and Their Extensions, Representation, Aggregation and Models, 2008, pp. 121-144 (in English)

Textbooks

KOLLÁR, J.: Mathematical Examples of Entrance Examinations 2002 – 2007, UK Publishing Centre, Bratislava, 2008, 351 pp. (in Slovak)

Journals

ČUNDERLÍK, R. - MIKULA, K. - MOJZEŠ, M.: Numerical Solution of the Linearized Fixed Gravimetric Boundary - Value Problem, Journal of Geodesy, Vol. 82, Issue 1, 2008, pp. 15-29 (in English)

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HANDLOVIČOVÁ, A. - MIKULA, K.: Stability and Consistency of the Semi-Implicit Co-Volume Scheme for Regularized Mean Curvature Flow Equation in Level Set Formulation, Applications of Mathematics, Vol. 53, No. 2, 2008, pp. 105-129 (in English)

JENČA, G.: The Block Structure of Complete Lattice Ordered Effect Algebras, Journal of the Australian Mathematical Society, Vol. 83, 2008, pp. 181-216 (in English)

KNOR, M. - GRANNELL, M. - GRIGGS, T. - THROWER, A.: A Census of the Orientable Biembeddings of Steiner Triple Systems of Order 15, Australian Journal of Combinatorics, Vol. 42, 2008, pp. 253-259 (in English)

KNOR, M. - ŠIRÁŇ, J.: Regular Hamiltonian Embeddings of $K_{n,n}$ and Regular Triangular Embeddings of $K_{n,n,n}$, Discrete Mathematics, Vol. 308, No. 20, 2008, pp. 4796-4800 (in English)

KOLESÁROVÁ, A. - MESIAR, R. - SEMPI, C.: Measure-Preserving Transformations, Copulae and Compatibility, Mediterranean Journal of Mathematics, 2008, pp. 325-339 (in English)

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MESIAR, R. - MESIAROVÁ, A.: Convex Combinations of Continuous t-Norms with the Same Diagonal Function, Nonlinear Analysis: Theory, Methods and Applications, Vol. 69, No. 9, 2008, pp. 2851-2856 (in English)

MESIAR, R. - MESIAROVÁ, A.: Fuzzy Integrals - What are They? International Journal of Intelligent Systems, Vol. 23, No. 2, 2008, pp. 199-212 (in English)

MESIAR, R. - MESIAROVÁ, A.: Fuzzy Integrals and Linearity, International Journal of Approximate Reasoning, Vol. 47, Issue 3, 2008, pp. 352-358 (in English)

MESIAR, R. - ŠPIRKOVÁ, J. - VAVŘÍKOVÁ, L.: Weighted Aggregation Operators Based on Minimization, Information Sciences, Vol. 178, Issue 4, 2008, pp. 1133-1140 (in English)

SAINIO, E. - TURUNEN, E. - MESIAR, R.: A Characterization of Fuzzy Implications Generated by Generalized Quantifiers, Fuzzy Sets and Systems, Vol. 159, Issue 4, 2008, pp. 491-499 (in English)

ŠIRÁŇ, J. - LOZ, E.: New Record Graphs in the Degree-Diameter Problem, Australian Journal of Combinatorics, Vol. 41, 2008, pp. 63-80 (in English)

ŠIRÁŇ, J.: Recent Progress in Classification of Regular Maps on a Given Compact Surface, Electronic Notes in Discrete Mathematics, Vol. 31, 2008, pp. 19-22 (in English)

SVETLÍKOVÁ, D. - KOMORNÍKOVÁ, M. - SZOLGAY, J. - KOHNOVÁ, S.: Hybrid Model for Mean Monthly Flows at the Banská Bystrica Station, Acta Hydrologica Slovaca, Vol. 9, No. 1, 2008, pp. 50 - 63 (in Slovak)

VETRÍK, T.: An Upper Bound for Graphs of Diameter 3 and Given Degree Obtained as Abelian Lifts of Dipoles, Discussiones Mathematicae, Vol. 28, No. 1, 2008, pp. 91-96 (in English)

Conferences

BACIGÁL, T.: Fitting Archimax Copula to Bivariate Data in R, FSTA 2008, Proceedings of 9th International Conference on Fuzzy Set Theory and Applications, Liptovský Ján, Slovakia, 2008, p. 22 (in English)

BACIGÁL, T. - MESIAR, R.: Non-Exchangeable Random Variables Modelling, COMPSTAT 2008, Book of Abstracts, Porto, Portugal, 2008, p. 67 (in English)

BODJANOVA, S. - KALINA, M.: Cardinalities of Granules of Vague Data, Proceedings of IPMU 2008, Information Processing and Management of Uncertainty in Knowledge-Based Systems, 12th International Conference, Malaga, 2008, pp. 63-70 (in English)

BODJANOVA, S. - KALINA, M.: Self-Duality of Fuzzy Integral-Based T_L- and S_L-evaluators, Proceedings of SISY 2008, 6th International Symposium on Intelligent Systems and Informatics, Subotica, Serbia, 2008 (in English)

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BYSTRICKÝ, R.: Medieval Period Voting - Papacy, Venice. Development and Comparison, Uncertainty 2008, Proceedings of International Seminar, Kálnica, Slovakia, 2008, pp. 106-110 (in English)

- ČUNDERLÍK, R. - FAŠKOVÁ, Z. - MIKULA, K.: Determination of Gravity Potential at Oceans Using Efficient Numerical Methods, Geophysical Research Abstracts, Vol. 10/2008, Abstracts of the Contributions of the EGU General Assembly, Vienna, Austria, 2008 (in English)
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- DRBLÍKOVÁ, O. - MIKULA, K. - HANDLOVIČOVÁ, A.: Nonlinear Tensor Diffusion in Coherence Enhancing Image Filtering, Program and Abstracts of Czech-Japanese Seminar in Applied Mathematics 2008, Takachiho, Miyazaki, Japan, 2008, pp. 22-23 (in English)
- DRBLÍKOVÁ, O. - MIKULA, K.: Semi-Implicit Diamond-Cell Finite Volume Scheme for 3D Nonlinear Tensor Diffusion in Coherence Enhancing Image Filtering, Finite Volumes for Complex Applications V, ISTE 2008, Proceedings of 5th International Symposium, Aussois, France, 2008, pp. 343-350 (in English)
- FROLKOVIČ, P.: Conservative Level Set Method, Jahrestagung der Deutschen Mathematiker -Vereinigung 2008, Book of Vortragsprogramm mit Abstracts, Erlangen, Germany, 2008, p. 49 (in English)
- FROLKOVIČ, P.: Finite Volume Methods for Some Advection Dominated Problems, Program and Abstracts of Czech-Japanese Seminar in Applied Mathematics 2008, Takachiho, Miyazaki, Japan, 2008, pp. 22-23 (in English)
- FROLKOVIČ, P.: Flux-Based Level Set Method, Schnelle Löser für Partielle Differential gleichungen, Oberwolfach Reports (online version), Oberwolfach, Germany, 2008, pp. 12-15 (in English)
- GRABISCH, M. - MARICHAL, J., L. - MESIAR, R. - PAP, E.: Aggregation Functions, Proceedings of SISY 2008, 6th International Symposium on Intelligent Systems and Informatics, Subotica, Serbia, 2008 (in English)
- HAVRANOVÁ, Z.: Similarity of Fuzzy Sets as IF-Set, 15th Zittau East-West Fuzzy Colloquium, Proceedings of Conference, Zittau, Germany, 2008, pp. 97-105 (in English)
- HLINĚNÁ, D. - KALINA, M. - KRÁL, P.: Choquet Integral and Its Modifications, Proceedings of IPMU 2008, Information Processing and Management of Uncertainty in Knowledge-Based Systems, 12th International Conference, Malaga, 2008, pp. 86-93 (in English)
- HLINĚNÁ, D. - KALINA, M. - KRÁL, P.: Evaluation by Choquet Integral, FSTA 2008, Abstracts of 9th International Conference on Fuzzy Set Theory and Applications, Liptovský Ján, Slovakia, 2008, pp. 49-50 (in English)
- JANÁK, J. - MOJZEŠ, M., ŠPRLÁK, M. - FAŠKOVÁ, Z.: The Satellite Mission GOCE - New Opportunities for Refinement of a Models Gravity Field, 70 Years of SvF STU, Proceedings of International Scientific Conference, CD Edition, Bratislava, Slovakia, 2008 (in Slovak)
- KALICKÁ, J.: On Some Construction Methods for 1-Lipschitz Aggregation Functions, FSTA 2008, Proceedings of 9th International Conference on Fuzzy Set Theory and Applications, Liptovský Ján, Slovakia, 2008, p. 66 (in English)
- KLEMENT, E., P. - MESIAR, R. - PAP, E.: A Universal Integral Independent of Measurable Spaces and Function Spaces, Proceedings of IPMU 2008, Information Processing and Management of Uncertainty in Knowledge-Based Systems, 12th International Conference, Malaga, 2008, pp. 1470-1475 (in English)
- KNOR, M.: Face-2-Colourable Triangulations by $K_{n,n,n}$, Proceedings of GRAPHS 2008, The 43rd Czech-Slovak Conference on Combinatorics and Graph Theory, Zadov, Czech Republic, p. 28 (in English)
- KNOR, M.: Unicyclic Radially-Maximal Graphs on the Minimum Number of Vertices, Proceedings of Cycles and Colourings 2008, Workshop, Tatranská Štrba, Slovakia, 2008, p. 13 (in English)
- KOHNNOVÁ, S. - SVETLÍKOVÁ, D. - KOMORNÍKOVÁ, M. - SZOLGAY, J. - HLAVČOVÁ, K.: Modeling of Monthly Rainfall and Discharge Time Series in the Area of the Kláštorské lúky Wetland, Cultural Landscape as an Object of Research in the Field of Sustainable Development, Proceedings of Contributions, Smolenice, Slovakia, 2008 (in Slovak)
- KOLESÁROVÁ, A. - MORDELOVÁ, J.: Construction of Aggregation Functions Based on a Generalization of the Choquet Integral Based Aggregation, 15th Zittau East-West Fuzzy Colloquium, Proceedings of Conference, Zittau, Germany, 2008, pp. 38-45 (in English)
- KOLESÁROVÁ, A. - MORDELOVÁ, J.: On Construction of Aggregation Functions by Extending Fuzzy Measures, Uncertainty 2008, Proceedings of International Seminar, Kálnica, Slovakia, 2008, pp. 7-15 (in English)
- KOMORNÍKOVÁ, M. - KOMORNÍK, J.: Copula Approach to Returns of Exchange Rates of Currencies of the Visegrad Countries to Euro, COMPSTAT 2008, Book of Abstracts, Porto, Portugal, 2008, p. 145 (in English)
- KOMORNÍKOVÁ, M. - KOMORNÍK, J.: Copula Approach to Returns of Exchange Rates of Currencies of the Visegrad Countries to Euro with Implications for Var of Their Portfolios, Uncertainty 2008, Proceedings of International Seminar, Kálnica, Slovakia, 2008, pp. 63-68 (in English)
- KYSELOVÁ, D.: Lexicographically Based Orderings on Finite Scales, 15th Zittau East-West Fuzzy Colloquium, Proceedings of Conference, Zittau, Germany, 2008, pp. 46-51 (in English)
- MESIAR, R. - AHMAD, K. - MESIAROVÁ, A.: Comotone Mixivity and Extended Sugeno Integral, Proceedings of IPMU 2008, Information Processing and Management of Uncertainty in Knowledge-Based Systems, 12th International Conference, Malaga, 2008, pp. 1484-1489 (in English)
- MESIAR, R.: Copulas: A Tool for Modeling the Dependence Structure of Random Vectors, Proceedings of SISY 2008, 6th International Symposium on Intelligent Systems and Informatics, Subotica, Serbia, 2008 (in English)
- MESIAR, R. - STUPŇANOVÁ, A.: Level-Dependent Integrals, FSTA 2008, Proceedings of 9th International Conference on Fuzzy Set Theory and Applications, Liptovský Ján, Slovakia, 2008, p. 83 (in English)
- MESIAR, R. - STRUK, P.: Monotone Measures and Integrals, Uncertainty 2008, Proceedings of International Seminar, Kálnica, Slovakia, 2008, pp. 16-19 (in English)
- MIKULA, K.: Computational Reconstruction of Vertebrate Early Embryogenesis by Nonlinear PDE Methods of Image Processing, Program and Abstracts of Czech-Japanese Seminar in Applied Mathematics 2008, Takachiho, Miyazaki, Japan, 2008, pp. 21-22 (in English)
- SAMMINGER-PLATZ, S. - KLEMENT, E., P. - MESIAR, R.: Bounded Lattices, Complete Sublattices and Extensions of t-Norms, Foundations of Lattice-Valued Mathematics with Applications to Algebra and Topology, Proceedings of 29th Linz Seminar on Fuzzy Set Theory, Linz, Austria, pp. 96-97 (in English)

- MIKULA, K. - PEYRIÉRAS, N. - REMEŠÍKOVÁ, M. - SARTI, A.: 3D Embryogenesis Image Segmentation by the Generalized Subjective Surfaces Method Using the Finite Volume Technique, Finite Volumes for Complex Applications V, ISTE 2008, Proceedings of 5th International Symposium, Aussois, France, 2008, pp. 585-592 (in English)
- NÁNÁSIOVÁ, O. - PASEKA, J. - TROKANOVÁ, K. - ŽEMBERY, I.: A Note on Convergence of S_n -Maps, Uncertainty 2008, Proceedings of International Seminar, Kálnica, Slovakia, 2008, pp. 35-39 (in English)
- NÁNÁSIOVÁ, O. - KALINA, M.: On Non-Commutativity of More-Dimensional s-Maps on Orthomodular Lattices, Uncertainty 2008, Proceedings of International Seminar, Kálnica, Slovakia, 2008, pp. 40-44 (in English)
- REMEŠÍKOVÁ, M. - MIKULA, K.: A Finite Volume Method for 4D Image Segmentation, Program and Abstracts of Czech-Japanese Seminar in Applied Mathematics 2008, Takachiho, Miyazaki, Japan, 2008, pp. 23 (in English)
- ŠIAGIOVÁ, J.: Cayley and Vertex-Transitive Near-Cages of Girth 5 and 6, Proceedings of Cycles and Colourings 2008, Workshop, Tatranská Štrba, Slovakia, 2008, p. 23 (in English)
- ŠIRÁŇ, J. - IPOLYIOVÁ, M. - MAČAJ, M.: Injectivity Radius of Triangle Group Representations with Application to Regular Embeddings of Hypermaps, Applications of Group Theory to Combinatorics - Selected Papers from the Com2MaC Conference, Pohang, Korea, pp. 147-154 (in English)
- STANEKOVÁ, Ľ.: Partially t-Balanced Cayley Maps, Proceedings of GRAPHS 2008, The 43rd Czech-Slovak Conference on Combinatorics and Graph Theory, Zadov, Czech Republic, p. 45 (in English)
- STUPŇANOVÁ, A.: Special Measures on N , Uncertainty 2008, Proceedings of International Seminar, Kálnica, Slovakia, 2008, pp. 20-24 (in English)
- SVETLÍKOVÁ, D. - KOMORNÍKOVÁ, M. - SZOLGAY, J. - KOHNOVÁ, S. -HLAVČOVÁ, K.: Analysis of Discharge and Rainfall Time Series in the Region of the Kláštorské Lúky Wetland in Slovakia, Proceedings of 24th Conference of the Danubian Countries: On the Hydrological Forecasting and Hydrological Bases of Water Management, Bled, Slovenia, 2008 (in English)
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- SZŐKEOVÁ, D.: Two-Regime Markov Switching Hydrological Model, Uncertainty 2008, Proceedings of International Seminar, Kálnica, Slovakia, 2008, pp. 69-74 (in English)
- VAJSÁBLOVÁ, M.: Geometric Aspects of Cartographic Projections, Proceedings of 13th Scientific-Professional Colloquium on Geometry and Graphics, Poreč, Croatia, p. 29 (in English)
- VAJSÁBLOVÁ, M. - FENCÍK, R. - DROPOVÁ, V.: The Methods of Making Digital Relief Models, Proceedings of Seminar on Geometry and Applications, (<http://www.math.sk/gaja/>), 2008 (in Slovak)
- VAJSÁBLOVÁ, M.: Projection Methods in Geodesy and Cartography, Proceedings of 30th Conference on Mathematics in VŠTEZ, Bohdaneč, Czech Republic, 2008, pp. 169-174 (in Slovak)
- VAJSÁBLOVÁ, M.: Mapping Equations of Pseudocylindrical Linear Projections, Proceedings of SCG 2008, Symposium on Computer Geometry, Kočovce, Slovakia, 2008, pp. 91-96 (in Slovak)
- VETRÍK, T.: Large Cayley Graphs of Given Degree and Diameter, Proceedings of Conference: Konferensi Nasional Matematika XIV & Kongres Himpunan Matematika, Palembang, Indonesia, 2008, p. 37 (in English)
- ŽDÍMALOVÁ, M.: Graph Coverings in Constructions of Large Graphs and Digraphs with Given Diameter and Degree, In: Proceedings of GRAPHS 2008, The 43rd Czech-Slovak Conference on Combinatorics and Graph Theory, Zadov, Czech Republic, p. 53 (in English)
- ŽDÍMALOVÁ, M.: Large Digraph of Given Diameter and Degree from Graph Coverings, Proceedings of Cycles and Colourings 2008, Workshop, Tatranská Štrba, Slovakia, 2008, p. 25 (in English)

DEPARTMENT OF PHYSICS

Department Head
Assoc. Prof. RNDr. Jozefa Lukovičová, PhD.

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1. Education

1.1 Graduate study

Obligatory subjects

Physics-Optics
Physics I
Physics II
Physics III
Physics-CE

Optional Subjects

Engineering Thermodynamics

1.2 Postgraduate courses

Physical Principles of Measurements
Special Aspects of Physics
Modelling Transport Phenomena
Physical Fields, Waves
Engineering Thermodynamics

2. Research

2.1 Research projects

Implementation of New Untraditional Forms of Physics Education – Methods of Improving the Physics Ability of Students of Technical Universities with the Aim of Innovating and Practicing Modern Technologies and Transferring Them to Technical Practice. (I. Baník) (Project No.: ESF, JPD BA 20004/14-008, 13120120117)

Interdisciplinary Knowledge Transfer into Improvement of Cultural Heritage and University Education. (J. Lukovičová, co-author). (Project. No.: 006STU-8/2008)

Higher Education Program for Graduate Students and Young Research Workers in the Field of Hydrothermal Behaviour of a Building. (J. Lukovičová) (Project No.: ESF, JPD 3 2004/4024, 13120200041)

Study and modelling of heat and moisture properties of porous building materials. (J. Lukovičová) (Project. No.: VEGA 1/4204/07)

2.2 International cooperation

Visit of staff members to foreign institutions

Faculty of Civil Engineering, Czech Technical University, Prague, Czech Republic (I. Baník, J. Veselský, M. Chovancová)

Silesian University of Technology, Gliwice, Poland. (J. Lukovičová)

Faculty of Civil Engineering, Technical University, Brno, Czech Republic. (J. Veselský, M. Holúbek, M. Chovancová)

Membership in international professional organizations

European Physical Society. (I. Baník, J. Veselský, J. Lukovičová, M. Chovancová)

European Society for the Study of Science and Theology. (J. Lukovičová)

International Council for Research and Innovation in Building and Construction–W 40. (J. Veselský, J. Lukovičová)

3. Publications

Books and Textbooks

I. Baník, R. Baník, M. Chovancová, J. Lukovičová: Physics in non-traditional way. 2 – Hydromechanics, Waves. Thermophysics. STU Publishing Centre, Bratislava 2008, pp. 411, 2008. ISBN 978-80-227-2962-8.

I. Baník, Joz. Hubeňák, Jir. Hubeňák, M. Smitková, R. Baník, J. Pišút, A. Kecskes, M. Chovancová, J. Lukovičová, J. Leja: Physics and Electronics. 2. STU Publishing Centre, Bratislava 2008, pp. 501, ISBN 978-80-227-2970-3.

I. Baník, R. Baník, M. Chovancová: Physical kaleidoscope.. STU Publishing Centre, Bratislava 2008, pp. 336, ISBN 978-80-227-2894-2.

E. Morháčová, J. Leja, Z. Lichardová: Technical Physics I, STU Publishing Centre, Bratislava 2008. ISBN 978-80-227-2823-2.

Journals

I. Baník: Temperature dependence of the optical absorption and electroabsorption in chalcogenide glasses based on barrier-cluster model, *Journal of Optoelectron. Adv. Mater.*, Vol. 10, No 3, pp. 475-483, 2008.

I. Baník: On the relation of optical absorption, luminescence and photoconductivity in non-crystalline semiconductors from the point of view of the barrier-cluster model, *Journal of Ovonic Research* Vol. 4, No. 2, pp. 35 – 41, 2008.

I. Baník: Electron processes connected with low energy optical absorption and with photoluminescence in non-crystalline semiconductors from point of view barrier-cluster model, *Chalcogenide Letters* Vol. 5, No 5, pp. 87 – 93, 2008.

I. Baník: Optical transitions in chalcogenide glasses from point of view of a barrier-cluster model, Trans Tech Publications, Switzerland, *Advanced materials Research* Vols. 39-40, pp. 253 – 256, 2008.

Yanetka, I.: On transmissions through a symmetrical triple delta-barrier. *Acta Physica Universitatis Comenianae*. 2007-2008, Vol. XLVIII-XLI, No. 1&2, pp. 57-64. ISBN 978-80-223-2480-9.

Conferences

I. Baník: Photoluminescence effectivity of excitation radiation in non-crystalline semiconductors from view of the barrier-cluster model, Proc. Int. workshop: Physical and material engineering 2008, Czech technical university in Prague 2008, p. 7-12, 2008, ISBN 978-80-01-04102-4.

Koronthályová, o. – Matiašovský, p. – Veselský, j. – Szabo d. – Puskár, A.: Simulation of Dynamic Moisture Response of Autoclaved Aerated Concrete. In: 8th Symposium on Building Physics in the Nordic Countries. Proceedings, Vol. 2, Monday, June 16-18, 2008, Copenhagen, Denmark. DTU Byg Report R-189 2008. p. 685-691. ISBN 978-87-7877-265-7.

- Veselský, J.: Thermal Conductivity of Fine Silica Sand in Dependence on its Bulk Density. In: Physical and Material Engineering 2008. Proceedings of International Workshop. September 9.-11. 2008, Šerlišský mlýn, Czech Republic. Czech Technical University in Prague, 2008. p. 124-128. ISBN 978-80-01-04102-4.
- M. Chovancová: Physics in the context of education, Proc. Int. workshop: Physical and material engineering 2008, Czech technical university in Prague 2008, p. 43-44, 2008, ISBN 978-80-01-04102-4.
- Holúbek, M.: Determination of the moisture diffusivity for water absorption In: Physical and material engineering 2008 : Proceedings of International Workshop, Praha, CR, 9.-11.9.2008. - Praha : Czech Technical University, - ISBN 978-80-01-04102-4. – p. 25-30.
- Palackova, A.: Thermal wave imaging In: Physical and material Engineering 2008. Proceedings of International Workshop. September 9.-11. 2008, Technical University in Prague, 2008. p. 85-86. ISBN 978-80-01-04102-4.
- J. Leja, Š. Gmuca: Calculations of the Properties of Silicon isotopes in the Relativistic Mean-Field Framework Proceedings of the 16th Conference of Czech and Slovak Physicists 8 – 11 September 2008, Hradec Králové (in Press).
- I. Baník, J. Lukovičová: "The electro-thermal model of switch effect in the chalcogenide glasses", Proc. conf. Thermophysics 2008, SUT Bratislava, 2008, p. 9-14, ISBN 978-80-227-2968-0.
- J. Leja, Š. Gmuca: Relativistic Mean-Field Description of Light Nuclei. Proceedings of the 6th International Conference „Dynamical Aspects of Nuclear Fission“, 2 - 6 October 2006, Smolenice, Pages 331 – 336 World Scientific, Singapore 2008 ISBN 978-981-283-752-3.
- Yanetka, I.: Inductance of an inductor measured with the CoachLab interface. In Leja, J. and Chovancová, M. Proceedings of international conference on Research and Educational Activities at Departments of Physics at Technical Universities. Bratislava: Slovak University of Technology. Faculty of Civil Engineering, 2008, p. 177-182. ISBN 978-80-227-2887-4.
- O. Koronthalyova and M. Holubek: Accuracy Of Indoor Air Humidity Simulation By Empd Method In Case Of Hygroscopic Materials With Finishing Coat, International Conference 70 Years of FCE STU, December 4 - 5, 2008 Bratislava, 10 p., Slovakia, ISBN 978-80-227-2979-6.
- M. Holubek: Comparison of the simulation and the measuring data of the heat transport in plexi-glass, International conference 70 years of FCE STU, December 4 - 5, 2008 Bratislava, Slovakia, 9 p., ISBN 978-80-227-2979-6.
- Yanetka, I.: Capacitance of a capacitor measured with the CoachLab interface. In Leja, J. and Chovancová, M. Proceedings of international conference on Research and Educational Activities at Departments of Physics at Technical Universities. Bratislava: Slovak University of Technology. Faculty of Civil Engineering, 2008, p. 171-176. ISBN 978-80-227-2887-4.
- F.Čulík, I.Baník, J.Lukovičová: Temperature field in a solid body restricted by two paralel planar surfaces, Proc. conf. Thermophysics 2008, SUT Bratislava, 2008, p. 26-35, ISBN 978-80-227-2968-0.

DEPARTMENT OF STRUCTURAL MECHANICS

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1. Education

1.1 Graduate study

Obligatory subjects

Building Analysis
Interaction of Structures and Foundations
Non-Linear Mechanics
Plate and Spatial Structures
Special Problems in Dynamics and Statics
Statics
Statics (English)
Structural Analysis
Structural Dynamics
Structural Mechanics
Structural Mechanics (English)
Structural Mechanics I
Theory of Elasticity
Theory of Elasticity (English)
Theory of Elasticity I
Theory of Elasticity II

Optional Subjects

Aeroelastics
Life Span and Reliability of Structures
Modelling Subgrades
Seismic Engineering

Recommended subjects

Automation in Non-Linear Structural Analysis
Automation in Structural Dynamics
Automation in the Statics of Structures
CAD in the Design of Structures
Plasticity Analysis of Structures
Stability of Structures
Statics of Reconstructions
Structural Modelling Using FEM
Use of Computers in Civil Engineering
Viscoelasticity of Structural Systems

2. Theses

2.1 Bachelor Theses

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2.2 Graduate Theses

BALÁŽ, M.: Analysis of Dynamic Effects upon a Reinforced Concrete Frame Structure. Supervisor: Psočný, M.

ČEMEZOVÁ, P.: Static Analysis of a Deep Reinforced Concrete Garage. Supervisor: Jendželovský, N.

JAGELKA, T.: Design and Analysis of the Bearing System of a Multifunctional Building. Supervisor: Marton, P.

SVOBODA, M.: Static and Dynamic Analysis of a High-Rise Building. Supervisor: Psočný, M.

ZADRABAJ, V.: Rotationally Symmetrical Circular Tank Resting on an Elastic Subgrade. Supervisor: Mistríková, Z.

2.3 Doctoral Theses

LENK, P.: Primary Consolidation – Interaction of an Upper Structure and a Subgrade. Supervisor: Jendželovský, N.

3. Research

3.1 Research projects

Application of Reliability and Durability Aspects in the Optimal Design of Structures Having Unilateral Bonds with Respect to the Non-Linear Behaviour of Materials (2006-2008, J. Dický, VEGA 1/3312/06)

European Civil Engineering Education and Training. (J. Dický - ERASMUS Project 2006-2373/001-001)

Analysis of Load-Bearing Structures Subjected to Accidental Dynamic Actions (2008 - 2010, M. Sokol, VEGA 1/0573/08)

Numerical Analysis of Foundation Structures under Various Foundation Conditions (2008 - 2010, N. Jendželovský, VEGA 1/0567/08)

Project TEMPUS Tacis Joint European Project 25186-2004: FRELP, Tambov (J. Dický)

Reliability of Reinforced Concrete Structures Considering the Soil-Structure Interaction, Effect of Extreme Loads and Degradation of Material Properties. Safety and Reliability of Nuclear Power Plants (2008 - 2010, J. Králik, VEGA 1/0849/08)

Research and Training in the Restoration and Protection of an Urban Environment in Industrial Regions. (J. Dický - 6th Marie - Curie Action Framework MTKD-CT-2004-509775)

Stability and Dynamics of Imperfect Heterogeneous Structures (2008-2010, J. Ravinger, VEGA 1/0666/08).

Timber-Bearing Elements Reinforced by Fibre-Based Materials. (J. Dický, J. Ravinger, APVV-99-015805 – KP 24).

Transferring EU Evaluation Models in KAUIR Functions and Processes. (J. Dický, Project SM_SCM-T45A06 -2006 (KZ,RU)).

Transferring Quality Management in KSTU Functions and Processes. (J. Dický, - Project – T078A06 – KYR – QM-KSTU).

3.2 International cooperation

Civil Engineering Institute of the Polish Academy of Science, Warsaw, Poland

Technical University of Opole, Poland

Silesian University of Technology, Gliwice, Poland

Cracow University of Technology, Poland

Fakultät der Bauingenieurwesen Ruhr-Universität, Bochum, Germany

Bundesforschung und Prufzentrum, Arsenal, Vienna, Austria

Czech Academy of Sciences, Prague, Czech Republic

Technical University of Ostrava, Czech Republic

Brno University of Technology, Czech Republic

Czech Technical University in Prague, Czech Republic

Budapest University of Technology and Economics,
Budapest, Hungary

Palacky University in Olomouc, Czech Republic

Membership in international professional organizations

KOLEKOVÁ, Y.: Member of ÖGE Bridges and Building Structures, TU Vienna

RAVINGER, J. Member of International Committee "Coupled Instabilities in Metal Structures"

RAVINGER, J.: Member of Polish – Slovak Commission for Civil Engineering, Polish Academy of Sciences

SOKOL, M.: Member of ÖGE Bridges and Building Structures, TU Vienna

SOKOL, M.: Member of European Association for Earthquake Engineering

SUMEC, J.: Member of IASS Workgroup 13

SUMEC, J.: Member of Polish – Slovak Commission for Civil Engineering, Polish Academy of Sciences

SUMEC, J.: Member of the Committee of European Society for Biomechanics

SUMEC, J.: Vice-Chairman of the Czech-Slovak Committee for Biomechanics

4. Publications

Books and textbooks

DICKÝ J. - JENDŽELOVSKÝ, N.: Structural Mechanics. 2nd Edition. Vydavateľstvo STU, Bratislava, 2008, 243 pp. ISBN 978-80-227-3004-4 (in Slovak)

HUBOVÁ, O. – MISTRÍKOVÁ, Z. – KOLEKOVÁ, Y.: Statics of Building Structures. Vydavateľstvo STU, Bratislava 2008. 296 pp. ISBN 978-80-227-2922-2 (in Slovak)

IVÁNKOVÁ, O.: Selected Problems of Fracture Mechanics. Vydavateľstvo STU, Bratislava 2008. 78 pp. ISBN 978-80-227-2681-8 (in Slovak)

MARTON, P.: Dynamics of Building Structures. Vydavateľstvo STU, Bratislava 2008. 240 pp. ISBN 978-80-227-2835-5 (in Slovak)

TVRDÁ, K.: Optimization of Plate Thickness. Vydavateľstvo STU Bratislava, 2008, 108 pp. ISBN 978-80-227-2875-1 (in Slovak)

Journals

HUBOVÁ, O.: Wind Actions on Canopy Roofs. *Konstrukce*, Vol. 7, 2008, No. 6, pp. 49-51. ISSN 1213-8762 (in Slovak)

IVÁNKOVÁ, O. – ŠTELLMACH, M.: Effects of Dilatations upon the Structural Systems of the High-Rise Buildings. *Civil and Environmental Engineering*, Vol. 4, 2008, No. 2, pp. 130-138. ISSN 1336-5835 (in Slovak)

IVÁNKOVÁ, O. – ŠTELLMACH, M.: Solution of Dividing Gaps of Buildings Using an Inserted Field. *Civil and Environmental Engineering*, Vol. 4, 2008, No. 2, pp. 139-147. ISSN 1336-5835 (in Slovak)

KRÁLIK, J. – KRÁLIK, J., Jr.: Probabilistic and Sensitivity Analysis of the Interaction Between a Machine's Foundation and a Subgrade. *Konstrukce*, Vol. 7, 2008, No. 6, Technologické stavby, pp. XII – XXII. ISSN 1213-8762. (in Slovak)

TOSECKÝ, A. – KOLEKOVÁ, Y. – SCHMID, G. – KALINCHUK, V.: Three-Dimensional Transient Half-Space Dynamics Using the Dual Reciprocity Boundary Element Method. *Engineering Analysis with Boundary Elements* 32 (2008), No. 7, pp. 597-618.

TVRDÁ, K.: Optimization of Plates. *Civil and Environmental Engineering*, Vol. 4, 2008, No. 1, pp. 34-45. ISSN 1336-5835 (in Slovak)

Conferences

BALÁŽ, I. – KOLEKOVÁ, Y.: Resistance of Members Made from Aluminium Alloys and Steel to Bending. In: 70 Years of FCE STU. Proceedings of the International Scientific Conference, December 4-5, 2008, FCE STU Bratislava. 8 pp. ISBN 978-80-227-2979-6 (in Slovak)

BOCK, I. – LOVÍŠEK, J.: Optimal Control of a Cylindrical Shell with a Unilateral Elastic Foundation and Rigid Supports. In: 70 Years of FCE STU. Proceedings of International Scientific Conference, December 4-5, 2008, FCE STU Bratislava. 7 pp. ISBN 978-80-227-2979-6.

DICKÝ, J. – TVRDÁ, K.: Optimal Design in Structural Mechanics. In: 70 Years of FCE STU. Proceedings of International Scientific Conference, December 4-5, 2008, FCE STU Bratislava. 20 pp. ISBN 978-80-227-2979-6.

DICKÝ, J. – TVRDÁ, K.: Optimal Design of Non-Homogeneous Plates. In: International VSU Conference 2008, Sofia, Bulgaria, May 29-30, 2008. Vol. I. pp. I- 100-105. ISBN – 978-954-331-019-7.

DICKÝ, J. – TVRDÁ, K.: Structural Optimization in Civil Engineering Design. In: Topical Problems of Mechanics. September 10-12, 2008, Gabčíkovo, Slovak Republic. 20 pp. ISBN 978-80-227-2935-2.

DICKÝ, J.: The Three-Level Higher Education Programmes at STU in Bratislava Based on a Credit System. In: International Education, the Noosphere and Sustainable Development. Proceedings of Conference, Russia, Tambov, TSTU, June 5-6, 2008. pp. 86-90. ISBN 978-5-98662-075-6.

DRAŠKOVIČ, F. – IVÁNKOVÁ, O. – GUGUTSIDZE, G.: Analysis of the Effects of Glued Timber Laminated Girders. In: 70 Years of FCE STU. Proceedings of International Scientific Conference, December 4-5, 2008, FCE STU Bratislava. 8 pp. ISBN 978-80-227-2979-6 (in Slovak)

DRAŠKOVIČ, F. – IVÁNKOVÁ, O. – GUGUTSIDZE, G.: Modelling Timber Laminated Girders Using ANSYS Software. In: 1st ANSYS Conference, Luhačovice, 5.-7.11. 2008. Brno, SVS FEM. pp. 1-8. ISBN 978-80-254-3355-3 (in Slovak)

HORÁK, J. – LOVÍŠEK, J.: Generalization of a Model of the Nonlinear Response Function of a Pasternak Subsoil. In: 70 Years of FCE STU. Proceedings of International Scientific Conference, December 4-5, 2008, FCE STU Bratislava. 13 pp. ISBN 978-80-227-2979-6 (in Czech)

HUBOVÁ, O.: Topical Problems of Wind Effects upon Building Structures. In: Topical Problems of Mechanics. September 10-12, 2008, Gabčíkovo, Slovak Republic. 5 pp. ISBN 978-80-227-2935-2 (in Slovak)

HUBOVÁ, O.: Wind Actions on Canopy Roofs. In: DYNA 2008. Brno, 9.-10. 9. 2008. pp 113 - 118. ISBN 978-80-7204-593-8 (in Slovak)

HUBOVÁ, O.: Wind Actions on Canopy Roofs. In: International VSU Conference 2008, Sofia, Bulgaria, May 29-30, 2008. Vol. I. pp. I- 41-46. ISBN – 978-954-331-019-7.

- HUBOVÁ, O.: Effects of Wind upon Free-Standing Walls, Parapets and Billboards. In: 70 Years of FCE STU. Proceedings of International Scientific Conference, December 4-5, 2008, FCE STU Bratislava. 6 pp. ISBN 978-80-227-2979-6 (in Slovak)
- IVÁNKOVÁ, O. – DRAŠKOVIČ, F. – GUGUTSIDZE, G.: Effects of Anisotropy and Variability of Material upon Glued Timber Reinforced Beams. In: Topical Problems of Mechanics. September 10-12, 2008, Gabčíkovo, Slovak Republic. 7 pp. ISBN 978-80-227-2935-2 (in Slovak)
- IVÁNKOVÁ, O. – NAGYOVÁ, M.: Effects of the Symmetry of a Bearing Structural System upon the Statics and Dynamics of a Building. In: Modelling in Mechanics 2008. VŠB - TU Ostrava, 13.- 14. 2. 2008. pp. 21-22. ISBN 978-80-248-1705-7 (in Slovak)
- IVÁNKOVÁ, O. – VÉGHOVÁ, I.: Analysis of the Effects of Subsoil upon the Static and Dynamic Impact of a Building with a Superstructure. In: Topical Problems of Mechanics. September 10-12, 2008, Gabčíkovo, Slovak Republic. 6 pp. ISBN 978-80-227-2935-2 (in Slovak)
- IVÁNKOVÁ, O.: Effects of Construction Work upon the Roof Structures of Historical Buildings. In: 70 Years of FCE STU. Proceedings of International Scientific Conference, December 4-5, 2008, FCE STU Bratislava. 7 pp. ISBN 978-80-227-2979-6 (in Slovak)
- IVÁNKOVÁ, O.: Impact of a Superstructure upon the Static and Dynamic Effects of a Structure. In: Proceedings of the 4th International Conference on Dynamics of Civil Engineering and Transport Structures and Wind Engineering, Papradno-Podjavorník, May 26-29, 2008, pp. 279-282. ISBN 978-80-8070-827-6 (in Slovak)
- JENDŽELOVSKÝ, N. – PREKOP, Ľ.: Analysis of the Foundation Conditions of a Water Pumping Station. In: International VSU Conference 2008, Sofia, Bulgaria, May 29-30, 2008. Vol. I. pp. I- 37-40. ISBN – 978-954-331-019-7.
- JENDŽELOVSKÝ, N. – PREKOP, Ľ.: Seismic Analysis of a Multifunctional Building. In: Topical Problems of Mechanics. September 10-12, 2008, Gabčíkovo, Slovak Republic. 8 pp. ISBN 978-80-227-2935-2 (in Slovak)
- JENDŽELOVSKÝ, N.: Analysis of a Foundation Plate on an Elastic Half-Space. In: 70 Years of FCE STU. Proceedings of International Scientific Conference, December 4-5, 2008, FCE STU Bratislava. 7 pp. ISBN 978-80-227-2979-6 (in Slovak)
- JENDŽELOVSKÝ, N.: Dynamic Analysis of a Technical Cooler. In: Proceedings of the 4th International Conference on Dynamics of Civil Engineering and Transport Structures and Wind Engineering, Papradno-Podjavorník, May 26-29, 2008, pp. 259-262. ISBN 978-80-8070-827-6 (in Slovak)
- JENDŽELOVSKÝ, N.: Modelling a Beam on an Elastic Subgrade Considering the Effects of the Stiffness Coefficient. In: International VSU Conference 2008, Sofia, Bulgaria, May 29-30, 2008. Vol. I. pp. I- 116-119. ISBN – 978-954-331-019-7.
- JURÍČEK, T. – DICKÝ, J.: Analysis of Composite Structures Made of Laminated Timber and Carbon Fibers. In: Topical Problems of Mechanics. September 10-12, 2008, Gabčíkovo, SR 9 pp. ISBN 978-80-227-2935-2.
- JURÍČEK, T. - DICKÝ, J.: Analysis of a Laminated Timber Beam Reinforced with Carbon Fibres. In: International VSU Conference 2008, Sofia, Bulgaria, May 29-30, 2008. Vol. I. pp. I- 94-99. ISBN – 978-954-331-019-7.
- JURÍČEK, T. – DICKÝ, J.: Laminated Timber Structures Reinforced with Carbon Strips. In: 70 Years of FCE STU. Proceedings of International Scientific Conference, December 4-5, 2008, FCE STU Bratislava. 9 pp. ISBN 978-80-227-2979-6.
- JURÍČEK, T. – DICKÝ, J.: Optimal Design of Timber Structures Reinforced with Fibers. In: Engineering Mechanics 2008, Svratka, Czech Republic, May 12-15, 2008, pp.116 – 117, ISBN 978-80-87012-11-6.
- KOLEKOVÁ, Y. – PETRONIJEVIĆ, M. – SCHMID, G.: Simple Models for Soil-Structure Interaction. In: International Scientific Symposium on Modeling of Structures, Mostar 2008, pp. 251-266. ISSN 1512 – 9322.
- KRÁLIK, J. – KRÁLIK, J., Jr.: Sensitivity and Probability Analysis of the Dynamic Resistance of a Compressor Foundation. In: International VSU Conference 2008, Sofia, Bulgaria, May 29-30, 2008. Vol. II. pp. IX- 149-154. ISBN – 978-954-331-020-3.
- KRÁLIK, J. - KRÁLIK, J., Jr.: Deterministic and Probabilistic Analysis of an Accidental Torsional Effect on the Seismic Resistance of Symmetrical High-Rise Buildings. In: Modelling in Mechanics 2008. VŠB - TU Ostrava, 13.- 14. 2. 2008. pp. 33-34. ISBN 978-80-248-1705-7.
- KRÁLIK, J. – KRÁLIK, J., Jr.: Deterministic and Probabilistic Analysis of a Compressor Foundation and Soil Interaction. In: DYNA 2008. Brno, 9.-10. 9. 2008. pp 67 - 76. ISBN 978-80-7204-593-8.
- KRÁLIK, J. – KRÁLIK, J., Jr.: Deterministic and Probabilistic Analysis of the Seismic Resistance of High-Rise Buildings Considering the Nonsymmetrical Effects on Symmetrical Structures. In: DCB 2008. International Conference on Civil Engineering Design and Construction, 12-14 September 2008, Varna, Bulgaria. pp. 228 – 234. ISBN 978-954-322-310-7.
- KRÁLIK, J. – KRÁLIK, J., Jr.: Deterministic and Probabilistic Analysis of a Machine Foundation and Soil Interaction. In: 1st ANSYS Conference, Luhačovice, 5.-7.11. 2008. Brno, SVS FEM. pp. 1-11. ISBN 978-80-254-3355-3.
- KRÁLIK, J. – KRÁLIK, J., Jr.: Probability and Sensitivity Analysis of a Machine Foundation and Soil Interaction. In: Computational Mechanics 2008, Nečtiny Castle, Czech Republic, November 3-5, 2008. pp. 1-2. ISBN 978-80-7043-712-4
- KRÁLIK, J. – KRÁLIK, J., Jr.: Probability and Sensitivity Analysis of a Steel Frame Considering the Effects of Geometric Imperfections. In: Reliability of Structures, April 14-15, 2008, Ostrava. pp. 57-60, ISBN 978-80-02-02007-3 (in Slovak)
- KRÁLIK, J. – KRÁLIK, J., Jr.: Seismic Analysis of Irregular Reinforced Concrete Coupling Wall Systems Considering Ductility Effects. In: Engineering Mechanics 2008, Svratka, Czech Republic, May 12-15, 2008, pp.124 – 125, ISBN 978-80-87012-11-6.
- KRÁLIK, J. – KRÁLIK, J., Jr.: Seismic Analysis of Interaction Between Reinforced Concrete Frames and Infilled Masonry Walls Considering Ductility Effects. In: DYNA 2008. Brno, 9.-10. 9. 2008. pp 85 - 92. ISBN 978-80-7204-593-8.
- KRÁLIK, J. – KRÁLIK, J., Jr.: Seismic Analysis of Interaction Between Reinforced Concrete Frames and Infilled Masonry Walls Interaction Considering Ductility Effects. In: Proceedings of the 4th International Conference on Dynamics of Civil Engineering and Transport Structures and Wind Engineering, Papradno-Podjavorník, May 26-29, 2008, pp. 75-78. ISBN 978-80-8070-827-6

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1. Education

1.1 Graduate study

Obligatory subjects

Concrete Technology
Technological Project
Concrete Technology II
Ceramics
Prefabricated Constructions
Testing

Optional Subjects

Microstructure of Building Materials
Technology of Repairs

2. Research

2.1 Research projects

Study of the properties of mortars made from lime and lime-pozzolan binders for renewal of cultural heritage structures (Pavlík) (VEGA 1/0621/08)

Monitoring of the pore structure of a brick during freezing and thawing (Šveda) (VEGA 1/0538/08)

Use of recycled aggregates in the production of cement composites (Unčík) (VEGA 1/0554/08)

Utilization of correlation relations between the properties of autoclaved aerated concrete in a quality management system (Unčík) (AV Project 4/0021/08)

2.2 International cooperation

VUT v Brně, ČR, Fakulta stavební, Ústav technologie stavebních hmot a dílců. Pravidelné návštěvy členov katedry.

3. Publications

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Conferences

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DEPARTMENT OF BUILDING TECHNOLOGY

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1. Education

3.1 Graduate study

Obligatory subjects

Technology of Construction Processes 1 (PSA)
Technology of Construction Processes 1 (TMS)
Technology of Construction Processes 2 (TMS)
Technology of Construction Processes 3 (TMS)
Pre-Construction Design
Technology of Building Renovation I
Modelling of Construction Processes
Protection of the Environment
Pre-Construction Design (ERS)
Costs and Prices in the Building Industry (ERS)

Optional subjects

Technology of Construction Processes 2 (PSA)
Construction of Buildings
Studio Design
Theses Seminar
Costs and Prices in the Building Industry
Bachelor's Theses Seminar
Bachelor's Theses
Professional Field Trip
Pathology of Buildings
Maintenance of Buildings
Technology of Building Renovation II
Technology of Building Service Renovations
Forensic Engineering
Technology for Traditional Buildings
Construction Site Facility (SMP)
Quality Management in the Construction Industry (ERS)
Historical Construction Technologies (ERS)
Quality Management System (TPB)
Protection and Restoration of Architectural Heritage (PSA-A/U)
Multicriteria Methods (VHVS)
Costs and Prices (VHVS)
Technology for Constructing a Town (MEI)

Recommended subjects

Computer-Aided Pre-Construction Design
Non-Destructive Testing
Technology of Finishing Processes
Professional Practice
Quality Management in the Construction Industry
Technological Project I
Technological Project II
Professional Field Trip
Construction Site Facility (ERS)
Historical Construction Technologies (PSA-A/U)

1.2 Postgraduate Courses

Technology of Construction

Subjects

Technology of Construction
Postgraduate Study Project I
Postgraduate Study Project II
Postgraduate Study Project III

Postgraduate Study Project IV
Postgraduate Study Project V
Postgraduate Study Project VI
Pedagogic Activity I
Pedagogic Activity II
Pedagogic Activity III
Pedagogic Activity IV
Pedagogic Activity V
Publication Activity I
Publication Activity II

2. Thesis

2.1 Bachelor theses

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2.2 Graduate thesis

BARTOŠOVÁ, J.: Residential House,
Supervisor: Božík, M.

ČÁKOVÁ, R.: Restoration of a Historical Building,
Supervisor: Božík, M.

ČERÝ, J.: Multifunctional Complex, Bosákova, Bratislava,
Supervisor: Gašparík, J.

DOČÁR, M.: Administrative Building, Mlynská dolina,
Bratislava,
Supervisor: Gron, A.

DÖMÖTÖR, Z.: Restoration of the Torso of the Medieval
Fortification of Bratislava,
Supervisor: Makýš, O.

FERČÁK, P.: CITY HOTEL, Zochova Street, Bratislava,
Supervisor: Juríček, I.

GUL'AŠ, J.: Multifunctional House, Staré Grunty, Bratislava,
Supervisor: Juríček, I.

HAJDU, M.: Training Hall of a Hotel, Za hrádzou, Dunajská
Lužná,
Supervisor: Makýš, P.

HALADA, R.: Multifunctional Building, Bratislava-Ružinov,
Supervisor: Gašparík, J.

HRABOVSKÝ, M.: Selected Parts of the Construction-
Technology Design of the "Multifunctional Complex
EUROPALACE" in Žilina,
Supervisor: Szalayová, S.

JAKUBÍK, P.: Residential House,
Supervisor: Bizub, J.

JÁNOŠ, M.: Multifunctional Building in Malacky,
Supervisor: Gron, A.

JANOŠTÍN, J.: Maintenance and Construction of the Open
Air Museum in Zuberec,
Supervisor: Makýš, O.

JAŠUREK, M.: Selected Parts of Construction-Technology
Design of the Avion Shopping Park in Bratislava – Extension
of the Business Complex,
Supervisor: Antošová, N.

KARDOŠ, M.: Residential House, Humenské Square, Bratislava,
Supervisor: Makýš, P.

KOVÁČIKOVÁ, N.: Residential House,
Supervisor: Božík, M.

KOVALČÍK, M.: Eden Park, High-Rise Building, Part A, Bratislava,
Supervisor: Juríček, I.

KUBICA, O.: Residential House No. 3, Gercenova Street, Bratislava,
Supervisor: Makýš, P.

KULAVJAK, M.: Multifunctional Building SKALNÁ, Bratislava,
Supervisor: Juríček, I.

LAMOŠ, R.: Residential House – Estónska Street, Bratislava,
Supervisor: Prokopčáková, K.

MADLEŇÁK, F.: Multifunctional Building Staré Grunty, Residential Houses, Bratislava,
Supervisor: Juríček, I.

MATIAŠKO, J.: Selected Parts of the Construction-Technology Design of the Building “Multifunctional Housing Hrachová in Bratislava”,
Supervisor: Antošová, N.

MIKULOVÁ, M.: Industrial Hall,
Supervisor: Božík, M.

PORUBAN, Ľ.: MAGNUS CENTER Multifunctional Building, Trenčín,
Supervisor: Gašparík, J.

POTÚČEK, J.: Residential House No. 4, Gercenova Street, Bratislava,
Supervisor: Makýš, P.

PROVODOVSKÁ, K.: Residential Houses, Vrábľa, Bratislava,
Supervisor: Hulínová, Z.

RÁCZOVA, P.: Residential Houses, Lipová, Bratislava,
Supervisor: Hulínová, Z.

RENDKO, P.: Residential House,
Supervisor: Božík, M.

SEŇÍK, M.: Selected Parts of the Construction-Technology Design of the “OMS, Ltd. Office Building” in Senica,
Supervisor: Szalayová, S.

SNIŠČÁK, M.: Multifunctional Building – Residential Hotel, Bratislava,
Supervisor: Gašparík, J.

SZÉPE, P.: “Tatra City” Administrative Building, Černyševského Street, Bratislava,
Supervisor: Prokopčáková, K.

ŠPÁNIK, M.: National Library of Technology in Prague,
Supervisor: Bizub, J.

USAČEV, B.: Residential House No. 2, Gercenova Street, Bratislava,
Supervisor: Makýš, P.

3. Research

3.1 Research projects

GAŠPARÍK, J.: Grant VEGA No. 1/3322/06 - Proposed Integrated Management System in the Process of the Preparation and Realisation of a Construction, 2006-2008.

JANKOVICHOVÁ, E.: Grant VEGA No.1/0683/08: Influence of Globalisation on the Management and Marketing of Construction Companies in Slovakia, 2008-2010.

MAKÝŠ, O.: MK SR Grant in the OSSD Programme, No. 283/2008/1.3 - Days of Architectural Heritage Conservation Technology, 2008.

MAKÝŠ, O.: MK SR Grant in the OSSD Programme, No. 286/2008/1.3 – Printed Materials for Post-Graduate Study of the Conservation of Architectural Heritage, 2008.

MAKÝŠ, O.: MK SR Grant in the OSSD Programme, No. 284/2008/1.3 – Photographic Exhibition – Built Heritage in Restoration III, 2008.

MAKÝŠ, O.: MK SR Grant in the OSSD Programme, No. 285/2008/1.3 – Additional Study Activities of Renovation of the Architectural Heritage, 2008.

SOMOROVÁ, V.: Grant VEGA No.1/0813/08: Use of Facility Management in the Modelling of the Maintenance and Repair Costs of Buildings, 2008.

3.2 International cooperation

Bundesdenkmalamt - Restaurierungswerkstätten
Baudenkmalpflege Kartause Mauerbach, Vienna

CNAM, Paris, France

CONTEC, Kralupy n. Vltavou, Czech Republic

Czech Technical University (ČVUT), Faculty of Building Engineering, Prague, Czech Republic

District Institute for the Preservation of Cultural Heritage, Brno, Czech Republic

ICCROM (International Centre of the Study of the Preservation and Restoration of Cultural Property), Rome, Italy

National Institute for the Preservation of Cultural Heritage, Prague, Czech Republic

NTNU – Norwegian University of Science and Technology, Trondheim, Norway

Purdue University, Division of Construction Engineering and Management, School of Civil Engineering, West Lafayette, IN, USA

Research Management A.S., Trondheim, Norway

Southampton Institute, Built Environment Division, Southampton, England, UK

Southampton Institute, Built Environment Division, Southampton, England, UK

Technical University (VUT), Faculty of Building Engineering, Department of Building Technology, Brno, Czech Republic

University of Brighton, Faculty of Engineering and Environmental Studies, Brighton, England, UK

4. Publications

Books and Textbooks

GAŠPARÍK, J.: Integrated Management System. Brno: Librix.EU, 2008, 158 pp., ISBN 978-80-7399-551-5.

GAŠPARÍK, J.: Building Technology I.: Non-Destructive Testing of Building Materials and Structures. STU Publishing, Bratislava 2008, 56 pp., ISBN 978-80-227-2978-9.

GAŠPARÍK, J.: Quality Management, Part 1: Quality Management in Construction. Bratislava: STU Publishing 2008, pp.44, ISBN 978-80-227-2977-2.

GAŠPARÍK, J.: Technology of Building Processes - Part II. Bratislava: STU Publishing 2008, 86 pp., ISBN 978-80-227-2861-4.

GAŠPARÍK, J.: Technology of Building Processes - Part I. Bratislava: STU Publishing 2008, 88 pp., ISBN 978-80-227-2842-3.

GAŠPARÍK, J.: Construction of Buildings - 1st part. Bratislava: STU Publishing 2008, 72 pp., ISBN 978-80-227-2843-0.

GAŠPARÍK, J.: Construction of Buildings - 2nd part. Bratislava: STU Publishing 2008, 87 pp., ISBN 978-80-227-2862-1.

HULÍNOVÁ, Z.: Safe Work at a Building. Starmuhler CEE Communications, Ltd. 2008, 236 pp.

JANKOVICHOVÁ, E.: Ethics as a Part of an Enterprise's Culture. Brno: Tribun.EU, Ltd., 2008, 89 pp., ISBN 978-80-7399-537-9.

MAKÝŠ, O.: Heritage in Restoration – Architectural Torsos, Old Wood, Industry, Bratislava: Renesans, Issue 1, 40 pp., ISBN 978-80-969777-8-9.

MAKÝŠ, O.: Construction Activity in Areas under the Protective Interest of Architectural Heritage, In: Construction Activity in Architectural Heritage Protected Environment – Selected Topics I., Bratislava: Renesans, pp. 14-36, 2008, ISBN 978-80-89402-00-7.

MAKÝŠ, O.: Technologies of the Repair of Wet Constructions, In: Construction Activity in an Architectural Heritage Protected Environment – Selected Topics II, Bratislava: Renesans, pp. 44-51, 2008, ISBN 978-80-89402-01-4.

MAKÝŠ, O.: Protection of Heritage in a Landscape, Bratislava: Renesans, Ltd., Issues 1, 2008, 48 pp., ISBN 978-80-969777-9-6.

MAKÝŠ, O.: Special Requirements for Site Supervision and Project Management in an Architectural Heritage Environment in Slovakia, In: European Specific Qualifications – Design and Construction in an Existing Context, Bratislava: STU, 38 pp., 2008, ISBN 978-80-227-2916-1.

MAKÝŠ, O.: Technology of the Renovation of an Architectural Heritage II, Bratislava: Renesans Ltd., Issue1, 2008, 56 pp., ISBN 978-80-89402-03-8.

MAKÝŠ, O.: Selected Topics from the Technology of the Renovation of an Architectural Heritage I., Bratislava: Renesans Ltd., Issue1, 2008, 32 pp., ISBN 978-80-89402-03-1.

Journals

BRIATKA, P.: Proposal for Repair of Industrial Floors Exposed to Low Operational Weight. Konstrukce, Vol. 7, 2008, No.4, pp. XV-XXIV. ISSN: 1213-8762.

SOMOROVÁ, V.: Multicriterial Decision Making Model for Outsourcing Contractor Selection. In: Slovak Journal of Civil Engineering, Vol. 2008, No.2, pp.35-41.

SOMOROVÁ, V.: The Task of Facility Management in Real Estate Development. In: Vadyba Management, Vol. 2008, pp. 95-96.

ANTOŠOVÁ, N.: Knowledge Gained from the Practice of the Assessment of the General Value of Unconventional Buildings. In: Almanach znalca, Vol. VII, No. 4/2008, ISSN 1336-3174.

BRIATKA, P.: Method of a Design for the Repair of Industrial Floors. In: Stavba, Vol. XI, 2008, No.10, pp.46-53. ISSN:1335-5406.

BRIATKA, P.: Inside a Construction Site: Transport of Fresh Concrete with the Use of Pumps. In: Stavba, Vol. XI, 2008, No.1-2, pp.54-57. ISSN: 1335-5406.

ELLINGEROVÁ, H.: Methodology of Calculating the Cost of the Construction of a Building. In: Hodák, et al.: Preparation, Management and Organising of Constructions, Vol. 1, 2008, Verlag Dashofer Publishing, ISSN 1335-8626.

ELLINGEROVÁ, H.: Methodology of Processing the Calculation of the Cost of a Building's Construction. In: Petráková, et al.: Alfa a omega stavby. Verlag Dashofer Publishing, Bratislava, October 2008, ISSN: 1337-8562, Ch. 11/2, pp. 1-9.

ELLINGEROVÁ, H.: Construction Costs and Their Planning and Calculation Methods. In: Petráková, et al.: Alfa a omega stavby. Verlag Dashofer Publishing, Bratislava, October 2008, ISSN: 1337-8562 Ch.11/2: pp. 1-10.

GAŠPARÍK, J.: Integrated Management System in a Construction Company. In.: Eurostav, Vol.14, No.6, pp. 99-103, Bratislava: EUROSTAV Ltd. Publishing, ISSN 1335-1249.

GAŠPARÍK, J.: Safety Precaution on a Construction Site. In: Hodák, et al.: Preparation, Management and Organising of Constructions, Bratislava: Verlag Dashofer Publishing, 2008, Ch. 2.7, 6 pp., ISSN: 1335-8626.

GAŠPARÍK, J.: An Environmental Management System within the Framework of STN EN ISO 14001.2005 Requirements. In: Petráková, et al.: Alfa a omega stavby, Bratislava: Verlag Dashofer Publishing, 2008, Ch. 10.2.3, 5 pp. ISSN: 1337-8562.

GAŠPARÍK, J.: Management of Safety and Health Protection at Work within the Frame of STN OHSAS 18001:2008. In: Petráková, et al.: Alfa a omega stavby. Bratislava: Verlag Dashofer Publishing, 2008 Ch. 10.2.2, 4 pp. ISSN: 1337-8562.

GAŠPARÍK, J.: Quality Management System. Use of Statistical Methods. In: Petráková, et al.: Alfa a omega stavby, Bratislava: Verlag Dashofer Publishing, 2008 Ch. 10.2.1.5, 3 pp. ISSN: 1337-8562.

GAŠPARÍK, J.: Quality Management System. Management of Resources Process. In: Petráková, et al.: Alfa a omega stavby, Bratislava: Verlag Dashofer Publishing, 2008 Ch. 10.2.1.2, 5 pp. ISSN: 1337-8562.

GAŠPARÍK, J.: Quality Management System. Process for Measurement, Analysis and Approval of QMS. In: Petráková, et al.: Alfa a omega stavby, Bratislava: Verlag Dashofer Publishing, 2008, Ch. 10.2.1.4, 8 pp. ISSN: 1337-8562.

GAŠPARÍK, J.: Quality Management System: Process of the Realization of a Product of a Construction Company. In: Petráková, et al.: Alfa a omega stavby. Bratislava: Verlag Dashofer, 2008 Ch. 10.2.1.3, 9 pp. ISSN: 1337-8562.

GAŠPARÍK, J.: Quality Management System. Responsibility in the Management Process. In: Petráková, et al.: Alfa a omega stavby, Bratislava: Verlag Dashofer Publishing, 2008 Ch. 10.2.1.1, 4pp. ISSN: 1337-8562.

GAŠPARÍK, J.: Ensuring Quality in a Building According to STN EN ISO 9001:2001. In: Petránková, et al.: Alfa a omega stavby, Bratislava: Verlag Dashofer Publishing, 2008 Ch. 10.2.1 - 2 pp., Ch. 10.2.1 - 10 pp., ISSN: 1337-8562.

GAŠPARÍK, J.: Bond, EMS Input Audit and Environmental Policy. In: Petránková, et al.: Alfa a omega stavby, Bratislava: Verlag Dashofer Publishing, 2008, Ch. 10.2.3.1, 10.2.3.2, 5 pp. ISSN: 1337-8562.

HULÍNOVÁ, Z.: What New Things Has the Amendment of the Act on Safety and Health Protection at Work Brought? In: Stavba, 2008, Vol. 11, No. 7-8, pp. 62-65.

JANKOVICHOVÁ, E.: Preparedness of Construction Companies for Entry into the European Currency Union. In: Almanach znalca, Vol. VII., 2008, Nos.1-2, pp.44-47, ISSN 1336-3174.

JANKOVICHOVÁ, E.: Slovak Construction Companies and the European Currency Union, In: ASB, Vol. XV, 2008, No.10, pp. 82-84, ISSN 1335-1230.

MAKÝŠ, O.: Brownfields – Principal Approach Towards Solutions, In: Stavba, Vol. 11, No. 10, pp. 24-27, Bratislava: MF Media Ltd., 2008, ISSN 1335-5406.

MAKÝŠ, O.: Dwelling on Rudnay Square, Baunit Journal, Vol. 2008, No. 2, pp. 12-13, Bratislava: Baunit Ltd., 2008.

MAKÝŠ, O.: Methodical Recommendations for Conserving Masonry, In: Euro-stav, 2008, Vol 14, No.12, pp. 30-32, Bratislava: Publishing Eurostav Ltd., ISSN 1335-1249.

MAKÝŠ, O.: Protection of Cellars and Basements against Moisture, In: Urob si sám, Bratislava: Jaga Group, Vol.: 2008, No.: September, pp. 70-74, ISSN – 1335-4604.

MAKÝŠ, O.: Repair of Walls and Columns, In: Urob si sám, Bratislava: Jaga Group, Vol.: 2008, No.: August, pp. 52-54, ISSN – 1335-4604.

MAKÝŠ, O.: Repair of Floors, In: Stavebné materiály, Vol. IV, No. 8, pp. 28-30, Bratislava: Jaga Group Ltd., 2008, ISSN 1336-7617.

MAKÝŠ, O.: Repair of Wooden Ceilings, In: Stavebné materiály, Vol. IV, No.6, pp. 74-76, Bratislava: Jaga Group Ltd., 2008, ISSN 1336-7617.

MAKÝŠ, O.: Repair of Wooden Ceilings, In: Urob si sám, Bratislava: Jaga Group, Vol.: 2008, No.: August, pp. 56-57, ISSN – 1335-4604.

MAKÝŠ, O.: Repair and Restoration of Vaults, In: Stavebné materiály, Vol. IV, No. 11, pp. 53-55, Bratislava: Jaga Group Ltd., 2008, ISSN 1336-7617.

MAKÝŠ, O.: Sports and Entertainment in Rome, In: Stavba, Vol 11, No. 5, pp. 48-53, Bratislava: MF Media Ltd., 2008, ISSN 1335-5406.

MAKÝŠ, P. – ŠLÚCH, M.: Quality Management System in the Building Industry. In: Stavebníctvo a bývanie - špeciál. Media/ST Žilina. April 2008. pp. 14-15.

MAKÝŠ, P.: How to Locate a Tower Crane Correctly. In: Stavba. Vol. XI, No. 1-2, 2008, MF Media Ltd., pp. 50-53.

SOMOROVÁ, V.: STN EN 15221 Facility Management. In: Správa budov, Vol.2008, No. 2, pp. 86-87.

SOMOROVÁ, V.: The Role of a Factor in the Renovation of a Dwelling House. In: Správca bytových domov, 2008, Vol. 3, No.2, pp. 40-41.

SOMOROVÁ, V.: Agreement on Facility Management. In: Správa budov, Vol.2008, No. 3, pp. 80-81.

Conferences

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ANTOŠOVÁ, N.: Position of Construction Supervisor in Ensuring the Quality of Construction Works. In: International Conference on Management in the Construction Industry 2008, Brno: April 2008, pp. 5-10, ISBN 978-80-7204-580-8.

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BRIATKA, P.: Proposal for Repair of Industrial Floors Exposed to Low Operating Weight. In: Proceedings of 10th Expert Conference of PhD. Students, Juniorstav 2008, Brno, January 2008, p. 103.

BRIATKA, P.: Guarantee of Quality in the Process of the Repair of Industrial Floors from Design to Longlife Service. In: International Scientific Conference on Quality, the Environment, Health, Protection and Safety Management Development Trends, Neum (Bosnia and Herzegovina), September 2008, Brno: Tribun.EU, 2008, pp. 40-50.

BŮCIOVÁ, M.: Biocorrosion of Buildings from the Point of View of Fungal Contamination. In: International Scientific Conference on Quality, the Environment, Health, Protection and Safety Management Development Trends, Neum (Bosnia and Herzegovina), Brno: Tribun.EU, 2008, pp. 51-54.

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CHAMULOVÁ, B.: The Effect of Scheduling on the Quality of Construction Management. In: International Scientific Conference on Quality, the Environment, Health, Protection and Safety Management Development Trends, Neum (Bosnia and Herzegovina), September 2008, pp. 106-110, ISBN 978-80-7399-479-2.

- ELLINGEROVÁ, H.: Building Industry and Marketing Mix. In: Proceedings of International Conference on Advanced Construction, Kaunas University of Technology of Lithuania 2008, Lithuania, November 2008, pp. 311-314.
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- ELLINGEROVÁ, H.: Risk in the Planning of Costs of Building Site Facilities. In: International Scientific Conference on Quality, the Environment, Health, Protection and Safety Management Development Trends, Neum (Bosnia and Herzegovina), September 2008, pp. 64-68.
- GAŠPARÍK, J.: Education and Research Activities at the Faculty of Civil Engineering of the Slovak University of Technology in Bratislava. In: Organization, Technology and Management in Construction: Proceedings of the 6th International Conference, 5th SENET Conference. Umag, 19.-21.9.2008, p.9, ISSN 953-96245-8-4 (CD-ROM).
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- HULÍNOVÁ, Z.: Risky Activities in the Building Industry. In: International Scientific Conference on Quality, the Environment, Health, Protection and Safety Management Development Trends, Neum (Bosnia and Herzegovina), September 2008, pp. 93-96.
- JANKOVICHOVÁ, E.: Management of Construction Enterprises under the Conditions of Globalization. In: International Scientific Conference on Quality, the Environment, Health, Protection and Safety Management Development Trends. Neum (Bosnia and Herzegovina), September 2008, pp. 126-130, ISBN 978-80-7399-479-2.
- JANKOVICHOVÁ, E.: European Construction Sector. In: International Conference on People, Buildings and the Nature 2008. Brno, November 2008, pp. 39-43. ISBN 978-80-7204-600-3.
- JANKOVICHOVÁ, E.: The Influence of Globalization on the Management of Construction Enterprises. In: International Conference on Management of the Building Industry 2008. Brno, April 2008, pp. 46-49, ISBN 978-80-7204-580-8.
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- MAKÝŠ, P.: Optimization of Time Management Schedules for Construction Works. In: 8th International Congress on Advances in Civil Engineering, ACE, North Cyprus, 2008, ISBN 978-975-8401-63-5.
- PAVLÍK, V. - MAKÝŠ, O.: Detection of the Basic Attributes of Mortar from the Walls of a Roman Fort. In: Construmat 2008 - Proceedings of 14th International Scientific Conference. Moravec, 4.-6.6.2008, Brno: VUT, 2008, 10 pp. (on CD), Abstract: pp.11-12, ISBN 978-80-214-3660-2.
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DEPARTMENT OF SANITARY AND ENVIRONMENTAL ENGINEERING

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1. Education

1.1 Graduate study

Obligatory subjects

Environmental Technology VHVS
Environmental Technology
Water Chemistry and Hydrobiology
Chemistry of Water, Soil, Air and Waste
Environmental Hygiene
Landscape Engineering
Infrastructure of Urban Regions
Landscape Eng. and Infrastr. of Urban Regions
Water Pollution Control
Sanitary Engineering Structures
Design and Execution of Water Management Structures
Water Supplies and Water Treatment
Public Utility Networks
Solid Waste Management
Public Utility Networks and Water Management Structures
Sewerage and Waste Water Treatment
In-Situ Training
Practical Training
Solid Waste Management
Urban Hygiene
Selected Chapters of Water Supply and Water Treatment
Selected Chapters of Sewerage and Waste Water Treatment
Spas and Mineral Waters
Special Excursion
Special Seminar
Realization of Sanitary Structures
Water Management
Automation of Engineering Works
Theory and Techniques of Air Protection
Final Thesis

Optional Subjects

Pumping Stations
Industrial Water Management
Urban and Regional Planning
Rehabilitation of Old Waste Disposal Sites
Urban Hydrology
Operation and Maintenance of Sanitary Engineering Structures

2. Theses

2.1 Research projects

21 Water Management
27 Environmental Engineering

2.2 Graduate theses

HARŠÁNY, P.: Water Supply for the Village of Borský Svätý Jur,
Supervisor: Barloková

MOLNÁR, V.: Design of Water Supply for the Village of Širkovce,
Supervisor: Kriš

MRAVÍK, M.: Water Supply for the Village of Jakubov,
Supervisor: Tóthová

VLČKOVÁ, D.: Management of Water Lost from Customer's Service Pipe,
Supervisor: Tóthová

HRONEC, T.: Design of a Water Supply System,
Supervisor: Božíková

HURBAN, Ľ.: Water Supply of the Locality of a Green Park,
Supervisor: Božíková

JAVORČÍK, R.: Technical Audit of Water Losses,
Supervisor: Tóthová

SLIMÁK, M.: Study of the Sewage System of the Villages of Trenčianske Bohuslavice, Zemianske Podhradie and Bošáca,
Supervisor: Sokáč,

KIANIČKOVÁ, E.: Sewage System of the Village of Liptovská Teplička,
Supervisor: Sokáč

GERBOCOVÁ, A.: Design of the Sewage System of the Villages of Zemplínske Hámre and Belá nad Cirochou,
Supervisor: Rusnák

CHABAL', L.: Design of the Sewage System of the Village Selice,
Supervisor: Rusnák

ELEK, P.: Design of the Sewage System of the Village of Dolný Bar,
Supervisor: Rusnák

JANOÚŠEK, S.: Sludge Treatment after Intensification of WWTP in Topoľčany,
Supervisor: Rusnák

JUTKA, A.: Design of Reconstruction of WWTP in Dedičné Resource Zone – Krahule,
Supervisor: Rusnák

FIAM, P.: Sewage System of the Village of Horné Srnie,
Supervisor: Stanko

GUZIOVÁ, D.: Dangerous Characteristics of Building Waste and Processes for Its Disposal,
Supervisor: Čermák

KOLARIČ, M.: Evaluation of the Main Sewage Collectors in the Town of Martin,
Supervisor: Stanko

KRALINA, Z.: Evaluation of the Effective Exploitation of a Vegetation WWTP,
Supervisor: Stanko

MILLEROVÁ, P.: Sewage System of the Village of Svodín,
Supervisor: Stanko

2.3 Doctoral theses

FAŠKO, M.: Evaluation of Water Distribution Systems,
Supervisor: Kriš

3. Research

3.1 Research projects

Management of Water Quality in Water Supply Distribution Systems. (Ilavský, J.), (VEGA No. 1/4208/07 – 09)

Evaluation of Water Distribution Systems. (Kriš, J.), (VEGA No. 1/0324/06)

Water Supply II. (Kriš, J.), (KEGA 3/5125/07)

Utilization of New Filtration Materials in Water Treatment. (Barloková, D.), (APVV 0379-07)

Determination of Dispersion Phenomenon Dependencies on Principal Hydraulic Parameters of Streams. (Sokáč, M.), (VEGA 2-0101-08)

Optimization of Design and Renovation of Sewage Systems in Urban Areas and Alternative Uses, (Stanko, Š.), (VEGA 1/0854/08)

4. Publications

Books and textbooks

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Čermák O., Kebísek M.: Waste Management – Composting, Publishing House STU Bratislava, 2008, 125 pp., ISBN 978-80-227-2920-8.

Faško, M.: Evaluation of Water Distribution Systems. Edition of Scientific Works, Publishing House STU Bratislava, 2008, No. 63, 63 pp., ISBN 978-80-227-3002-0.

Ali Hadi Ghawi : A Numerical Model of Flow and Settling in Sedimentation Tanks in Potable Water Treatment Plants. Edition of Scientific Works, Publishing House STU Bratislava, 2008, No. 64, 154 pp., ISBN 978-80-227-2964-2.

Ilavský, J., Barloková, D., Biskupič, F.: Chemistry and Hydrobiology of Water, Publishing House STU Bratislava, 2008, 303 pp., ISBN 978-80-227-2930-7.

Kriš, J., Božiková, J., Čermák O., Čermáková, M., Škultétyová, I., Tóthová, K.: Water Supply Branch I, Water Supply. Publishing House STU Bratislava, 2008, 793 pp., ISBN 80-227-2426-2.

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Journals

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MAHRÍKOVÁ, I.: Draining and Treatment of Waste Waters from Small Urban Areas, In: Vodní hospodářství, Čistírenské listy, No.7, ISSN 1211-0760, pp.7-9

STANKO, Š.: Reconstruction and Rehabilitation of Sewer Systems in Slovakia. In: Dangerous Pollutants (Xenobiotics) in Urban Water Cycles, Published by Springer 2008, The Netherlands, ISBN 978-1-4020-6800-3, pp.61-71

TÓTHOVÁ, K.: Water Loss Evaluation. In: Performance Assessment of Urban Infrastructure Services : The Case of Water Supply, Wastewater

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MAHRÍKOVÁ, I.: Drainage and Treatment of Waste Waters from Small Urban Areas I. In: Proceedings of Conference on Centralized Disposal of Waste Water, Brno, May 2008, ISBN 80-86020-58-3, pp. 34-39

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SOKÁČ, M.: Concept of Disposal of Surface Runoff Waters and Analysis of Their Impact on Receiving Waters – Case Study of Banská Bystrica. In: Proceedings of Conference on Optimization of the Design and Operation of Sewage Systems and WWTP, Velké Bílovice, October 2008, ISBN 80-86020-59-2, pp. 207-212.

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STANKO, Š., KRIŠ, J., ŠKULTÉTYOVÁ, I., RUSNÁK, D.: Protection of Water Sources and Distribution of Path of Water by Reuse of Waste Water. In: Proceedings of 12th International Water Management Conference, Water Zlín 2008, Zlín, March 2008, ISBN 978-80-254-1348-7, pp. 27 – 32

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- STANKO, Š.: Design and Recommendation of a Sewer System Using a CAD System. In: Proceedings of International Scientific Conference on Quality, the Environment, Health Protection and Safety Management Development Trends, Neum Bosnia and Herzegovina, September 2008, ISBN 978- 80- 7399-479-2, pp. 294-299.
- STANKO, Š.: Reconstruction of Sewages with Alternative Uses. In: Proceedings of International Scientific Conference on Quality, the Environment, Health Protection and Safety Management Development Trends, Neum Bosnia and Herzegovina, September 2008, ISBN 978- 80- 7399-479-2, pp. 288-293
- STANKO, Š.: Reuse of Waste Water. In: Proceedings of NATO ARW Workshop, Risk Management of Water Supply and Sanitation Systems Impaired by Operational Failures, Natural Disasters and War Conflicts, Macedonia, October 2008, e-book
- TÓTHOVÁ, K., MRNČO, I.: Optimum Use of Gravity Springs in Water Supply Systems (Abstract). In: Proceedings of the World Water Congress and Exhibition, Vienna, 7.-12.9.2008, IWA, 2008, p. 177.
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- BOŽIKOVÁ, J.: Recognition of Natural Mineral Waters and Exploitation of Thermal Waters. In: Proceedings of 7th Conference on Water Supply and Sewage Systems, Waste. Small Waterworks. Alternative Sources of Energy. Liptovská Sielnica, SR, 12.-14.11.2008, ISBN 978-80-89385-01-0.
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- ČERMÁK O.: Dangerous Materials in Construction Waste. In: Proceedings of International Conference on Reuse of Materials for Building Purposes, Štrbské Pleso, February 2008, ISBN 978-80-232-0289-2, pp. 58-63
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- MRNČO, I., TÓTHOVÁ, K., KRIŠ, J. : Possibilities for the Application of Hydroinformatics in the Management of Water Supply Systems. In: Proceedings of International Scientific Conference on 70 Years of the Faculty of Civil Engineering, Slovak University of Technology, Bratislava, 4-5.12.2008, ISBN 978-80-227-2979-6, CD.
- MIŠÍK, M., ANDO, M., GIBALA, T., KUČERA, M., MRNČO, I., ŠOLTÉSZ, A. : Complex Solution for the Drainage and Protection of Areas against Floods. In: Proceedings of International Scientific Conference on 70 Years of the Faculty of Civil Engineering, Slovak University of Technology, Bratislava, 4-5.12.2008, ISBN 978-80-227-2979-6, CD.
- KRIŠ, J., ŠKULTÉTYOVÁ, I., STANKO, Š.: The meaning of the World Sanitation in the Development of Water and Sewage Water Systems in Region of Poprad. In: Proceedings of 7th Seminar on World Water Day, 9.4.2008 Poprad, pp. 25-33.
- KRIŠ, J., ŠKULTÉTYOVÁ, I.: Future of Geothermal Energy in Slovakia. In: Proceedings of International Scientific Conference on 70 Years of the Faculty of Civil Engineering, Slovak University of Technology, Bratislava, 4-5.12.2008. ISBN 978-80-227-2979-6, CD.
- MAHRÍKOVÁ, I.: Drainage and Waste Water Treatment for Small Urban Areas. In: Proceedings of International Research Conference on 70th Years of Slovak University of Technology, Faculty of Civil Engineering Bratislava, December 2008, ISBN: 978-80-227-2979-6
- MAHRÍKOVÁ, I.: Disposal of Waste Water from Small Urban Areas. In: Proceedings of International Research Conference on 55th Anniversary of the Department Of Sanitary and Environmental Engineering, Trenčín, September 2008, CD
- PIKOROVÁ, T., JAKUBČOVÁ, Z., HLAVÍNEK, P., DRTIL, M.: Use of Membrane Module in Actual Conditions of Household Waste Water Treatment Plant. In: Proceeding of International Conference on Drinking Water Supply Systems, Sewage Systems and Solid Waste. Small Water Works. Alternative Power Sources. 7th Year of Technical Conference, Liptovská Sielnica , November 2008, ISBN 978-80-89385-01-0, 56-58, CD
- RUSNÁK, D.: Technical Standards in the Renovation of Sewage Systems and Their Structures. In: Proceedings of 5th Biennial International Conference on Waste Water 2008, Štrbské Pleso, October 2008, ISBN 978-8089088-68-3, pp. 104-111
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- RUSNÁK, D.: Sewage Tanks. In: Proceedings of International Research Conference on 55th Anniversary of Department of Sanitary and Environmental Engineering, Trenčín, September 2008, CD
- RUSNÁK, D.: Design of Combined Sewage Overflow. In: Proceedings of International Research Conference on 70th Years of the Slovak University of Technology, Faculty of Civil Engineering Bratislava, December 2008, ISBN: 978-80-227-2979-6, CD
- SOKÁČ, M.: Analysis of Impact of Surface Runoff on Receiving Waters – Case Study Banská Bystrica. In: Proceedings of 5th Biennial International Conference on Waste Water 2008, Štrbské Pleso, October 2008, ISBN 978-8089088-68-3, pp. 200-205
- SOKÁČ, M.: Concept of Disposal of Surface Runoff Waters in Urban Development of Towns. In: Proceedings of 5th Biennial International Conference on Waste Water 2008, Štrbské Pleso, October 2008, ISBN 978-8089088-68-3, pp. 72-75
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- SOKÁČ, M.: Concept of Disposal of Surface Runoff Water and Analysis of Their Impact on Receiving Waters – Case Study Banská Bystrica. In: Proceedings of International

DEPARTMENT OF BUILDING SERVICES

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1. Education

1.1 Graduate study

Obligatory subjects

Technical Equipment of Buildings
Technical Equipment of Buildings II
Technical Equipment of Buildings III
Internal Water Piping
Internal Drainage
Heating I
Heating II
Design IV
Design V
Design VI
Air Conditioning
Sanitary Techniques
Water Delivery and Drainage
Computer Design Systems
Measuring and Control I
Measuring and Control II
Energy Supply of Buildings
Excursions
Building Control Systems
Special Seminar
Heating Systems
Industrial Installations
Renewable Energy in Technical Equipment of Buildings
Ventilation and Air Conditioning Systems I
Fire-Fighting Equipment
Diploma Seminar

Optional Subjects

Technical Equipment
Sanitary-Technical Equipment
Heating Systems
Combustion Theory and Techniques
Ventilation and Air Conditioning Systems
Industrial Air Conditioning Systems II
Sanitation Audit
Heating Audit
Ventilation Audit
Operation of Air Conditioning Systems
Heat Delivery to Buildings
Renovation of Building Services
Indoor Environment of Buildings
Environmental Audit of Buildings

Postgraduate courses

Indoor Environment of Buildings	Petráš
Energy Audit of Buildings	Petráš
Ph.D. Project I, II, III	Petráš
Ph.D. Project IV, V, VI	Petráš
Teaching I – IV	Petráš
Sanitary Installations	Petráš
Heating	Petráš
Ventilation and Air Conditioning	Petráš

3. Thesis

2.1 Graduate theses

FERIANCOVÁ, J.: Final Project for Sanitary-Technical Installations. Drainage in a High-Rise Building
Supervisor: Jánošková, T.

GLONČÁKOVÁ, Z.: Hot Water Delivery for a Residential Building
Supervisor: Jánošková, T.

JELENÍKOVÁ, I.: Final Project for an Off Building Drainage and the Design of Equipment for Use of Rain Water in a Factory
Supervisor: Valášek, J.

KUŠMÍREKOVÁ, Z.: Final Project for Off Building Drainage, and the Design of a Roof Drainage in a Logistical Centre
Supervisor: Valášek, J.

DANĚK, L.: Final Project for Sanitary-Technical Installations. Drainage in a Factory Area.
Supervisor: Valášek, J.

OSUSKÝ, M.: Final Project for Sanitary-Technical Installations. Water Piping in a High-Rise Building
Supervisor: Jánošková, T.

RAJNICOVÁ, P.: Final Project for Selected Sanitary Installations in a Multifunctional Building
Supervisor: Peráčková, J.

TRUCHANOÁ, M.: Renovation of Sanitary Installations in a Historical Villa
Supervisor: Peráčková, J.

VALENTOVÁ, Z.: Final Project for Selected Sanitary Installations in a Residential Building
Supervisor: Peráčková, J.

ZAJAC, J.: Final Project for a Gas Service Pipe, Control and Measuring Equipment for a Boiler Room in a Residential Building. Gass Base
Supervisor: Valášek, J.

BAŠOVÁ, H.: Ventilation and Air Conditioning of an Office Building
Supervisor: Székyová, M.

BELLA, I.: Ventilation of Shopping and Wholesale Centers
Supervisor: Boďo, R.

MASTNÁ, D.: Warm Air Ventilation in a Swimming Pool
Supervisor: Székyová, M.

PAŠKO, M.: Ventilation of a Swimming Pool
Supervisor: Boďo, R.

RAFAYOVÁ, B.: Air Conditioning of an Office Building
Supervisor: Székyová, M.

ZÁMEČNÍKOVÁ, M.: Air Conditioning of Operating Areas
Supervisor: Székyová, M.

BISTAR, S.: Hydronic Control of a Heating System in a High-Rise Building
Supervisor: Petráš, D.

BUKOVIANSKY, M.: Final Project for a Warm Water Heating System in a Selected Part of a Building – Faculty of Civil Engineering in Bratislava
Supervisor: Takács, J.

CESNEK, T.: Final Project for Warm Water, Two-Pipe Heating System in a Selected Part of a Building – Faculty of Civil Engineering in Bratislava
Supervisor: Takács, J.

GÁLOVÁ, J.: Hydronic Control of a Heating System in a Residential Building as a Result of an Energy Audit
Supervisor: Petráš, D.

KONÍK, J.: Heat Pump as a Heat Source for the “Jako” Hotel
Supervisor: Takács, J.

KOPKO, M.: Energy Audit of a Residential Building
Supervisor: Kalús, D.

KOLUMBER, P.: Design of Energy Systems for Passive Energy Building. Solar Base
Supervisor: Kalús, D.

MACO, I.: Design of Biomass Combustion Source
Supervisor: Lulkovičová, O.

MOLNÁR, F.: Design of a Heat Source for a Swimming Pool
Supervisor: Lulkovičová, O.

ORGONÍK, D.: Design of a Heating System in a Tennis Center. Renewable Energy Heat Source
Supervisor: Lulkovičová, O.

REPTA, T.: Passive Energy House – Energy System Analysis
Supervisor: Kalús, D.

KOREŇOVÁ, P.: Energy Audit and Certification of a Residential Building
Supervisor: Petráš, D.

BELAI, M.: Design of a Construction for Geothermal Energy Use in Bardovo
Supervisor: Takács, J.

BLAŽIČKOVÁ, I.: Alternative Energy Source Design for a Residential Building
Supervisor: Lulkovičová, O.

BOLANOVSKÝ, M.: Technical Equipment for Use of Rain Water
Supervisor: Peráčková, J.

BRUNOVSKÝ, M.: Design of an Off Building Drainage and Rain Water Use in a Factory Area
Supervisor: Valášek, J.

ČAPUCHA, P.: Design of a Solar System for Hot Water Preparation in a Residential Building
Supervisor: Valášek, J.

DULÍK, J.: Energy, Economic, and Environmental Analyses of Use of Woodchips for Heating in Buildings
Supervisor: Kalús, D.

ĎURIŠOVÁ, E.: Environmental Evaluation of a Hybrid Heating and Cooling System in an Office Building
Supervisor: Petráš, D.

HROMADOVÁ, M.: Alternative Elements for a Solar Energy System in a Residential Building with Year-Round Operation
Supervisor: Lulkovičová, O.

KISS, D.: Energy, Economic, and Environmental Analyses of Energy Systems in Low Energy Buildings
Supervisor: Kalús, D.

KOŽIAK, J.: Conceptual Design of Use of Biomass for Delivery of Heat for Pribinova Basic School in Zlate Moravce
Supervisor: Takács, J.

KRAJČÍK, M.: Evaluation of Indoor Environment Evaluation, and Energy Certification of a Residential Building
Supervisor: Petráš, D.

MARKOVIČ, G.: Infiltration Rain Water Systems
Supervisor: Peráčková, J.

MATEJČÍK, A.: Design and Evaluation of Energy Systems in a Passive Energy House
Supervisor: Kalús, D.

PAVLÍK, M.: Technical – Economic Evaluation of Energy Systems in a Passive Energy House
Supervisor: Petráš, D.

ŠOLTÉSZ, A.: Conceptual Design of Geothermal Energy Potential in Dunajska Streda
Supervisor: Takács, J.

ZAGORA, M.: Solar Energy Use of Heating Water in a Swimming Pool
Supervisor: Valášek, J.

2.2 Doctoral theses

TÓTHOVÁ, V.: Analýza využívania energie v otvorenom geotermálnom energetickom systéme – skleníkové hospodárstvo: Analysis of Energy Use in an Open Geothermal Energy System – Green Houses.
Supervisor: Takács, J.

3. Research

3.1 Research projects

CEEPUS II – Education without Borders (Lulkovicova)

KEGA – Preparation of Teaching Materials for Building Service Specializations (Lulkovičová) (Project Number: 3/4105/06)

VEGA – Determination of Energy Balance of Building Services Using Renewable Energy as a Base for an Energy Audit, Certificate, and Monitoring (Petráš) (Project Number:1/0730/08)

VEGA – Analysis of Energy and Environmental Measures During Operation of Sanitary Installations and Ventilation Systems in Low Energy Buildings (Peráčková) (Project Number:1/0730/08)

SLOVAK – NORWEGIAN Project: Implementation of Tools and Software for Energy Certification, Audit and Monitoring of Buildings for Slovak Conditions (Petráš) (Project number: SK 0013)

3.2 International cooperation

Visit of staff members to foreign institutions

ENSI – Energy Saving International AS, Oslo, Norway; D. Petráš

Hansa, AG, Burglengenfeld, Germany

Geberit, AG, Rottenbrunn, Germany

GAS, Ltd, Prague, Czech Republic

CVUT – Civil Engineering Faculty, Prague, Czech Republic; D.Petráš, O. Lulkovičová, J. Peráčková,

VUT, Brno, Czech Republic; D. Lulkovičová, D. Petráš

VUT, Ostrava, Czech Republic, O. Lulkovičová, J. Takács,

J. Peráčková, M. Kurčová, J. Šabíková

Deutsche Institute fur Bautechnik, Berlin, Germany, J.

Valášek

Czech Association of Civil Engineers, Prague, Czech Republic; J. Valášek, D. Petráš

ASHRAE, Winter Meeting, New York, USA; D. Petráš

REHVA, Brussels, Belgium; D. Petráš

GA – REHVA, Berlin, Germany, D. Petráš

Fachhochschule, Pinkafeld, Austria, D. Petráš

The Danish Technical University – International Center for the Indoor Environment and Energy, Lyngby, Denmark; D. Petráš, I. Balážová, B. Halvoňová, J. Šabíková
UNI, inSoul, Korea, D. Petráš
INNER project, Marua, Portugal, D. Petráš
GA – ALA, Tallin, Estonia, D. Petráš
GA – SEFI, Aalborg, Denmark, D. Petráš
ERSF, Grenoble, France, D. Petráš
ENSI, Oslo, Norway, D. Petráš
B4 – UNI meeting, Vienna, Austria, D. Petráš
Metropolit UNI, Warszawa, Poland, D. Petráš
SAE meeting, Dubai, D. Petráš

Membership in international professional organizations

ASHRAE – USA, Petráš, D.
REHVA – Brussels, Belgium, Petráš, D

4. Publication

Journals

BALÁŽOVÁ, I., CLAUSEN, G., PEJTERSEN, J.: Internal Environment of Large-Scale Offices in Bratislava's Administration Buildings. In: TZB Haustechnik. ISSN 1210-356X. Vol. 16, No. 7 (2008), pp. 62-65 (in Slovak) (Vnútorne prostredie veľkoplošných kancelárií bratislavských administratívnych budov)

BEKÖ, G., CLAUSEN, G., WESCHLER, C. J.: Air Pollution from Bag Filters, Carbon Filters and Combinations. In: Indoor Air. ISSN 0905-6947. Vol. 18, No. 1 (2008), pp. 27-36 (in English) (Znečistenie produkované vreckovými filtrami, uhlíkovými filtrami a ich kombináciou.)

ĐURIŠOVÁ, E., PETRÁŠ, D., BALÁŽOVÁ, I.: Inner Environment in an Office Building with a Hybrid System of Low-Temperature Heating and High-Temperature Cooling. In: TZB Haustechnik. ISSN 1210-356X. Vol. 16, No. 7 (2008), pp. 36-39 (in Slovak) (Vnútorne prostredie administratívnej budovy s hybridným systémom nízokoteplotného vykurovania a vysokoteplotného chladenia)

FÜRI, B.: How to Employ Wind Energy? In: Stavba. ISSN 1335-5406. Vol.11, No.12 (2008), pp. 54-61 (in Slovak) (Ako využiť veternú energiu?)

HALVOŇOVÁ, B., MELIKOV, A. K.: Decentralized Individual Ventilation in Combination with Uplift-Pressure Ventilation. In: TZB Haustechnik. ISSN 1210-356X. Vol. 16, No. 7 (2008), pp. 52-54 (in Slovak) (Decentralizované personálne vetranie v kombinácii so vztlakovým vetraním)

JANUŠKA, J.: Operation of a Heating System in Residential Buildings After Hydraulic Regulation. In: Stavba. ISSN 1335-5406. Vol.11, No.6 (2008), pp. 35-37 (in Slovak) (Prevádzka vykurovacej sústavy v bytových domoch po hydraulickom vyregulovaní)

KRAJČÍK, M., PETRÁŠ, D.: Energy Audit and Appraisal of Internal Environments in Residential Buildings. In: TZB Haustechnik. ISSN 1210-356X. Vol. 16, No. 7 (2008), pp. 44-47 (in Slovak) (Energetický audit a posúdenie vnútorného prostredia bytového domu)

LULKOVÍČOVÁ, O.: Regular Check of Boilers As a Part of the Valuation of the Energy Efficiency of Buildings. In: Eurostav. ISSN 1335-1249. Vol.14, Nos.1-2 (2008), pp. 70-71 (in Slovak) (Pravidelná kontrola kotlov ako súčasť hodnotenia energetickej hospodárnosti budov)

PERÁČKOVÁ, J., KUNÍKOVÁ, Z.: Analysis of a Design of the Thickness of Thermal Insulation According to European Standards and Regulations. In: TZB Haustechnik. ISSN 1210-356X. Vol.16, No.5 (2008), pp. 54-56 (in Slovak) (Analýza návrhu tepelnej izolácie podľa európskych noriem a predpisov 2. časť1)

PERÁČKOVÁ, J.: Implementation of European Standards in Sanitary Engineering. In: TechCON. ISSN 1337-3013. Vol. 4, No. 2 (2008), pp. 9-10 (in Slovak) (Implementácia európskych noriem v zdravotnej technike)

PERÁČKOVÁ, J.: Revision of STN 73 6655: Calculation of Water Supply in Buildings. In: TechCON. ISSN 1337-3013. Vol. 4, No. 6 (2008), pp. 28-30 (in Slovak) (Revízia STN 73 6655 Výpočet vodovodov v budovách)

PETRÁŠ, D., KRAJČÍK, M.: EPA-NR: Methods and Tools for the Assessment of the Energy Performance of Non-Residential Buildings in European Countries. 2008. (www.buildingsplatform.eu) (in Slovak) (EPA-NR:metóda a nástroje pre posúdenie energetickej hospodárnosti budov, ktoré nie sú určené na bývanie v európskych krajinách)

PETRÁŠ, D., KRAJČÍK, M.: EPBD Building Platforms: Overall Context and Activities. 2008. (www.buildingsplatform.sk) (in Slovak) (EPBD(Energy Performance of Buildings Directive) Buildings platform: Celkový kontext a aktivity)

PETRÁŠ, D., KRAJČÍK, M.: Certification of Energy Performance, Status in December 2006. 2008. unpaginated (www.buildingsplatform.eu) (in Slovak) (Postavenie certifikácie energetickej hospodárnosti k decembru 2006)

PETRÁŠ, D., KRAJČÍK, M.: Procedures for Calculating Energy Performance for the EPBD (2). Quality for Purpose. 2008. unpaginated (www.buildingsplatform.eu) (in Slovak) (Postupy výpočtu energetickej hospodárnosti budov pre EPBD-Energy Performance of Buildings Directive (2). Kvalita pre daný účel)

PETRÁŠ, D., KRAJČÍK, M.: Procedures for Calculating Energy Performance for the EPBD (1). Introduction. 2008. unpaginated (www.buildingsplatform.eu) (in Slovak) (Postupy výpočtu energetickej hospodárnosti budov pre EPBD-Energy performance of buildings (1). Úvod)

PETRÁŠ, D., KRAJČÍK, M.: Software in Support of the Implementation of the EPBD. 2008. unpaginated (www.buildingsplatform.eu) (in Slovak) (Softvér na podporu implementácie Smernice o energetickej hospodárnosti budov)

PETRÁŠ, D.: Heat Pumps versus Solar Panels - Perhaps for the Last Time? In: TZB Haustechnik. ISSN 1210-356X. Vol. 16, No. 6 (2008), p. 9 (in Slovak) (Tepelné čerpadlá verzus slnečné kolektory - snáď naposledy?)

Conferences

BOLEDOVIČ, M.: Heat Pumps as Efficient Heat Sources for Environmental Building Techniques. In: Proceedings of the 11th National Conference on the Indoor Climate of Buildings. Environmental Evaluation and Energy Certification. Tatranská Lesná, The Faculty of Civil Engineering in Bratislava, 2008. ISBN978-80-89216-26-0. pp. 116-120 (in Slovak) (Tepelné čerpadlá ako energeticky efektívne zdroje tepla pre techniku prostredia budov)

CVIČELA, M., KALÚS, D.: Energy Systems with Active Thermal Protection. In: Proceedings of the 11th National Conference on the Indoor Climate of Buildings. Environmental Evaluation and Energy Certification. Tatranská Lesná, The Faculty of Civil Engineering in Bratislava, 2008. ISBN978-80-89216-26-0. pp. 87-90 (in Slovak) (Energetické systémy s aktívnou tepelnou ochranou)

ĎURIŠOVÁ, E., PETRÁŠ, D., BALÁŽOVÁ, I.: Thermal Comfort and Discomfort in the Application of a Hybrid System of Heating and Cooling. In: Proceedings of the 11th National Conference on the Indoor Climate of Buildings. Environmental Evaluation and Energy Certification. Tatranská Lesná, The Faculty of Civil Engineering in Bratislava, 2008. ISBN978-80-89216-26-0. pp. 33-38 (in Slovak) (Tepelná pohoda a nepohoda s aplikáciou hybridného systému vykurovania a chladenia)

FŮRI, B.: Heat Pumps - Energy Efficiency and Emission of CO₂. In: Proceedings of 2nd National Conference on Renovation of Residential Buildings. Podbanské. Association for the Support of Building Renovations (Združenie pre podporu obnovy bytových domov), Martin, 2008. ISBN978-80-969675-7-5. pp. 107-110 (in Slovak) (Tepelné čerpadlá - energetická účinnosť a emisie CO₂)

HALVOŇOVÁ, B., MELIKOV, A.K.: Ductless Personalized Ventilation in Conjunction with Displacement Ventilation. In: INDOOR AIR 2008: Proceedings of the 11th International Conference on Indoor Air Quality and Climate. Denmark, Copenhagen. 2008. ISBN9788778772701. unpaginated (in English) (Decentralizované personálne vetranie v kombinácii so vztlakovým vetraním)

HALVOŇOVÁ, B.: Impact of the Arrangement of an Office on the Effects of Displacement Ventilation. In: Juniorstav 2008. Brno, The Faculty of Civil Engineering. 2008. ISBN978-80-86433-45-5. unpaginated (in Slovak) (Vplyv usporiadania priestoru na efektívnosť vztlakového vetrania)

HALVOŇOVÁ, B.: Displacement Ventilation in Conjunction with a Heated or Cooled Floor. In: Proceedings of National Conference on Ventilation and Air Conditioning (Vetranie a klimatizácia). Tatranská Lomnica. The Slovak Society for Environmental Techniquess in Bratislava. 2008. ISBN978-80-89216-20-8. pp. 71-76 (in Slovak) (Vztlakové vetranie v kombinácii s vyhrievanou alebo chladenou podlahou)

JÁNOŠKOVÁ, T.: Analysis of the Payment of Heat Costs of a Selected Set of Residential Buildings. In: Proceedings of National Conference on Measuring and Calculating Heat (Meranie a rozpočítavanie tepla). Piešťany. The Slovak Society for Environmental Techniques in Bratislava. 2008. ISBN 978-80-89216-25-3. pp. 111-117 (in Slovak) (Analýza platieb vybratého súboru bytových domov za vykurovanie)

JÁNOŠKOVÁ, T.: Modernization of Equipment for Measuring Heat and Casting-Off Methodology. In: Proceedings of the 2nd National Conference on Renovation of Residential Buildings. Podbanské. Association for the Support of Building Renovations (Združenie pre podporu obnovy bytových domov), Martin, 2008. ISBN978-80-969675-7-5. pp. 74-77 (in Slovak) (Mogernizácia zariadení na meranie tepla a metodiky rozpočítavania)

JANUŠKA, J.: Renovation of Heating Systems of Residential Buildings. In: Proceedings of the 2nd National Conference on Renovation of Residential Buildings. Podbanské. Association for the Support of Building Renovations

(Združenie pre podporu obnovy bytových) (in Slovak) (Obnova vykurovacích sústav v bytových domoch)

JANUŠKA, J., TAKÁCS, J.: Attestation of the Function of a Dynamic Balancing Armature in the Long-Term Operation of a Heating System. In: Proceedings of International Conference on Heating 2008. Energy Efficiency of Heat Delivery (Energetická efektívnosť zásobovania teplom). Tatranské Matliare. The Slovak Society for Environmental Techniques in Bratislava. 2008. ISBN978-80-89216-19-2. pp. 399-402 (in Slovak) (Overenie funkčnosti dynamických vyvažovacích armatúr v dlhodobu prevádzkovej vykurovacej sústave)

KALÚS, D.: Operation and Maintenance of Heating Systems During Dwelling Renovations. In: Proceedings of the 2nd National Conference on Renovation of Residential Buildings. Podbanské. Association for the Support of Building Renovations (Združenie pre podporu obnovy bytových domov), Martin, 2008. ISBN978-80-969675-7-5. pp. 78-80 (in Slovak) (Zásady prevádzky a údržby pre vykurovacie sústavy po obnove).

KALÚS, D., KESZEGH, M.: Ground Accumulators and Heat Exchangers for Low-Energy Houses. In: Proceedings of the 19th international conference on the Indoor Climate of Buildings. Environmental Evaluation and Energy Certification of Buildings. Tatranská Lesná. 2008. The Faculty of Civil Engineering in Bratislava, 2008. ISBN978-80-89216-26-0. pp. 91-96 (in Slovak) (Zemné zásobníky a výmenníky tepla pre nízkoenergetické domy)

KONKOL, R.: Energy Certification of a Heating System: Heat Exchange, Distribution and Storage. In: Proceedings of the 2nd National Conference on Renovation of Residential Buildings. Podbanské. Association for the Support of Building Renovations (Združenie pre podporu obnovy bytových domov), Martin, 2008. ISBN978-80-969675-7-5. pp. 91-98 (in Slovak) (Energetická certifikácia vykurovacej sústavy? odovzdávanie tepla, distribúcia a akumulácia)

KONKOL, R., PETRÁŠ, D.: Identification of the Effectiveness of a Heating System According to EN Standards. In: Proceedings of International Conference on Heating 2008. Energy Efficiency of Heat Delivery (Energetická efektívnosť zásobovania teplom). Tatranské Matliare. SSTP Bratislava, 2008. ISBN978-80-89216-19-2. pp. 51-54 (in Slovak) (Určovanie účinnosti vykurovacích systémov podľa EN štandardov)

KRAJČÍK, M., PETRÁŠ, D.: Energy Certificate of a Residential Building and the Thermal Comfort of the Occupants. In: Proceedings of the 2nd National Conference on Renovation of Residential Buildings. Podbanské. Association for the Support of Building Renovations (Združenie pre podporu obnovy bytových domov), Martin, 2008. ISBN978-80-969675-7-5. pp. 115-120 (in Slovak) (Energetický certifikát bytového domu a teplotná pohoda užívateľov)

KRAJČÍK, M., PETRÁŠ, D.: Evaluation of the Indoor Environment of a Prefabricated Residential Building. In: Proceedings of the 19th international conference on the Indoor Climate of Buildings. Environmental Evaluation and Energy Certification of Buildings. Tatranská Lesná. 2008. The Faculty of Civil Engineering in Bratislava, 2008. ISBN978-80-89216-26-0. pp. 25-32 (in Slovak) (Hodnotenie vnútorného prostredia panelového bytového domu)

- KRAJČÍK, M., PETRÁŠ, D.: Evaluation of the Indoor Environment of a Prefabricated Residential Building. In: Proceedings of the 19th international conference on the Indoor Climate of Buildings. Environmental Evaluation and Energy Certification of Buildings. Tatranská Lesná. 2008. The Faculty of Civil Engineering in Bratislava, 2008. ISBN978-80-89216-26-0. pp. 25-32 (in Slovak) (Hodnotenie vnútorného prostredia panelového bytového domu)
- KURČOVÁ, M.: The Problem of Effective Uplifts in a Heating System. In: Proceedings of Conference on Heating 2008. Energy Efficiency of Heat Delivery. Tatranské Matliare. 2008. ISBN978-80-89216-19-2. pp. 403-406 (in Slovak) (Problém účinného vztaku vo vykurovacej sústave)
- LULKOVIČOVÁ, O., MOLNÁR, F., KONÍK, J.: Commentary on European Legislation on the Efficiency of Boilers and Heating Systems. In: Proceedings of the 2nd National Conference on Renovations of Residential Buildings. Podbanské. Association for the Support of Building Renovations (Združenie pre podporu obnovy bytových domov), Martin, 2008. ISBN978-80-969675-7-5. pp. 103-106 (in Slovak) (Komentár k Európskej legislatíve o účinnosti kotlov a vykurovacích sústav).
- LULKOVIČOVÁ, O.: Methodology for the Calculation of Energy Demands and the Efficiency of Solar Thermal Systems. In: Proceedings of International Conference on Heating 2008. Energy Efficiency in Heat Delivery (Energetická efektívnosť zásobovania teplom). Tatranské Matliare. The Slovak Society for Environmental Techniques in Bratislava. 2008. ISBN978-80-89216-19-2. pp. 55-58 (in Slovak) (Metodika výpočtu energetických požiadaviek a účinnosti slnečných termálnych systémov)
- LULKOVIČOVÁ, O.: Renovation of Classic Heating Sources and Increasing Their Energy Efficiency. In: Proceedings of the 2nd National Conference on Renovation of Residential Buildings. Podbanské. Association for the Support of Building Renovations (Združenie pre podporu obnovy bytových domov), Martin, 2008. ISBN978-80-969675-7-5. pp. 55-58 (in Slovak) (Obnova klasických zdrojov tepla a zvýšenie ich energetickej účinnosti).
- LULKOVIČOVÁ, O.: Operational Rating of the Energy Efficiency of Heating. In: Proceedings of National Conference on Building – Energy 2008. Energy Certification of Buildings. Podbanské. The Slovak Society for Environmental Techniques in Bratislava. 2008. ISBN978-80-89216-23-9. pp. 13-16 (in Slovak) (Prevádzkové hodnotenie energetickej hospodárnosti zdrojov tepla)
- LULKOVIČOVÁ, O.: Solar Panels - Energy Efficiency and CO2 Emissions. In: Proceedings of the 2nd National Conference on Renovation of Residential Buildings. Podbanské. Association for the Support of Building Renovations (Združenie pre podporu obnovy bytových domov), Martin, 2008. ISBN978-80-969675-7-5. pp. 111-114 (in Slovak) (Solárne panely - energetická účinnosť a emisie CO2)
- LULKOVIČOVÁ, O.: Assessment of the Energy Efficiency of Production and Energy Distribution in Heating Systems. In: Proceedings of International Conference on Heating 2008. Energy Efficiency of Heat Delivery (Energetická efektívnosť zásobovania teplom). Tatranské Matliare. The Slovak Society for Environmental Techniques in Bratislava. 2008. ISBN978-80-89216-19-2. pp. 293-296 (in Slovak) (Stanovenie energetickej efektívnosti výroby a distribúcie energie vo vykurovacích sústavách)
- LULKOVIČOVÁ, O.: Heat Generators for Dwellings. In: Proceeding of International Conference on Renovation of Building Services in Dwelling Stock from User's Point of View (Renovace technických zařízení budov bytového fondu z hlediska uživatele), Brno. The Society for Environmental Techniques (Společnost pro techniku prostředí), 2008. pp. 55-58 (in Slovak) (Tepelné zdroje pre bytové objekty)
- LULKOVIČOVÁ, O.: Heat Sources in Low-Energy Buildings. In: Proceeding from National Conference on Building Structures (Konštrukcie pozemných stavieb) – Dwellings and Their Energy Effectiveness (budovy na bývanie a ich energetická náročnosť). Nitra, 2008. ISBN978-80-227-2859-1. pp. 28-31 (in Slovak) (Zdroje tepla pre nízkoenergetické budovy)
- LULKOVIČOVÁ, O.: Heat Sources for Multi-Functional Buildings. In: Proceedings of the 6th International Summer Course on Building Services 2008 (Letní škola TZB 2008, 6. letní škola katedry TZB). The Czech Technical University, Prague (ČVUT), The Society for Environmental Techniques (Společnost pro techniku prostředí), 2008. ISBN976-80-02-02066-0. pp. 99-102 (in Slovak) (Zdroje tepla pre polyfunkčné objekty)
- MAGYAR, Z., PETRÁŠ, D., KRAJČÍK, M.: REHVA - EPBD (Energy Performance of Buildings Directive) . In: Proceedings of International Conference on Heating 2008. Energy Efficiency of Heat Delivery (Energetická efektívnosť zásobovania teplom). Tatranské Matliare. The Slovak Society for Environmental Techniques in Bratislava. 2008. ISBN978-80-89216-19-2. pp. 27-34 (in Slovak)
- PERÁČKOVÁ, J.: Commentary on Revision of STN 73 6655: Calculation of Water-Supply in Buildings. In: Proceeding of the Proceeding of the 13th International Conference on Sanhyga. Piešťany. The Slovak Society for Environmental Techniques in Bratislava. 2008. ISBN978-80-89216-24-6. pp. 9-16 (in Slovak) (Komentár k revízii STN 73 6655 Výpočet vodovodov v budovách)
- PERÁČKOVÁ, J.: Rehabilitation of Thermal Insulation Pipes for Heating and Hot Water. In: Proceedings of 2nd National Conference on Renovation of Residential Buildings. Podbanské. Association for the Support of Building Renovations (Združenie pre podporu obnovy bytových domov), Martin, 2008. ISBN978-80-969675-7-5. pp. 69-73 (in Slovak) (Obnova tepelných izolácií potrubných rozvodov tepla a teplej vody)
- PERÁČKOVÁ, J.: Unit Assembly Installation Systems. In: Proceedings of the National Conference on Monumentorum tutela. Častá. 2008. ISBN978-80-89175-25-3. pp. 81-86 (in Slovak) (Stavebnicové inštalčné systémy v pamiatkovo chránených budovách)
- PERÁČKOVÁ, J., KUNÍKOVÁ, Z.: Heat Insulation of Piping of Water Distribution Systems. In: Proceedings of the National Conference on Building – Energy 2008. Energy Certification of Buildings. Podbanské. The Slovak Society for Environmental Techniques in Bratislava. 2008. ISBN978-80-89216-23-9. pp. 125-128 (in Slovak) (Tepelné izolácie potrubí distribučných sústav teplej vody)
- PETRÁŠ, D.: Energy Management of Buildings and European Legislation. In: Proceedings of International Conference on Heating 2008. Energy Efficiency of Heat Delivery (Energetická efektívnosť zásobovania teplom). Tatranské Matliare. The Slovak Society for Environmental Techniques in Bratislava. 2008. ISBN978-80-89216-19-2. pp. 459-462 (in Slovak) (Energetický manažment budov a európska legislatíva)

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PETRÁŠ, D.: Environmental Evaluation and Energy Certification of Buildings. In: Proceedings of the 19th International Conference on the Indoor Climate of Buildings. Environmental Evaluation and Energy Certification of Buildings. Tatranská Lesná. 2008. The Faculty of Civil Engineering in Bratislava, 2008. ISBN978-80-89216-26-0. pp. 5-12 (in Slovak) (Environmentálne hodnotenie a energetická certifikácia budov)

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PETRÁŠ, D.: Low-Temperature Heating and High-Temperature Cooling - Principles of Calculation and Design. In: Proceeding of International Conference on Ventilation and Air Conditioning (Vetrание a klimatizácia). Tatranská Lomnica. The Slovak Society for Environmental Techniques in Bratislava. 2008. ISBN978-80-89216-20-8. pp. 35-44 (in Slovak) (Nízkoteplotné vykurovanie a vysokoteplotné chladenie - zásady výpočtu a návrhu)

PETRÁŠ, D.: Operation and Maintenance of Dwelling Houses as a Result of an Energy Audit. In: Proceeding of the 2nd International Conference on Technology of Building Renovation and Maintenance (Technológie opráv a údržby stavieb : 2.international conference). Žilina, Krupa print, 2008. ISBN978-80-969681-6-9. pp. 26-33 (in Slovak) (Prevádzka a údržba bytových domov ako výsledok energetického auditu)

PETRÁŠ, D., KRAJČÍK, M., ĎURIŠOVÁ, E., BALÁŽOVÁ, I.: Study of the Basic Indoor Environmental Parameters in an Office Building and Their Influence on the Quality of a Working Environment. In: INDOOR AIR 2008: Proceedings of the 11th International Conference on Indoor Air Quality and Climate/Copenhagen, Denmark. 2008. ISBN9788778772701. - unpaginated (in English) (Štúdia základných parametrov vnútorného prostredia v administratívnej budove a ich vplyv na kvalitu pracovného prostredia.)

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ŠABÍKOVÁ, J.: Environmental Aspects of Low Temperature Heating. In: Proceedings of International Conference on Heating 2008. Energy Efficiency of Heat Delivery (Energetická efektívnosť zásobovania teplom). Tatranské Matliare. The Slovak Society for Environmental Techniques in Bratislava. 2008. ISBN978-80-89216-19-2. pp. 297-300 (in Slovak) (Environmentálne aspekty vykurovania pri nízkoteplotných vykurovacích sústavách)

ŠABÍKOVÁ, J.: Commissioning of Heating Systems In: Proceedings of 2nd National Conference on Renovation of Residential Buildings. Podbanské. Association for the Support of Building Renovations (Združenie pre podporu obnovy bytových domov), Martin, 2008. ISBN978-80-969675-7-5. pp. 81-82 (in Slovak) (Uvedenie vykurovacích sústav do prevádzky)

SZÉKYOVÁ, M.: Creation of an Internal Environment in Historical Objects. In: Proceedings of National Conference on Monumentorum tutela. Časť. 2008. ISBN978-80-89175-25-3. pp. 74-80 (in Slovak) (Tvorba vnútorného prostredia v pamiatkovo chránených objektoch)

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TAKÁCS, J., LULKOVICHOVÁ, O., FÜRI, B.: Possibilities for Use of Renewable Energy Sources in Slovakia. In: Proceeding of the 12th International Conference on EPKO. The Faculty of Civil Engineering and Architecture, Csíksolyó, Romania, 2008, pp. 248-254 (in Hungarian) (A megújuló energiaforrások hasznosításának lehetőségei Szlovákiában)

TAKÁCS, J.: Renovation of Heat Exchange Stations. In: Proceedings of the 2nd National Conference on Renovation of Residential Buildings. Podbanské. Association for the Support of Building Renovations (Združenie pre podporu obnovy bytových domov), Martin, 2008. ISBN978-80-969675-7-5. pp. 59-64 (in Slovak) (Obnova odovzdávacích staníc tepla)

TAKÁCS, J., ŠTEFANIČKA, F.: Comparison of the Operation of Swimming Pools with Flowing and Circulatory Water. In: Proceeding of the Proceeding of the 13th International Conference on Sanhyga. Piešťany. The Slovak Society for Environmental Techniques in Bratislava. 2008. ISBN978-80-89216-24-6. pp. 85-94 (in Slovak) (Porovnanie prevádzky bazénov s prietokom a s cirkuláciou bazénovej vody)

VALÁŠEK, J.: Commentary on the Revision of STN 6760: Canalization in a Building. In: Proceeding of the Proceeding of the 13th International Conference on Sanhyga. Piešťany. The Slovak Society for Environmental Techniques in Bratislava. 2008. ISBN978-80-89216-24-6. pp. 5-8 (in Slovak) (Komentár k revízii STN 73 6760 Kanalizácia v budovách)

TAKÁCS, J., ŠTEFANIČKA, F.: Briefing on the Exploitation of Geothermal Energy for Recreational Purposes. In: Proceedings of International Conference on Heating 2008. Energy Efficiency of Heat Delivery (Energetická efektívnosť zásobovania teplom). Tatranské Matliare. The Slovak Society for Environmental Techniques in Bratislava. 2008. ISBN978-80-89216-19-2. pp. 189-193 (in Slovak) (Prehľad využívania geotermálnej energie pre rekreačné účely)

TÓTHOVÁ, V., TAKÁCS, J.: Briefing on the Exploitation of Geothermal Energy for Agricultural Purposes In: Proceedings of International Conference on Heating 2008. Energy Efficiency of Heat Delivery (Energetická efektívnosť zásobovania teplom). Tatranské Matliare. The Slovak Society for Environmental Techniques in Bratislava. 2008. ISBN978-80-89216-19-2. pp. 195-198 (in Slovak) (Prehľad využívania geotermálnej energie pre poľnohospodárske účely)

VALÁŠEK, J.: Normalized Energy Evaluation of Energy Demands for the Preparation of Hot Water. In: Proceedings of the National Conference on Important Renovation and Energy Certification of Buildings. Building Structures (Významná obnova a energetická certifikácia budov. Teória a konštrukcie pozemných stavieb) as a part of the CONECO 2008 exhibition. Bratislava, BB Print. 2008. ISBN978-80-969158-3-5. pp. 46-49 (in Slovak) (Normalizované energetické hodnotenie potreby energie na prípravu teplej vody)

VALÁŠEK, J.: Energy Demands of Preparation of Warm Water in a Distribution System without Circulation. In: Proceedings of National Conference on Building – Energy 2008. Energy Certification of Buildings. Podbanské. The Slovak Society for Environmental Techniques in Bratislava. 2008. ISBN978-80-89216-23-9. pp. 27-30 (in Slovak) (Potreba energie na prípravu teplej vody v distribučnom systéme bez cirkulácie)

VALÁŠEK, J.: Concept of Heating Warm-Water Which Defines the Criteria for Energy Efficiency. In: Proceedings of International Conference on Heating 2008. Energy Efficiency of Heat Delivery (Energetická efektívnosť zásobovania teplom). Tatranské Matliare. The Slovak Society for Environmental Techniques in Bratislava. 2008. ISBN978-80-89216-19-2. pp. 47-50 (in Slovak) (Spôsoby ohrevu pitnej vody určujú kritériá energetickej hospodárnosti)

Books

BEKÖ, G.: Removal of Particles from the Air Supply of Ventilation Systems to Avoid the Formation of Air Pollution Sources. Delivery of Clean Air to Building Occupants: No. 57. Bratislava, The Faculty of Civil Engineering, 2008. 131 pp. ISBN978-80-227-2874-4 (in English)

DAHLSVEEN, T., PETRÁŠ, D., CHMÚRNY, I., SMOLA, A., LULKOVIČOVÁ, O., FÜRI, B., KONKOL, R.: Energy Audit and Certification of Buildings. - Bratislava: Jaga Group, 2008. - 163 p. ISBN978-80-8076-063-2 (in Slovak) (Energetický audit a certifikácia budov#1038/06/2008#)

PETRÁŠ, D., LULKOVIČOVÁ, O., FÜRI, B., TAKÁCS, J., MATUŠKA, T.: Low Temperature Space Heating and Renewable Energy Sources. - Bratislava: Jaga, 2008. - 250 pp. ISBN978-80-8076-069-4 (in Czech) (Nízkoteplotní vytápění a obnovitelné zdroje energie)

LULKOVIČOVÁ, O.: Solar Energy. In: Low Temperature Space Heating and Renewable Energy Sources. Bratislava. Jaga. 2008. ISBN978-80-8076-069-4. pp. 74-105 (in Czech) (Sluneční energie)

FÜRI, B.: Environmental Energy. In: Low Temperature Space Heating and Renewable Energy Sources. Bratislava. Jaga. 2008. ISBN978-80-8076-069-4. pp. 141-180 (in Czech) (Energie prostředí)

LULKOVIČOVÁ, O.: Heating. Heating Sources. In: Building Services. The Rules for the Design, Evaluation, and Application of Internal Piping and Equipment (Technické zariadenia budov. Stavebno-technické zásady pre navrhovanie, posudzovanie a realizáciu vnútorných rozvodov a ich zariadení predmetov). Verlag Dashöfer, Bratislava. 2008. 40 pp. (in Slovak) (Vykurovanie. Zdroje tepla)

SZÉKYOVA, M.: Air Conditioning. In: Building Services. The Rules for the Design, Evaluation, and Application of Internal Piping and Equipment (Technické zariadenia budov. Stavebno-technické zásady pre navrhovanie, posudzovanie a realizáciu vnútorných rozvodov a ich zariadení predmetov). Verlag Dashöfer, Bratislava. 2008. 40 pp. (in Slovak) (Vzduchotechnika)

TAKÁCS, J.: Geothermal Energy. In: Low Temperature Space Heating and Renewable Energy Sources. Bratislava. Jaga. 2008. ISBN978-80-8076-069-4. pp. 106-140 (in Czech) (Geotermální energie)

TAKÁCS, J.: Heating. Alternative Energy Sources. In: Building Services. The Rules for the Design, Evaluation, and Application of Internal Piping and Equipment (Technické zariadenia budov. Stavebno-technické zásady pre navrhovanie, posudzovanie a realizáciu vnútorných rozvodov a ich zariadení predmetov). Verlag Dashöfer, Bratislava. 2008. 40 pp. (in Slovak) (Vykurovanie. Alternatívne energetické zdroje)

DEPARTMENT OF LANGUAGES

Department Head
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1. Education

1.1 Graduate study

Optional Subjects

English
German

1.2 Postgraduate courses

Ph.D. courses in advanced English and German.
UNlcert – ESP certificate courses in English and German.

2. Research

2.1 Research projects

Soil – Structure Interaction Under an Intensive Load.
Research team leader: doc. Ing. Jozef Kuzma, PhD.
Recipients: V. Pišteková, V. Števove (VEGA 2135/05)

Lifelong Learning Programme 2007-2013, Leonardo da Vinci.
Research team leader: Kristin Brogan, Recipients: D. Špildová, V. Lesňáková (LLP/LdV/TOI/2007/IRL-501 VOCAL-VOCAL LdV)

Improvement of the Awareness of Students of Secondary School and Their Preparation for Study at the Faculty of Civil Engineering in Bratislava.
Research team leader: prof. Ing. Jozef Oláh, PhD. Recipients: D. Špildová, I. Habajová, T. Filipoiu, A. Pálová, S. Vašková (ESF-JPD BA Target 3, No. 131 1202 42)

Complete language transformation and personal covering of computer modeling study program.
Research team leader: doc. RNDr. Angela Handlovičová, PhD. Recipients: T. Filipoiu, J. Něničková (No. 131 201 202 71)

2.2 International cooperation

British Council, Bratislava, Slovakia
University of Washington, Washington, USA
Institute of Technology, Tralee, Ireland

3. Publications

Journals

Něničková, J.: Newark Castle - Friendship - for Learners of English - February 2008,
Published by: FLP for the SR and the CR

Něničková, J.: Blarney Castle - Friendship – February 2008,
Published by: FLP for the SR and the CR

Něničková, J.: Groundhog Day - Friendship - February 2008,
Published by: FLP for the SR and the CR

Něničková, J.: Inveraray Castle – Friendship – March 2008,
Published by: FLP for the SR and the CR

Něničková, J.: Achnacarry Castle – Friendship – March 2008,
Published by: FLP for the SR and the CR

Něničková, J.: Oklahoma City National Memorial – Friendship – March 2008,
Published by: FLP for the SR and the CR

Něničková, J.: Walmer Castle – Friendship – April 2008,
Published by: FLP for the SR and the CR

Něničková, J.: Leeds Castle – Friendship – April 2008,
Published by: FLP for the SR and the CR

Něničková, J.: U.S. Holocaust Museum – Friendship – May – June 2008,
Published by: FLP for the SR and the CR

Něničková, J.: Crossword Puzzles – Friendship – May - June
Published by: FLP for the SR and the CR

Něničková, J.: U.S. Holidays – Friendship – September – October 2008,
Published by: FLP for the SR and the CR

Něničková, J.: Ground Zero- Friendship – September – October 2008,
Published by: FLP for the SR and the CR

Něničková, J.: Macy's Parade – Friendship – November 2008,
Published by: FLP for the SR and the CR

Něničková, J.: British Holidays and Celebrations – Friendship – December – January 2008,
Published by: FLP for the SR and the CR

Něničková, J.: St. Paul's Winter Festival – Friendship – December – January 2008,
Published by: FLP for the SR and the CR

Něničková, J.: Christmas Day – Friendship – December – January 2008,
Published by: FLP for the SR and the CR

Filipoiu, T.: Carisbrook Castle – Friendship – May – June 2008,
Published by: FLP for the SR and the CR

Filipoiu, T.: Orford – Friendship – May – June 2008,
Published by: FLP for the SR and the CR

Filipoiu, T.: Big Ben – Friendship – September-October 2008,
Published by: FLP for the SR and the CR

Filipoiu, T.: Trafalgar Square – Friendship – December – January 2008,
Published by: FLP for the SR and the CR

Gambrill, D.: Facebook – Friendship – April 2008,
Published by: FLP for the SR and the CR

Špildová, D.: Who Are Debaters? – Friendship – May – June 2008,
Published by: FLP for the SR and the CR

Špildová, D.: Multicultural Communication – Friendship – September – October 2008
Published by: FLP for the SR and the CR

Špildová, D.: Modern Communication – Friendship
December – January 2008,
Published by: FLP for the SR and the CR

Špildová, D.: Traffic Signs and Security on the
Roads – Friendship – December –
January 2008, Published by: FLP for the SR and
the CR

Vašková, S.: Das Ei von Kolumbus – Hurrá, May –
June 2008,

Editing

1. Gambrill, D., Pišteková, V.: Annual Report 2008
2. Gambrill, D.: Journal of Civil Engineering
Volume XV
2008/1
2008/2
2008/3
2008/4

DEPARTMENT OF PHYSICAL EDUCATION

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1. Education

1.1 Graduate study

Optional Subjects

Aerobics
Basketball
Swimming
Volleyball
Football
Skiing
Bodybuilding
Water Sports /Kayaking, Canoeing/
Tennis
Squash
Floorball
Hiking
Aquagymnastics

Recommended subjects

swimming courses
skiing courses
white water rafting
cross-country skiing
physical fitness exercises
cardio-vascular fitness

2. Research

Cooperation

Training the Faculty of Physical Education and Sports,
Comenius University, Bratislava

DEPARTMENT OF HUMANE SCIENCES

Department Head
Ing. Katarína Heretiková, PhD.

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1. Education

1.1. Graduate Study

Obligatory subjects

Political Science
History of Civil Engineering
History of Civil Engineering & Surveying
Macroeconomics
Construction and Commercial Law
Construction and Land Law
Civil Law
Land Law
Construction and Commercial Law
Entrepreneurship Law
Public Administration
Philosophy
Basic Law
Environmentalism
Geoecology

Optional subjects

Sociology
Globalization
Commercial Law
Engineering Ethics
Construction Law
Environmental Law

2. Research

2.1. Research Projects

Tempus-Tacis Joint European Project 25186-2004: FREL P
– Master's Degree in Environmental Law and Policies in
the Russian Federation, Š. Huszár

3.2 International cooperation

Visit of staff members to foreign institutions

- Tambov State Technical University, Tambov, Russian
Federation
- Czech Technical University, Prague, Czech Republic

4. Publications

Gajniak, Ján: Certain Legal Aspects of Introducing the Euro
Currency in the Slovak Republic Concerning Globalization.
In: Globalization and Changes in the Structure of Economics
and Society. International Colloquium in Bratislava, 25.6.
2008

Gajniak Ján: Basic Legal Cultures of the World and
International Law. In: 70 Years of the Faculty of Civil
Engineering, STU. International Conference, 4.-5.12.2008,
Bratislava.

Gajniak, Ján: The Introduction of the Euro in the Slovak
Republic. In: Projekt - stavba, Year 3, No. 5-6 /2008
Bratislava, 2008, pp. 33-34

Heretiková, Katarína: Engineering Ethics as a Part of the
Humanization of Education on the Faculty of Civil
Engineering STU. In: 70 Years of the Faculty of Civil
Engineering, STU. International Conference, 4.-5.12.2008,
Bratislava.

Heretiková, Katarína: Proceedings of Process of
Globalization and Transformation in the Structure of the
Economy and Society. In: Globalization and Changes in the
Structure of Economics and Society. International
Colloquium in Bratislava, 25.6. 2008 pp. 20-23

Huszár, Štefan, Miščenko, S.V., Popov, Nikolaj Sergejevič,
Kožaček, A.V.: Ecological Engineering Education – A Major
Factor of Sustainable Natural Management and
Development. In: Current Problems of Science and of
Practice, RU/Tambov, 2008, pp. 55-61

Huszár, Štefan: Need for Environmental Education in
Engineering Education. In: 70 Years of the Faculty of Civil
Engineering, STU. International Conference, 4.-5.12.2008,
Bratislava.

Kopšová, Oľga: Legal Regulations in the Waste Disposal
Sector

In: Stavba : mesačník pre stavebníctvo a architektúru, Year
11, No.10, pp. 60-61

Kopšová, Oľga: Some Aspects of Teaching the Subject of
Environmental Law. In: 70 Years of the Faculty of Civil
Engineering, STU. International Conference, 4.-5.12.2008,
Bratislava.

Kopšová, Oľga: Enterprise in the Globalization Process. In:
Globalization and Changes in the Structure of Economics
and Society. International Colloquium in Bratislava, 25.6.
2008, pp. 49-54.

Rybárik, Jozef: Crisis of Civilization, the Globalization
Process and Urgency of Humane Preparation of Students at
Technical Universities. In: 70 Years of the Faculty of Civil
Engineering, STU. International Conference, 4.-5.12.2008,
Bratislava.

Rybárik, Jozef: Policy and Its Entities in the Conditions of
Globalization. In: Current Philosophy and Political
Problems. Proceedings of Scientific Works. - RU / Moscow:
MADI, 2008, pp. 92-97

Rybárik, Jozef: Changes in the Positions and Tasks of
Political Subjects in the Process of Globalization. In:
Globalization and Changes in the Structure of Economics
and Society. International Colloquium in Bratislava, 25.6.
2008, pp. 95-109

Rybárik, Jozef: The Environment and Politics in the
Globalization Process. In: Ecological Crisis – Disasters or
Opportunity? Papers of International Symposium, Zvolen,
SR, 11.9.2008, pp. 51-59

Zajacová Jana: European Law and the Legal Order of the
Slovak Republic . In: 70 Years of the Faculty of Civil
Engineering, STU. International Conference, 4.-5.12.2008,
Bratislava.

Zajacová Jana: Legal Relations in the Ownership of Flats.
In.: Nehnutelnosti a bývanie. Year 3, No.1, pp. 73-83

Zajacová Jana: Recent Developments in the Property
Market for Housing. In: Globalization and Changes in the
Structure of Economics and Society. International
Colloquium in Bratislava, 25.6. 2008, pp. 124-128

DEPARTMENT OF ARCHITECTURE

Department Head
Assoc. Prof. Dipl. Ing. arch. Elena Dohňanská, PhD.

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Fax: + 421 2 5296 1448
E-mail: elena.dohnanska@stuba.sk

1. Education

1.1 Graduate study

Obligatory subjects

History of Architecture and Civil Engineering
History of Architecture and Art 1
Typology 1
Design Studio 1
Design Studio 2
Composition and Colour in Architecture
Typology 2
Bachelor's Work
Typology 4
Typology 5
Design Studio 5 (Civic Buildings)
History of Architecture and Art 3

Optional Subjects

Typology 3
Renovation of Buildings and Preservation of Monuments 1
Urbanism
Drawing and Modelling
History of Architecture and Art 2
Drawing and Composition
Color in architecture
Urbanism 2
Internship
Restoration and Preservation of Monuments 2
Thesis
Special Seminar
Philosophical, Aesthetic and Compositional Principles in Architectural Design
History of Urban and Rural Settlements
History of Drawing and Sketching

Recommended subjects

Ecological Design in Solar Age
Interior Design 2
Color in Architecture2

1.2 Postgraduate courses

Doctoral Degree Study : THEORY AND CONSTRUCTION OF BUILDING STRUCTURES
Typology
Restoration and Preservation of Monuments

2. Thesis

2.1 Bachelor's Work

13 Bachelor's Works

2.2 Graduate Thesis

KŇAŽEK, P.: Leisure Centre Příbovce
Supervisor: E.Dohňanská

A.DANIŠ
Title: Low - Energy Housing Unit and Multifunctional Centre Příbovce
Supervisor: E.Dohňanská

M.TOMÁŠ : Hotel in Old Stone Pit
Supervisor: E.Dohňanská

M.KEŠELÁK: Hotel in Bratislava
Supervisor: P.Bauer

M.ŠULAN: Hotel and Congress Centre in Bratislava
Supervisor: P.Bauer

M.MEŽDEJOVÁ: Wellnes Centre Zemplínske Hámre
Supervisor: P.Bauer

J.HUBINÁK: Leisure Centre
Supervisor: P.Bauer

E.BRÁZDOVÁ: Multifunctional Building in Bratislava
Supervisor: P.Bauer

T.MORAVČÍK: Accomodation Příbovce
Supervisor: P.Bauer

S.VANEK: Piešťany Airport
Supervisor: A.Grandtnerová

R.TÓTH: Thermal Swimming Pool
Supervisor: A.Grandtnerová

P.SIVONŇ: Snooker Club and Hotel
Supervisor: A.Grandtnerová

D.MEDERLYOVÁ: Centre of the Countryside Tourismus
Supervisor: J.Húsenicová

D.ŠEVČÍK: Wellnes Hotel in the Old Stone Pit
Supervisor: J.Húsenicová

M.DUCHOŇ: Low-Energy Housing Unit
Supervisor: W.Kvarda

G.ÁDAM: Market Hall in Petržalka
Supervisor: J.Liščák

K.AMON: Office Building in Petržalka
Supervisor: J.Liščák

T.PECUCHA: Ice Ring
Supervisor: J.Liščák

J.MAJESKÁ: Library in Petržalka
Supervisor: J.Liščák

J.CSOLLEY: Yacht Club Gabčíkovo
Supervisor: J.Liščák

Š.RAFANIDES: Multifunctional Building in B.Bystrica
Supervisor: J.Liščák

D.POTOMOVÁ: Wellnes Hotel Nemce
Supervisor: J.Liščák

M.PAVLE: Dwelling in the Old Stone Pit
Supervisor: Z.Nádaská

M.ONDREJKA: Gallery in the Old Stone Pit
Supervisor: Z.Nádaská

K.ČERŇANSKÁ: Experimental School
Supervisor: Z.Nádaská

M.TIBENSKÁ: Gallery of Glass
Supervisor: Z.Nádaská

M.ZELENAY: Fire Station
Supervisor: P.Sedlák

M.KOMÁROMI: Culturall Centre Príbovce
Supervisor: P.Sedlák

P.WIRTHOVÁ: Gallery in Piešťany
Supervisor: P.Sedlák

M.ZSÓKA: Church
Supervisor: P.Sedlák

J.VESELÝ: Multifunctional Building in Bratislava
Supervisor: P.Sedlák

R.ŽILINSKÝ: Funeral Home Vlčany
Supervisor: P.Sedlák

M.VYCHODIL: Pedestrian Bridge and Wharf in Nitra
Supervisor: V.Šimkovičová

M.PREŠINSKÝ : Funeral Home Prievidza
Supervisor: V. Šimkovičová

T.NOVÁK : Multifunctional Building Levice
Supervisor: I.Turček

3. Research

3.1 Research Projects

Agend 21-Sustainable Development of the Countryside/
Program INTERREG III.A Austria-Slovakia.
(Assoc.Prof.Dipl.Ing.arch. Jarmila Húsenicová, PhD.)
Reg.numb.: 14130200075

Project Management of Design and Construction in Existing
Context, European Specific Qualification-Design and
Constructions in Existing Context, Spatial Planning and
Management of Sustainable Development in Slovakia
(Assoc. Prof. Dipl. Ing. arch. Jarmila Húsenicová, PhD.)

3.2 International Cooperation

Visit of Staff Members to Foreign Institution

Dohňanská E. - CVUT Praha - SvF

Húsenicová J. - Crossborder Cooperation Territory
"Centrope" – Workshop - Municipality Vienna

4. Publications

Dohňanská E.: Renovation of the Folk Architecture,
In.: Proceedings of the International scientific conference -
Buildings in the Countryside 2008./Nitra,18.9.2008 , ISBN
978-80-227-2941-3. - SK / Bratislava :STU, 2008*171804*

Húsenicová J.: - AGENDA 21- Sustainable Countryside
Development Belongs to European Union Innitiative of
INTERREG IIIA Austria-Slovak Republic,

Šimkovičová V.: Architect Bohuslav Fuchs,
In: Stavba 7/ 8 review for architecture and Civil
Engineering , ISSN 1335-5406*167856*, pp. 68-70

Bobota Š.: The Trajectory of a Comet III., Diary 2008 :Union
of Slovak Artists. Exhibition - SK / Bratislava :MRXP,
2008*170865*

Řehák I.: Mint Kremnica Begin to Stamp Slovak Euro-coins,
SITA a.s. 2006-2008, 1377-0308

Bauer P.: New building of the Slovak National Theatre,
www.wikipédia.sk

Sedlák P.: Revitalisation of the Mannor House
Bohunice,INTERREG IIIA.Austria-Slovakia - AGENDA 21 –
Sustainable Development of the Countryside,
In.: Proceedings of the International conference
.Bratislava,SR,10.-11.4.2008 , ISBN 978-80-227-2918-5. -
SK / Bratislava :SVF, 2008*171017*

Department Head
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1. Education

Specialized courses for experts have been provided by the Institute for Forensic Engineering since 1999 in accordance with a program approved by the Scientific Council of the Institute. Experts in property valuation lecture on technical and economic subjects. After approval of the study program, the Faculty of Civil Engineering of the Slovak University of Technology as an expert institute was charged with providing specialized courses in the Building Industry field (No. POA: 0473/22091/2004365/1) and specialized courses (No. POA: 0473/22091/2004/365/2) concerning the performance method of expert activities (experts minimum) by the Ministry of Justice of the Slovak Republic.

1.1 Graduate study

Optional Subjects

Basics of Legal Expertise
Real Estate Valuation

1.2 Postgraduate courses

Specialized courses in the Building Industry field, 450 hours

Specialized courses concerning the performance method of expert activities, 30 hours

Obligatory subjects

Basics of Legal Expertise
Basics of Civil Law
Basics of Criminal Law
Basics of Commercial Law
Methodology of Expert Opinions
Building Structures
Building Materials and Conformity to Certification
Land Registry
Transport Engineering
Building Physics
Planning and Technology of Buildings
Soil Mechanics, Foundations and Mining Work
Analysis of Building Structures
Real Estate Valuation Theory
Evaluating Business Property
Real Estate Valuation According to Previous Price Legislation
Real Estate Value Estimation
Building Act
Water Construction
Real Estate Valuation, Restitution
Real Estate Valuation, Foreign Approach
Defects in Buildings and Their Diagnosis
Estimation of Value of Construction and Design Work
Automated Engineering Work

2. Research

2.1 Research projects

Educational program concept for determining general real estate values in the Slovak Republic (Nič) (project KEGA No.: 3/4104/06)

3.2 International cooperation

Visit of staff members to foreign institution

Institute for Forensic Engineering, Brno, Czech Republic
TZÚS, Prague, Czech Republic

4. Publications

Journals

Nič, M.: New Design Process for Determining the General Value of Construction by the Position-Differentiation Method. In: Soudní inženýrství 2/2008, ISSN 1211-443X, pp. 59-71.

Nič, M.: Development of the Self-Governing Region of Trenčín. In: Almanach znalca 3/2008, ISSN 1336-3174, pp. 3-9

Hudcovská, J. – Gregušová, S.: Trends in the Prices of Real Estate in Relation to Individual Impacts in Time and Space. In: Almanach znalca 4/2008, ISSN 1336-3174, pp. 29-34

Nič, M.: General Value of Buildings and Flats Established by Comparison Methodology. In: Almanach znalca 3/2008, ISSN 1336-3174, pp. 28-39

Rajprichová V.: Preparation of Town-Planning Documentation with Public Participation. In: Alfa a omega stavby, Vol. 2, chap. 3.4, Verlag Dashofer, ISSN 1337-8562

Rajprichová V.: Urban Management and Decision Making. In: Alfa a omega stavby, No. 4/2008, Vol. 2, chap. 3.5, Verlag Dashofer, ISSN 1337-8562

Rajprichová V.: Building Permits for Realising Construction. In: Alfa a omega stavby, No. 4/2008, Vol. 2, chap. 4.2, Verlag Dashofer, ISSN 1337-8562

Rajprichová V.: Constructions, Their Changes, Building and Maintenance Work for Which Building Permits and Notices are Not Needed. In: Alfa a omega stavby, No. 4/2008, Vol. 2, chap. 4.3, Verlag Dashofer, ISSN 1337-8562

Rajprichová V.: Constructions and Remodelling, the Realisation of Which Needs a Notification. In: Alfa a omega stavby, No. 4/2008, Vol. 2, chap. 4.4, Verlag Dashofer, ISSN 1337-8562

Rajprichová V.: Other Constructions Requiring Building Permits. In: Alfa a omega stavby, No. 4/2008, Vol. 2, chap. 4.5, Verlag Dashofer, ISSN 1337-8562

Rajprichová, V.: Building Performance. In: Alfa a omega stavby, No. 4/2008, Vol. 2, chap. 4.6, Verlag Dashofer, ISSN 1337-8562

Conferences

Nič, M.: Assessing Expert Activities in Slovakia. Seminar 2811 Nemovitosti, 13 -14 November 2008, Hotel Devět skal, Sněžné-Milovy.

Nič, M.: The Activity of the Institute for Forensic Engineering of the Faculty of Civil Engineering of the Slovak University of Technology in Bratislava. In: Proceedings of International conference on 70 Years of FCI SUT, 4 – 5 December 2008, Bratislava, ISBN 978-80-227-2979-6

Korec, I. – Nič, M.: Development of Opinions on the Value of Real Estate in the Slovak Republic. In: Proceedings of International conference on 70 Years of FCI SUT, 4 – 5 December 2008, Bratislava, ISBN ISBN 978-80-227-2979-6

Rajprichová, V.: Urban Activities in the Field of Urban Management. In: Proceedings of International conference on 70 Years of FCI SUT, 4 – 5 December 2008, Bratislava, ISBN ISBN 978-80-227-2979-6

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SLOVAK UNIVERSITY OF TECHNOLOGY
BRATISLAVA 2009
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