

Annual Report 2011

Activities
of the Faculty of Civil Engineering

BRATISLAVA

**© FACULTY OF CIVIL ENGINEERING
SLOVAK UNIVERSITY OF TECHNOLOGY
IN BRATISLAVA**

AUTHORIZED CONTRIBUTIONS FROM THE DEPARTMENTS

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REPORT OF THE DEAN

According to Act No. 131/2002 Coll., on universities, providing a university education and creative scientific research are the main tasks of any university or faculty. Besides the Act on Higher Education, the activities of the Faculty of Civil Engineering are ruled by the Statute of STU, the Statute of the Faculty of Civil Engineering of STU and other principal documents of the Faculty, including the Long-Term Development Goals of the Faculty. An essential and inherent part of the process of evaluating the Faculty is also reassessing if the Faculty is currently meeting the primary tasks and aims which have been incorporated in the document "The Long-Term Development Goals of the Faculty of Civil Engineering of STU in Bratislava from 2011 to 2015," which assessed the goals intended for the year 2011.

Education

In accordance with the Bologna Declaration, education at the Faculty of Civil Engineering has three levels that implement the credit system for assessment. In the academic year 2010/2011, there was a standard structure of study programs, but the offer of Master's degree study programs was changed for the academic year 2011/2012. The study program of Environmental Engineering was replaced by the study program of Land Protection Structures, and the study program of Structures of Civil Engineering Works was replaced by the Structures of Buildings program. The study program of Civil Engineering at the Master's degree level with instruction in English was reopened.

Study Programs

Overview of the study programs in the academic years of 2010/2011 and 2011/2012:

Bachelor's degree study programs:

1. Geodesy and Cartography
2. Structural and Transportation Engineering
3. Environmental Engineering
4. Mathematical and Computational Modeling
5. Building Structures and Architecture
6. Civil Engineering (instruction in English)
7. Building Technologies and Management
8. Hydraulic Engineering and Water Resources Management

Master's degree study programs:

1. Architectural Constructions and Design
2. Environmental Engineering/Land Protection Structures
3. Geodesy and Cartography
4. Structural and Transportation Engineering
5. Landscape Engineering and Planning
6. Mathematical and Computational Modeling
7. Structures of Civil Engineering Works/ Structures of Buildings
8. Building Structures and Architecture
9. Building Services
10. Technology of Building Environments
11. Building Technology
12. Hydraulic and Water Resources Engineering

Doctoral study programs:

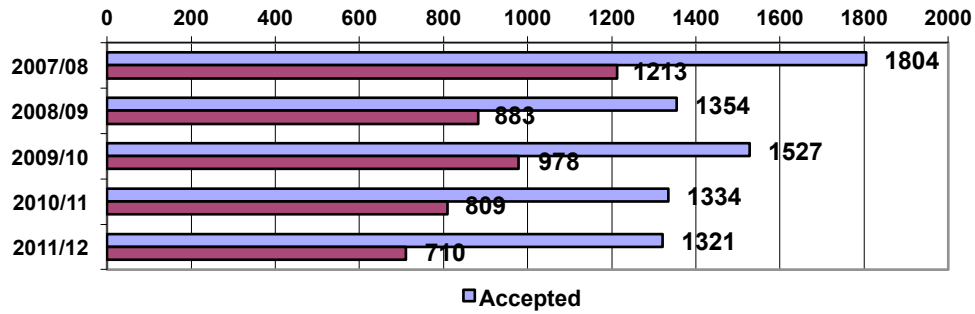
1. Theory and Structures of Civil Engineering Works
2. Applied Mechanics
3. Landscaping
4. Geodesy and Cartography
5. Theory and Construction of Building Structures
6. Theory and Technology of Building Environments
7. Building Technology
8. Applied Mathematics
9. Water Management Engineering

Studies at the Faculty

The entrance examinations for the bachelor and engineering studies took place in compliance with the rules that were passed a few years ago. We are pleased that the number of secondary grammar school graduates is rising. The ratio of bachelor students and students at the Master's degree level has gradually been changing in favor of the number of students in the Master's degree study programs. Due to steady output within

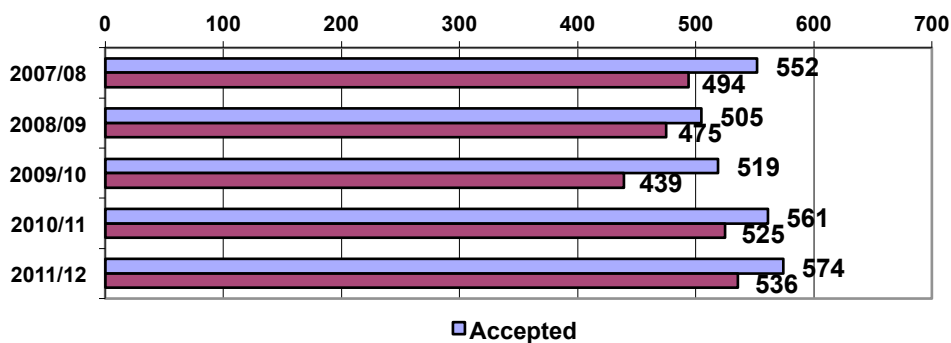
the area of science and research, the number of students in the third level programs is slightly growing. **The total number of students at the Faculty has stabilized for a few years.**

Number of students accepted and students enrolled in the first year of B.Sc. studies



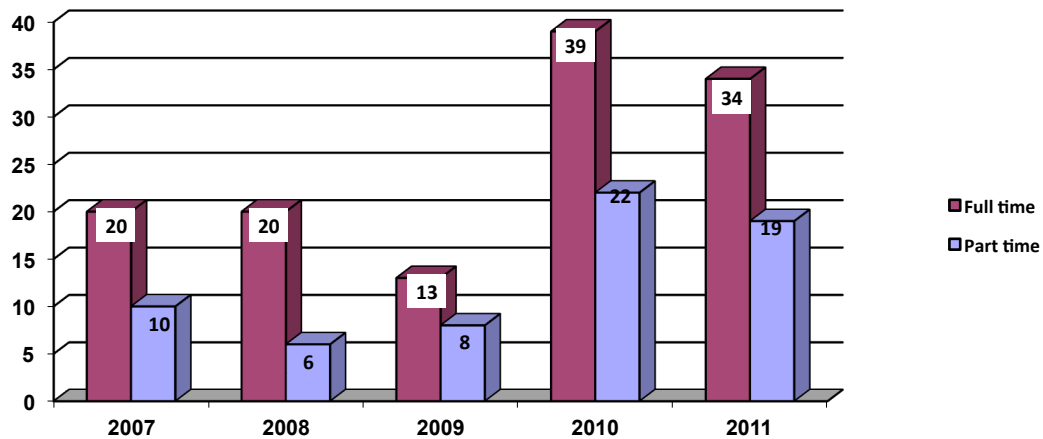
In spite of the high number of applicants for studies at the Faculty, the number of students enrolled in the first year of bachelor studies is falling, and we have noticed a long-lasting trend of a substantial decrease in the number of students who were expected to continue to their second year of studies. The reason for the decline is that some students cannot cope with the study requirements and tend to give up their studies during the first year. In the past academic year the number of students decreased by 14% after the first year of studies; however, that percentage is lower in comparison to the academic year 2010/2011 in which the number decreased by 18%. There is also a continuing problem for students to pass the last year of their bachelor studies successfully. Out of the total number of 921 students in the final year of their studies, only 59% achieved their bachelor degree in 2011. At the engineering level 85% to 90% of the students complete their studies successfully.

Number of students accepted and students enrolled in the first year of M.Sc. studies



In the last two years the number of successful graduates in the study programs at the doctoral level has increased. The Presidium of the Faculty has paid special attention to achieving a higher number of doctoral students out of those who were the best students at the engineering level with good foreign language skills, as well as some experience gained from international mobility. Funding these doctoral students was not only covered by the financial resources allocated by the Ministry of Education of the SR, but also from other resources. The academic standards at the doctoral level are rising, but they still have not reached the quality desired. Within the process of the Faculty's complex accreditation, the 4-year doctoral study programs have been accredited. As a result, the Faculty's management anticipates that the doctoral students will be considerably more successful and that most of them will complete their studies within the given time interval. It appears that this category is becoming the only source and prospect in the process of the gradual replacement of the Faculty's employees and its natural rejuvenation.

Number of graduates in doctoral studies



Within the framework of the EU Erasmus program, the Faculty is facilitating part of the studies abroad for our students (the usual length of the mobility is one semester). In the academic year 2010/2011, twenty two out of thirty students who applied from our faculty studied at universities abroad; in the previous year forty two applied and twenty studied abroad.

In the recent past we have managed to stabilize the number of **foreign students** interested in studies at the Faculty of Civil Engineering, especially in the Civil Engineering study program, which conducts full-scale instruction in the English language. We are pleased that the number of foreign students, including those who come from EU countries, is gradually rising on the engineering as well as the doctoral levels. In the academic year 2011/2012 the Faculty registered a total number of 141 foreign students in all the study programs. As the Faculty has managed to re-accredit the CE study program at the Master's degree level, instruction is being carried out on both levels of the CE studies. Many students, who are mainly from Lithuania, Slovenia, Spain and Germany, were able to obtain scholarships from the ASIA Link Program or the LLP- Socrates programs, and they were able to write their bachelor or engineering theses during their study stay.

Providing a high-quality education is the primary function of universities. The Faculty management is fully aware that the quality of teaching extensively depends upon the quality of the control and supervision of this process on all levels. We have started a new system for the evaluation and control of the quality of the Faculty's teaching. The principal documents for the system were prepared, discussed and approved by the Faculty boards. The system is generating improvements in the monitoring of the quality of the teaching process and is creating efficient feedback. An integral part of the system is supporting the activities and competencies of the guarantors of the study programs.

In accordance with the Law on Universities, evaluations of the teaching process belong among the main rights of students. Not only does the Presidium of the FCE, STU perceive evaluations of the teaching process to be a student right, but it also sees such evaluations as a source of information on the strong and weak aspects of the teaching process and services provided for the students as well as a means of enhancing their quality. In the academic year 2010/2011 **evaluations of the teaching process via the Academic Information System** took place for the fifth time. The survey was made available to the students towards the end of the two semesters and during the examination periods in December and January for the winter semester and in May and June for the summer semester. Considering the Faculty's experience from previous years, these terms seem to be the best times to conduct the survey. The Presidium of the Faculty was concerned with a trend indicating the declining interest of the **students to evaluate the teaching process**; therefore, it organized an information campaign in cooperation with the Student Association of FCE, by which it explained the importance of the survey for enhancing the quality of the teaching process. Furthermore, the participants were offered some prizes if they completed the survey. These efforts resulted in a higher number of respondents to the survey, i.e., 939, an increase from 7% to 25% out of the total number of students and a higher number of filled-in ballots from 1,420 to 6,238. The results of the survey showed that the students perceived most of their lecturers in a positive way, and there were fewer unfavorable evaluations. The comments and suggestions from the students were considered either by the vice-deans in charge of the survey or the Dean of the Faculty. The students could also express their opinions on the teaching process during sessions of the Academic Senate of the Faculty.

The fact that the students of the Faculty of Civil Engineering are given various awards can also be considered an indicator of the quality of their studies. In the previous year our graduates were given seven awards from the Rector, twenty eight awards from the Dean, and two awards from the Minister of Construction and Regional Development; an award from the Minister of the Environment of the SR, an award from the **Geodesy, Cartography and Cadastre Authority of the Slovak Republic** and a few more awards given for attaining prominent places in competitions, as well as awards given by specialized or artist's associations for achieving excellent study results. On the occasion of International Students Day a reception was given by the

Dean of the Faculty for the top 32 students; and he awarded their academic results with merit-based scholarships.

FCE offers courses of **continuing education** following its study branches or programs, which are aimed at the formation of a continuous system of life-long education. In the academic year 2010/11 FCE, STU offered 20 courses to the professional public, which were attended by more than 300 participants. A survey via questionnaires indicated the satisfaction of the participants with their courses. According to the outcomes from the survey and information furnished to the Faculty on the conduct of the courses, we assume the quality of the courses to be very good. In general, the courses were highly appreciated by the participants, especially the high level of the instructors' preparation and conduct of the courses, as well as the prepared texts.

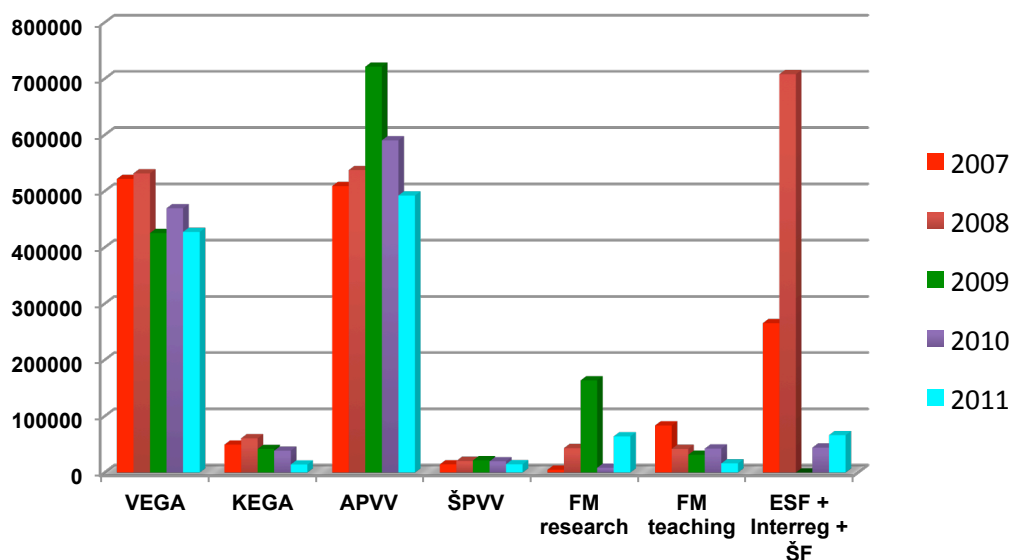
Research

In compliance with the provisions of the Act on Higher Education, science and research are an integral part of university education activities. **The Scientific Board**, which plays a major role in determining the direction of the scientific research activities of the Faculty, was newly constituted and approved by the Academic Senate of the Faculty on 25 February 2011. It was formed from 29 members of the Scientific Board and 11 honorary members. This newly constituted Scientific Board held a meeting three times and discussed the Annual Report from the previous year, the scientific-research goals of FCE from 2011 to 2014, the syllabus for the following academic year and the personnel necessary to cover the teaching process (guarantors of subjects, the constitution of state examination boards, supervisors, etc.), current problems of re-accreditation and accreditation as well as an assessment of the pedagogical and scientific-research work of the Faculty for the previous year. An important part of the activities of the Scientific Board is the approval of professional promotions and discussions of proposed promotions of regular employees (two conferments, one inauguration and one proposal for a 'visiting' professor) and proposals from the Slovak Academy of Science and the Faculty of Civil Engineering of Zilina University concerning branches that do not have the appropriate institutions to authorize inaugurations.

Over the long run the strategy of the scientific-research work of FCE, STU in Bratislava is based on the national policy on science as well as the predicted European and world trends in civil engineering and geodesy. The bodies of the Faculty discussed, and the Scientific Board approved, a new principal research orientation, while considering the condition of the experimental bases of the departments, the development of which was a priority for achieving a higher standard of outcomes. In the field of scientific-research activities, the Faculty of Civil Engineering will aim at intelligent construction and transportation systems, modern materials and constructions, modeling of the processes of the internal environments of buildings, protection of the environment and renewable energy sources, automatic control systems in civil engineering, the safety and reliability of constructions, optimizing plans, exploitation of hydraulic structures and their interactions with the environment, and integrated protection from hydrospheric extremes, including the monitoring of global and regional changes to the environment. The Faculty will constantly disseminate information to the practice about the creation and updating of international, European and domestic norms, as well as realizing tasks requested by companies or institutions.

Grants from the VEGA and APVV agencies are major and relatively stable segments of the scientific-research work of the Faculty. Within the framework of the Slovak Republic, FCE has been successful in attaining grants; however, the ratio of grants attained from abroad is still too low and does not correspond with the potential of the creative employees of the Faculty. The number of programs requiring variable administrative procedures for the submission and management of projects and uncoordinated calls are quite demanding for the employees who submit them. It is extremely hard (especially for the lecturers) to manage these demands under the university's working conditions. The same is true about the quality of the Faculty and university logistics service for employees submitting projects in spite of certain improvements in this area.

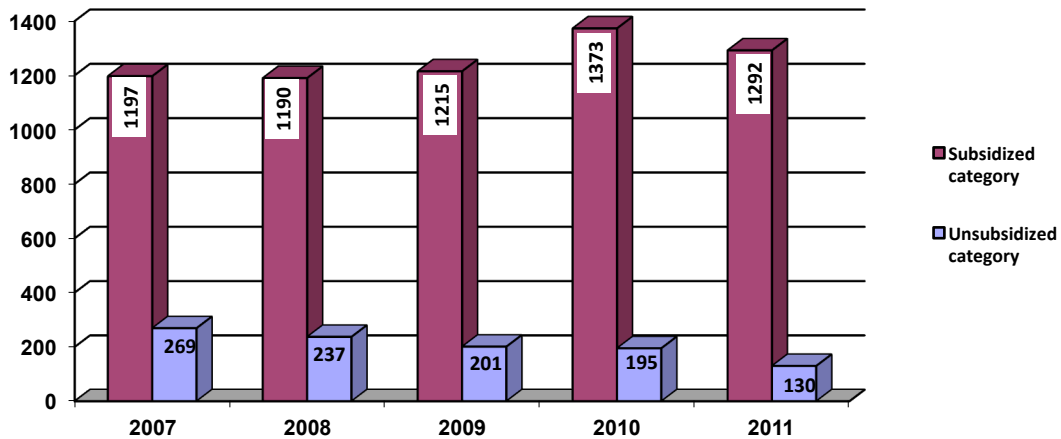
Overview of the financial means allocated for research projects within the previous period in €



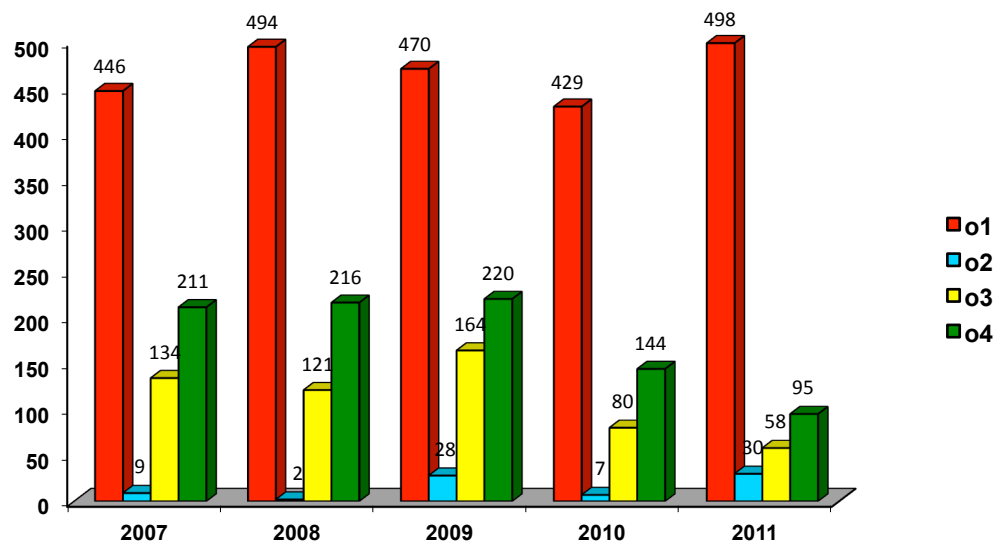
The performance of the individual departments in the field of **scientific-research work** is rather different; there are some very efficient departments, but also departments which could operate better. The Faculty has to prepare for possible changes in the structure of the state policy towards science and research. The Presidium of the Faculty, along with the Scientific Board of the Faculty, has recommended diversifying research activities and focusing on themes that are a priority from the point of view of the EU and SR (e.g., environmental, energy, and transportation infrastructure issues and efficiency in the production and operation of constructions). At the same time it is necessary to improve care of the Faculty's young scientific workers. Our Faculty has therefore paid a higher degree of attention to them. Seventeen applications were submitted to the Faculty in 2011 in response to a call by STU within its program of supporting young researchers; out of those 17, 10 received a subsidy from the University, and three projects were supported by the Faculty from its own resources.

The results of the scientific-research work of the universities and faculties have been constantly reflected in the allocation of the subsidy from the Ministry of Education of the SR. Systematic research work substantiated **by publications** is one of the primary conditions for the success of the Faculty and the professional growth of its employees. Therefore, the Presidium of the Faculty strives at all control levels to ensure favorable conditions for creative work, including publishing work. The absolute number of works published could result in a false sense of self-satisfaction, especially due to the rapid increase in the number of publications. It is important to demonstrate a high number of so-called subsidized publications to guarantee financial resources from the Ministry of Education. It is encouraging that the percentage of subsidized titles is growing steadily every year. As of 28 December, 2011, the percentage of unsubsidized publications represented only 9.5% in comparison to the year 2010, when there were 12% of such publications. The Faculty is concerned that only a relatively small number of its creative employees considers publishing work as an essential part of their activities and also that the subsidized publications have an unsuitable structure. There are very few outcomes from FCE belonging to the category of the mostly highly valued ones, which is important for the Faculty's future. The successful accreditation of the Faculty, continuing financial resources for its functioning, and the professional growth of its employees as individuals depend to a great extent upon the quality and amount of publications. The task for the next period of time is to create an atmosphere in which any specialized work at a department will result in publication.

Overview of the publishing activities at FCE in subsidized and unsubsidized categories during the years 2007 to 2011 (situation as of 10.1.2012)



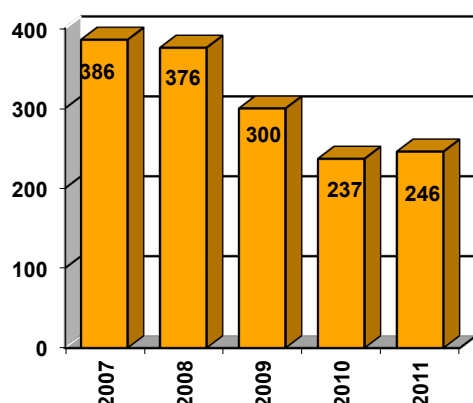
Graphic illustration of the number of citations from publications of FCE employees from 2007 to 2011



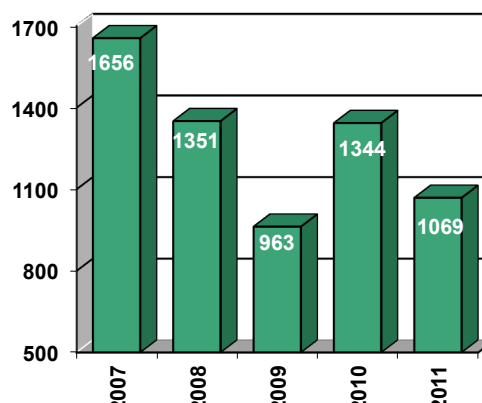
- o1 – Citations in foreign publications registered in the Web of Science and Scopus database citation indexes
- o2 – Citations in domestic publications registered in the Web of Science and Scopus database citation indexes
- o3 – Citations in foreign publications unregistered in citation indexes
- o4 – Citations in domestic publications unregistered in citation indexes

There is a long-lasting tradition of so-called **contracted research**. This means conveying the latest information to the civil engineering practice by the resolution of assignments of a non-routine character. Through the number of contracts and the financial budget in the last four years, we can see interest in these activities gradually decreasing. At the same time the civil engineering practice is still interested in the expert work of our employees. The Presidium of the Faculty will continue to support these activities in the future, as they constitute direct links with the practice by facilitating the application of theoretical knowledge in the resolution of demanding tasks and also by providing supplementary financial resources for the Faculty's departments.

Overview of the number of entrepreneurial contracts from 2007 to 2011



Overview of the financial budget of entrepreneurial contracts from 2007 to 2011 (ths. €)



International Cooperation

Due to the activities of its employees, FCE, STU is currently participating in all the significant EU programs, including the **TEMPUS, SOCRATES-ERASMUS, and LEONARDO da VINCI II** educational programs, but we also have to mention other international activities, especially the **CEEPUS program** and bilateral programs based on our employees' contacts with foreign partner universities. A total of nine projects within various forms of EU framework programs were submitted in 2011. The number of applications is perceived positively.

In the year 2011, the Faculty of Civil Engineering was involved in the ongoing **6th Framework scientific** and research program. We should not neglect to mention the Faculty's other international activities, especially the CEEPUS II program, Visegrad Group programs, and the great amount of interest shown by our PhD students in the scholarship programs offered by the SAIA agency. A total of 17 projects were submitted by the Faculty via the Project and External Affairs Department (Table 1)

Table 1 – International Projects Submitted in the Year 2011

Program	Title of Project	Principal Researcher	Department
FP7- IDEAS - ERC - 2011-ADG_20110209	Possibilities of Using an Innovative Tunnel with a Critical Layer for Modeling Urban and Topographic Units	Assoc. Prof. Húšťava	KPS+SME
FP7- IDEAS - ERC-2011-ADG_20110209	Nonlinear Partial Differential Equations for 4D Image Analysis and Further Applications	prof. Mikula	MDG
FP7- INFRASTRUCTURES - 2011 -2	e-Platform for the Multiscale Reconstruction of Animal Models	prof. Mikula	MDG
FP7- PEOPLE – 2011- IAPP	Improving Access to High Accuracy Simulation Models	Ing. Rabenseifer	KPS
FP7- PEOPLE – 2011- IRSES	EPBD and Standards	Prof. Oláh, Ing. Rabenseifer	KPS
FP7- Fission-2011	Study to Support Implementation of Geological Deposits in a DEEP Underground	Ing. Chabroňová	GTE
FR7-ENV-2011-ECO- INOVATION	Development of Computerized Monitoring System for Eco-Innovative Containment of Hazardous Materials	Assoc. Prof. Lukovičová	FYZ
FP7-SEC-2011-1	Advanced Supply Chain for Land, Air and Maritime Crisis Management with Knowledge Management System in Central Europe	Assoc. Prof. Hlavčová	VHK

Program	Title of Project	Principal Researcher	Department
FP7- IDEAS – ERC-2012 –StG_20111012	High -Resolution Gravity Field Modeling of the Earth	Ing. Čunderlík	MDG
LLP – Leonardo da Vinci	Lifelong Learning Project in the Field of Multi-Storey Buildings	Assoc. Prof. Sandanus	KDK
LLP - Leonardo da Vinci – Transfer inovacii	TURMOD	Prof. Šoltész	HTE
LLP - Erasmus Mundus Action 3 Project 2011	European Environmental Engineering Education for Industrialized Countries (E4ICs)	Assoc. Prof. Stanko, Ing. Mahriková	ZEI
Višegrad Small Grants 11040095	Mobilita 11	Prof. Bezák	DOS
COST Cost -action	Towards Sustainable Construction Through Interdisciplinary and European Consensuses	Prof. Gašparík	TES
TEMPUS 517340 – TEMPUS -1-2011 -1- IT SMGR	Documentation for Quality Assurance of Study Programmes	Assoc. Prof. Lukovičová	FYZ
NATO Ac4	Defence-Related Environmental Issues	Ing. Mahriková	ZEI
Sciex	MUSTANG - MULTivariate HM	Dr. Gaal	VHK

Public Relations

The Faculty has to extensively present its activities even within our own country. Year by year the role of **Public Relations** has become more important in informing the public about the range of study programs at the Faculty, our graduate job prospects and the promotion of the civil engineering professions. In accordance with the Long-Term Goals of the Development of the Faculty of Civil Engineering, the Faculty's Public Relations activities cover the most fundamental areas, including the promotion of studying at STU, student life, representing the Faculty at trade fairs and professional and scientific events, activities of the Industrial Board, competitions, media activities, social events and care of its employees.

The Faculty regularly attends an international fair featuring education after post-leaving examinations as well as the **AKADEMIA and VAPAC** exhibitions to promote its academic offerings. This year the fair was held October 4-6, 2011, at the Sibamac Arena of the National Tennis Center in Bratislava. FCE promoted its study programs by offering extensive information on its academic subjects as well as the role of education in enhancing one's professional life and future job opportunities.

The Faculty organized an Open Door Day on February 10, 2011, with almost 600 students from various secondary schools visiting the Faculty. The Faculty's representatives informed the students about the entrance examination for the Bachelor's Degree studies, the required level of mathematics and physics for the entrance examination and about opportunities to attend preparatory courses for the entrance exam. The student representatives focused on the more pleasant aspects of Faculty life outside the classrooms, including sports facilities and student parties for relaxing and having fun.

One of the top priorities and, at the same time, the most monitored form of promotion of study at the Faculty is its **web page**. We therefore pay great attention to the information that appears on the web page to keep it reliable, up to date and thorough. Publishing the electronic version of our quarterly Faculty journal **INFORMÁCIE** also contributes to these efforts.

In 2011, seventeen visits to secondary schools across the entire Slovak territory were conducted by our colleagues in order to acquaint students with the Faculty. Possible applicants received detailed information on the studies and professional profiles of our graduates. A group of 20 students from the Secondary Technical School of Civil Engineering in Hurbanovo especially requested a visit to the Faculty in March 2011. They received all the information they needed about the study programs at our faculty.



The Faculty makes an effort to help the students admitted to their alma mater 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 are organized on a regular basis on the grounds of the Faculty. They present all the training methodology – project information, the construction solution of designs, and finally, the design of details. The professional public that attend the exhibitions in considerable numbers as well as the students greatly admire the works presented.

A "Job Auction" is organized on a regular basis for graduates of the Bachelor and Master's degree studies. Seven companies attended the latest auction held April 12-13, 2011, and offered available jobs to the students. At the same time the auction has proved to be a good opportunity to provide information and training for students and the professional public on new construction materials and technologies.

Great attention has been paid to the promotion of the Lifelong Learning program. 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 a CD issued by the Faculty and on the Internet pages of the individual departments. In addition, the courses are promoted via scientific journals and professional undertakings (conferences, seminars, etc.) organized by the Faculty and its departments.

As a part of the traditional **STUDENT SCIENTIFIC CONFERENCE**, which was held on April 13, 2011, 232 students participated with 200 works in 19 sections. One hundred prominent specialists from the Faculty and professional institutions worked on expert commissions. Prizes for works by students finishing in the first, second and third places were awarded to 75 competitors. Sections with 11 or more works also awarded prizes to students finishing in the fourth and fifth places, and 12 works were awarded the Literary Fund Prize.

The Faculty organized a sixth annual competition of Bachelor's degree dissertations known as "ABF SLOVAKIA BAKALAR," which was evaluated on the Faculty's premises on September 27, 2011. A total of 40 Bachelor's degree dissertations from various faculties were registered in four sections. The students from our Faculty registered 18 works and won eight prizes, by which they demonstrated their creativity and competitiveness.

Another competition, **ABF SLOVAKIA – INŽINIERSKA CENA** (AN ENGINEERING AWARD), for the best dissertation in the Master's degree studies was founded this year, with the closing date for the first year on November 15, 2011. An independent expert commission was established. They held a meeting on July 22, 2011, assessed 12 registered dissertations and selected the three best ones, which were sent to the organizer of the competition.

The PhD students participate in a competition, which is organized on a regular basis every year in the autumn. The winner can present their work at the JUNIORSTAV international conference in Brno, with their full costs covered. These financial awards to our students are possible due to the support furnished by the Faculty's sponsors, the Alumni Club of FCE and, above all, the members of the FCE 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 are held under the auspices of the Xella Company and are organized with the cooperation of the Faculty. In the academic year 2010/2011 the task of this competition was to design an annex to the concert hall of the existing functionalistic building of the Czech Radio-Broadcasting in Plzeň. Two students from our Faculty studying in the Building Structures and Architecture program were ranked at the top.

Dexia Bank Slovakia announced a national **Competition for the Dexia Bank Award** for the best dissertation supporting the development of cities, municipalities and regions in Slovakia with the twin goals of assisting the regional development of Slovakia and helping students achieve their potential at the various university faculties in Slovakia. The Bank also wants to stimulate young people to continue their careers in the Slovak region. Two works from our Faculty were entered in the competition.

Our Faculty was successful at the **BROWNFIELDS SLOVNAFT 2011** student competition, which SLOVNAFT, plc., announced for postgraduate architecture students. A total of 19 works (**nine** from our Faculty) dealt with architecture and urbanism – regional plans, protected zones, utilities, legislative restraints, etc. One of our students, Barbora Szabóová, Bc., from the Department of Architecture, won the main award in the architecture category for her project on converting old factories into cultural and social centers.

The FCE was also successful in the most popular national competition for the best dissertations of graduates from the schools of architecture in Slovakia – **CENA PROF. JOZEFA LACKA** (THE AWARD OF PROF. JOZEF LACKO). The juries from the respective schools of architecture nominated 21 graduate projects for the competition; three of them were from the Department of Architecture. Ing. Juraj Lutišan, a graduate of the Department of Architecture, won the **PRO ART** award for the best standard of expression and artistic worth of an architectural project on the topic of "The Embassy of the SR in Berlin."

NEMETSCHKE, a world-famous producer of software for architects and civil engineers, held an international structural architecture-student competition, the **ALLPLAN CONTEST**. M. Chudej, a Building Structures and Architecture student, was awarded the **PUBLIC PRIZE** in this very competitive environment.

In 2011, professionals from the Faculty took part in an assessment of the national competition, "**CONSTRUCTION OF THE YEAR,**" organized by ABF Slovakia, as they traditionally do every year. This year 30 constructions were entered into the competition to attain the title of "Construction of the Year 2011." Sixteen

of them were from Bratislava and 14 from other regions of Slovakia. A maximum of 13 constructions won an award. Prizes were awarded to nine constructions from Bratislava and five constructions from other regions.

The Faculty, as the sponsor and professional guarantor, offered the **AWARD OF THE FACULTY OF CIVIL ENGINEERING STU FOR IMPLEMENTATION OF SCIENCE AND TECHNOLOGY IN THE REALIZATION OF CONSTRUCTION WORK**. This award was given for the reconstruction and renovation of the **KOCH Gynecological-Maternity Ward** historical building.



events by organizing a conference entitled **PREPARATION, PLANNING AND REALIZATION OF ENGINEERING CONSTRUCTIONS**.

The promotion of the Faculty is apparent from the numerous regular professional events (conferences, symposia, seminars, etc.) at the professional academic premises of the fair. There were more than 30 events that reflected the wide-ranging interests of the Faculty professionals, who presented the latest knowledge in science and technology and their practical implementation at these forums.

The Faculty is a regular participant and also an organizer of the **CONECO-RACIONENERGIA-CLIMATHERM Fair** (March 29 – April 2, 2011). This provides an opportunity to make the fair available to the teachers and students under more favorable conditions. The Faculty also contributed to the program of related



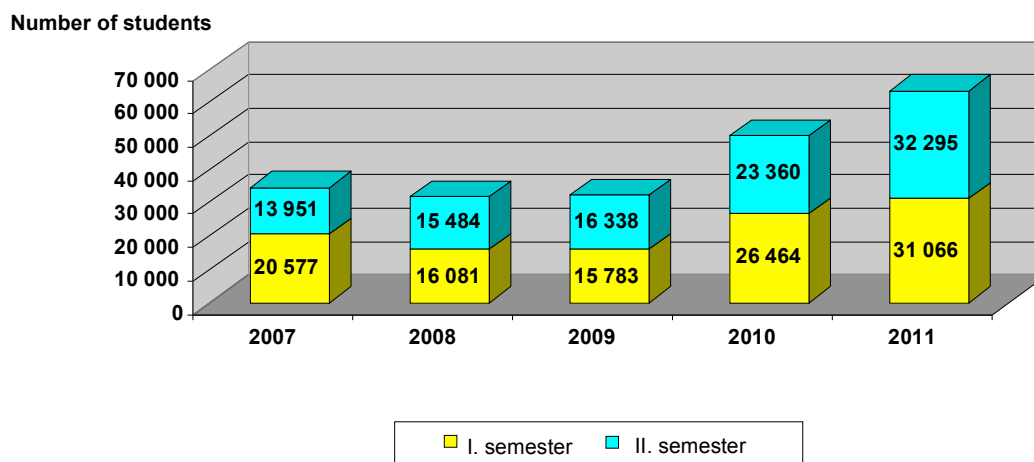
Student Services

In the previous year the Presidium of the Faculty made, besides the teaching process, **improving the standard of services provided to the students** its priority. During the 2011 summer holidays it was necessary to move three computer classrooms to other rooms because of ongoing construction work. An opportunity was thereby provided to renovate the electrical network's infrastructure, reconstruct the 230V cabling, and equip the classrooms with data projectors. Wi-Fi is available in the classrooms in block B, where most classes are held, the atrium, the Faculty library and lecture halls. The students can connect to the Web in these rooms without using any cables in case they need to use their notebooks. The students can also consult on a daily basis with the professionals from the Center of Information Technologies of the Faculty. The computer classrooms are visited by an average of 1,500 students per week, i.e., more than 20,000 students per semester and 40,000 students per year. Twenty PC kiosks located at the main entrance of the Faculty building, the Registrar's Office and the IT Center primarily serve to assist the students with their individual work. The kiosks are available 24 hours a day, seven days a week. IT Center employees have installed 30 connections to the Web in the library to enable students to work individually on their notebooks. This is a practical response to the needs of students to have better access to the STU information system.

The arrangement of specialized zones in the library for notebooks to be connected to the Internet has enhanced the capacity of the reading room and the comfort of its users. This has resulted in higher attendance in the Library and Information Center of the FCE, STU with students spending longer periods of time there on average.

The modernization of the library and its higher quality services had a positive impact on attendance at the library reading room in 2010, which increased by 55% in comparison to the year 2009. There was a continuing trend of increased attendance in 2011 as well. The increased attendance at the library proves that the realization of the modernization project of the academic library at the Faculty of Civil Engineering STU has been successful and that the library has become a vital center for education and the meaningful use of free time during breaks between classes. However, it must be noted that if the increased rate of attendance and interest from the students continues, it will be necessary to find more room for an extension of the library.

Overview of the attendance in the reading room of the Library during the semesters from 2007 – 2011



With its greater number of professional online databases and modern information technologies available, **The Library and Information Center (LIC)** of FCE is trying to actively encourage improvements in the information literacy of its target groups of undergraduates, postgraduates and PhD students through enhancing their ability to achieve excellent results in their educational and scientific outcomes. In the year 2009 the LIC implemented an innovative project that provides a series of elective information seminars for first-year students.

In cooperation with the Registrar's Office an application for the course was sent to all students accepted to studies at the Faculty of Civil Engineering STU. At the beginning of the academic year 2009/2010, a total of 100 first-year students confirmed their interest in taking part in the three-hour seminar held by LIC that provides detailed information on using the

Library's facilities. The following year 200 students showed interest in participating in the information seminars, which means an increase of 100%. The winter semester of the academic year 2011/2012 featured the third year of seminars for the PhD students with the topic of retrieving and maintaining scientific information. The LIC, FCE continuously provides on-line access to tens of electronic databases for its employees and students of the Faculty. In April 2011, the LIC, FCE, was the first academic library in Slovakia to start, on a probationary basis and free of charge, operation of the e-Scan self-service library scanner in its reading room. As the reaction from the students was very positive, the Presidium of the Faculty approved purchasing the self-service scanner for the LIC. Since September 2011 the scanner has been accessible on the landing of the reading room and provides a better degree of comfort for all the students, PhDs and lecturers of FCE for their individual education and scientific work.

Vice-Dean and Prof. Ing. Ján Szolgay, PhD, who is in charge of science and research and the international relations of FCE, and the head of the LIC, FCE, Ing. Silvia Stasselová, welcomed a significant visitor from abroad – Ms. Roberta Stevens, president of the American Library Association, to the LIC of the Faculty of Civil Engineering STU on May 17, 2011.

During her business stay in Slovakia from May 9-17, 2011, the President of the ALA visited the National Science Library in Banská Bystrica and Košice, the University Library in Bratislava and the Library and Information Center of the Faculty of Civil Engineering STU. After her visit to the LIC, FCE, Ms. Stevens sent the following e-mail: *"It was my honor to be able to be here and to meet so many colleagues. Knowing what it takes to rebuild a facility and its services, I especially enjoyed seeing your reading room. Congratulations on your achievement!"*



LIC, FCE provides the students, lecturers and scientific employees of the Faculty with a wide range of titles from professional databases and electronic information sources directly on-line via the IP addresses of the computers in the database center of LIC and via the IP addresses of all the computers at the departments and other offices at FCE, STU. In 2011 the LIC, FCE enabled access to the following **professional databases within the National Information System for the Support of Research and Development in Slovakia:**

- **ACM/Association for Computing Machinery** – nationwide licence within the NISPEZ project ,
- **IEEE/IET Electronic Library (IEL)** - nationwide licence within the NISPEZ project,
- **Knovel** - nationwide licence within the NISPEZ project,
- **ProQuest Central** - nationwide licence within the NISPEZ,
- **ScienceDirect** - nationwide licence within the NISPEZ project,
- **SCOPUS** - nationwide licence within the NISPEZ project,
- **SpringerLink** - nationwide licence within the NISPEZ project,
- **Web of Knowledge** - nationwide licence within the NISPEZ project,
- **Wiley InterScience** - nationwide licence within the NISPEZ project,
- **EBSCO** – nationwide licence covered by the Slovak National Library,
- **APS Journals** – journals of the American Physical Society, a full-text database,
- **Elektronische Zeitschriftenbibliothek** – access to full-texts of 61,000 freely accessible or licensed titles of professional electronic journals.
- The Faculty of Civil Engineering STU provides constant access to the **ASCE Research Library** database – the full-text online database of the American Society of Civil Engineers, from its own financial resources. To enhance the access to and use of the ASCE Research Library, the LIC has created an independent sub-page about the database on the web page of FCE with direct links to the contents of the database: http://www.svf.stuba.sk/generate_page.php?page_id=2099.

In 2011, the students and lecturers of FCE could actively access the following free texts via an offer from LIC. Considering the amount of available information, including data and full texts, this amounted to financial savings of tens of thousands of Euros:

- **ProQuest Technology Collection** database (February-March 2011),
- **Taylor & Francis** database (April 2011),
- **World Public Library** database of electronic books (November-December 2011).

Investment Activities, Renovations, Reconstructions



Many **complex reconstruction** projects of the Faculty's buildings have recently been realized. **Barrier-free access** to the central parts of the Faculty has been achieved as well as the reconstruction of the external cladding of block C of the Faculty of Civil Engineering. In 2011, these positive trends continued. The reconstruction of the heating and cooling facility, the main entrance to the Faculty, a few lecture rooms in block B and department laboratories were completed. The reconstruction of the cafeteria, numerous classrooms on the second floor in block B, the Central Laboratories on Technická Street, and the reconstruction and construction of new buildings at RTEC Kočovce are in progress.

In the summer months 2011, **the window constructions of the lecture rooms in block B** of the Faculty of Civil Engineering (lecture rooms B-005, B-008 and BAT) **were replaced**. These are window constructions with frames based on aluminum alloys with interrupted cold bridges in the B-005 and B-008 lecture rooms and a plastic substance in the BAT lecture room. Both types of windows have modern, low-emission double-glazed systems with closed insulation units. During the same summer period the reconstruction of numerous specialized classrooms, such as a classroom used for foreign language instruction, a classroom for physics and two computer rooms, took place.

In December 2011, **the reconstruction of the large-scale BAT lecture rooms** started. The reconstruction will result in one large room that can be divided into two smaller classrooms by a mobile acoustic partition; each room will have a capacity of 80 students. These lecture rooms will be fitted with new floors and acoustic ceilings; they will be directly illuminated, ventilated and equipped with new high-quality furniture and sockets, so that every student can electrically connect their notebook and use the wireless Wi-Fi computer network.

Although the departments have the responsibility to equip their lecture rooms and cover the related costs, **a fund for the renovation of lecture rooms and department laboratories** was opened in 2007, and the Faculty regularly contributes to the investment activities of the departments. In 2011, the Faculty used 31,532 Euros for renovating the lecture rooms and laboratories of the Departments of Hydraulic Engineering,

Geodesy, Geotechnics, and Building Structures and Architecture. In the coming years the Faculty plans to maintain this internal "grant" system to modernize the lecture rooms and department laboratories.

In the summer of 2011, **the area** in the corridors interconnecting blocks B and C on the second and third floors was redesigned **for the students to work and rest**. They were equipped with sockets for notebooks to be electrically connected. The same standard was maintained in the area behind the lecture hall in block B. This relatively dark area was lightened by removing drywalls and separating it from the glazed walls of the northern façade. New desks and electrical sockets were installed. The students enjoy using this renovated area.

The Central Laboratories (CL) in Trnavka have also been recently restructured. The positive impetus for their revival is the construction of two significant parts of the CL, namely, the aerodynamic tunnel and the geodesy laboratories. In the year 2010 the **design plan for the aerodynamic wind tunnel** was conceived by the Research and Testing Institute of Aviation in Prague. It is a BLWT (Boundary Layer Wind Tunnel) – a wind tunnel with a critical layer for modeling tests of the stresses on buildings and building constructions, specifying the aerodynamic coefficients of external pressure on a building, specifying the aerodynamic impacts in a built-up area and conducting scattering studies close to sources of emissions. In the first half of the year 2011, documents for the realization of the construction work on the aerodynamic tunnel were in progress. In the second part of 2011, the production of components for the tunnel took place.

During the summer 2011, the workers and equipment of the Road Research Laboratory were moved from the building of the Laboratory of Transportation Structures (LTS) to the building of the Laboratory of Load-Bearing Structures, where new offices and halls were prepared for this purpose. In December 2011, reconstruction work at LTS started. This involved replacing transparent window panes, glazed walls and the entrance door; removing unnecessary partition walls and adding new ones to enlarge the offices; reconstructing the sanitary fittings; restoring damaged areas with plaster; renovating parts of floors; adding new decorations and painting doorframes and radiators; and repairing damaged electrical fittings.

In the autumn of 2009, the acquisition of an all-University grant from EU structural funds and part of a grant of 1,373,040 Euros were designated for the construction of a Regional Technical Education Center in Kočovce. Within the grant the Faculty should be allocated an additional 354,730 Euros for information and telecommunications technology related to the facilities of the Center. EU financial resources will cover 95% of the construction costs. In July 2011, construction of the Center was launched. By this time, the earthworks have been realized, the main ditch dug and the screeding of the concrete base finished; the casting of the foundation slab and the rough structure have been completed. By the middle of January 2012, the transparent panes of the construction were installed, so that cabling and wiring installations could be carried out without any disturbances in the winter months.

Part of this investment project is also the reconstruction of the facade of the mansion. At the end of the year the ASFEU agency approved increased investment spending of 192,902 Euros. In 2012, it will be possible to use these financial means for reconstruction of the roof frame of the mansion, use an infusion screen to eliminate damp in the external walls of the mansion, and realize remedial plastering of the external walls, i.e., to realize the complete reconstruction of the facade of the mansion apart from its windowpanes and doors. A project for replacing the windows and doors is being prepared, and we are negotiating with the Regional Monuments Board in Trenčín for its possible financial cover of these activities.

A stable economic environment is a precondition for the successful realization of the Faculty's future investment goals and the participation of the Faculty's employees in international scientific and research projects. Accordingly, it is significant that the Faculty has made a profit in the last few years. This was possible thanks to the profits made from entrepreneurial activities as well as the increased income from the tuition fee of foreign students, among the main activities. In previous years the Faculty has gradually improved numerous performance indicators, resulting in its improved position among leading technical faculties. In the future it will be possible to continue this trend only through a higher degree of quality, both in the Faculty's pedagogy, as well as its science and research activities.

EXECUTIVE BODIES OF THE FACULTY

1. The Dean of the Faculty

Prof. Ing. Alojz Kopáčik, PhD.

2. Presidium of the Faculty

Prof. Ing. Alojz Kopáčik, PhD.

Prof. Ing. Ján Szolgay, PhD.

Assoc. Prof. Ing. Peter Makýš, PhD.

Assoc. Prof. Ing. Vladimír Benko, PhD.

Assoc. Prof. Ing. Boris Bielek, PhD.

Ing. Tomáš Šatura

Assoc. Prof. Ing. Stanislav Unčik, PhD.

Bc. Gabriela Szántová

Ing. Miloslav Štujber

- The Dean

- The First Deputy Dean , Vice-Dean for Science, Research and Foreign Relations

- Vice-Dean for Education

- Vice-Dean for Public Relations

- Vice-Dean for Development of the Faculty

- Financial Manager

- Chairman of the Academic Senate FCE STU

- Chairperson of the Students' Association, FCE STU

- Chairman of the Trade Union Organisation

3. The Dean's Council

Prof. Ing. Alojz Kopáčik, PhD.

Prof. Ing. Ján Szolgay, PhD.

Assoc. Prof. Ing. Peter Makýš, PhD.

Assoc. Prof. Ing. Vladimír Benko, PhD.

Assoc. Prof. Ing. Boris Bielek, PhD.

Ing. Tomáš Šatura

Assoc. Prof. Ing. Stanislav Unčik, PhD.

Bc. Gabriela Szántová

Ing. Miloslav Štujber

Prof. Ing. Juraj Bilčík, PhD.

Prof. Ing. Bystrík Bezák, PhD.

Assoc. Prof. Ing. Juraj Janák, PhD.

Ing. Ján Ježko, PhD.

Ing. Ivan Slávik, PhD.

Prof. Ing. Ján Szolgay, PhD.

- The Dean

- The First Deputy Dean, Vice-Dean for Science, Research and Foreign Relations

- Vice-Dean for Education

- Vice-Dean for Public Relations

- Vice-Dean for Development of the Faculty

- Financial Manager

- Chairman of the Academic Senate FCE STU

- Chairperson of the Students' Association, FCE STU

- Chairman of the Trade Union Organisation

- Head of Department of Concrete Construction and Bridges

- Head of Department of Transportation Engineering

- Head of Department of Theoretical Geodesy

- Head of Department of Surveying

- Head of Department of Geotechnics

- Head of Department of Land and Water Resources Management

- Head of Department of Hydraulic Engineering

- Head of Department of Building Construction

- Head of Department of Steel and Timber Structures

- Head of Department of Mapping and Land Consolidation

- Head of Department of Mathematics and Descriptive Geometry

- Head of Department of Physics

- Head of Department of Structural Mechanics

- Head of Department of Building Technology

- Head of Department of Sanitary and Environmental Engineering

- Head of Department of Building Services

- Head of Department of Languages

- Head of Department of Physical Education

- Head of Department of Humanities

- Head of Department of Architecture

- Head of Institute of Forensic Engineering

- Head of Central Laboratories

Assoc. Prof. RNDr. Jozefa Lukovičová, PhD.

Prof. Ing. Norbert Jendželovský, PhD.

Prof. Ing. Jozef Gašparík, PhD.

Assoc. Prof. Ing. Štefan Stanko, PhD.

Assoc. Prof. Ing. Oľília Lulkovičová, PhD.

PhDr. Dagmar Špildová

PaedDr. Ján Masarovič

Ing. Katarína Heretiková, PhD.

Assoc. Prof. Ing. arch. Elena Dohňanská, PhD.

Assoc. Prof. Ing. Milan Nič, PhD.

Ing. Vladimír Priechodský, PhD.

4. Scientific Board of the Faculty

Members of the Scientific Board (full members from the Faculty)

Chairman: Prof. Ing. Alojz Kopáčik, PhD.

Vice-Chairman: Prof. Ing. Ján Szolgay, PhD.

Prof. Ing. Ján Szolgay, PhD., First Deputy Dean, Vice-Dean for Science, Research and International Relations , Department of Land and Water Resources Management
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 Structures and Bridges
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 Structures
Prof. Ing. Alojz Kopáčik, PhD., Dean of the Faculty, Department of Surveying
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Prof. Ing. Viliam Macura, PhD., Department of Land and Water Resources Management
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Prof. RNDr. Radko Mesiar, DrSc., Department of Mathematics and Constructive Geometry
Prof. Ing. Dušan Petráš, PhD., Department of Building Services
Prof. Ing. Anton Puškár, PhD., Department of Building Structures
Dr.h.c. Prof. Ing. Ján Ravinger, DrSc., Department of Structural Mechanics
Prof. Ing. Milan Sokol, PhD., Department of Structural Mechanics
Prof. Ing. Andrej Šoltész, PhD., Department of Hydraulic Engineering
Prof. Ing. Peter Turček, PhD., Department of Geotechnics
Assoc. Prof. Ing. Stanislav Unčík, PhD., Department of Material Engineering

Members of the Scientific Board (full members from external institutions)

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Assoc. Prof. Ing. Peter Černík, PhD., STRABAG Development Slovakia, Ltd.
Assoc. Prof. RNDr. Ján Feranec, DrSc., Geographical Institute SAS Bratislava
Prof. Ing. Ivan Hyben, PhD., Faculty of Civil Engineering, Technical University of Košice
Assoc. Prof. Ing. Karol Kalúz, CSc., Horticulture and Landscape Engineering Faculty of Slovak University of Agriculture Nitra
Ing. Peter Matiašovský, CSc., Institute of Construction and Architecture SAS Bratislava
Ing. Zoltán Sadovský, DrSc., Institute of Construction and Architecture SAS Bratislava
Prof. RNDr. Daniel Ševčovič, CSc., Faculty of Mathematics, Physics and Informatics of Comenius University Bratislava
RNDr. Vlasta Štekauerová, CSc., Institute of Hydrology SAS Bratislava

Members of the Scientific Board (honorary members)

Prof. Ing. Alena Kohoutková, CSc., Dean of the Faculty of Civil Engineering Czech University in Prague
Prof. Ing. Rostislav Drochytka, CSc., Dean of the Faculty of Civil Engineering, Brno University of Technology
Prof. Ing. Darja Kubečková Skulinová, PhD., Dean of the Faculty of Civil Engineering, Technical University Ostrava
Prof. Ing. Josef Vičan, CSc., Dean of the Faculty of Civil Engineering, University of Žilina
Assoc. Prof. Ing. Vincent Kvočák, PhD., Dean of the Faculty of Civil Engineering, Technical University of Košice
Assoc. Prof. Ing. arch. Ľubica Vítková, PhD., Dean of the Faculty of Architecture, STU Bratislava
Ing. Hedviga Májovská, Chairman Úradu geodézie, kartografie a katastra SR
Ing. Zolt Lukáč, President of the Slovak Association of Construction Entrepreneurs
Prof. Ing. Dušan Majdúch, PhD., Chairman of the Slovak Chamber of Civil Engineers
Ing. Vladimír Stromček, Chairman of the Directorate of the Chamber of Surveyors and Cartographers
Ing. arch. Juraj Šujan, President of the Slovak Chamber of Architects

5. The Faculty's Academic Senate

Chairman:	Assoc. Prof. Ing. Stanislav Unčák, PhD.
Vice-Chairman:	Prof. Ing. Viliam Macura, PhD.
Executive Board:	Prof. Ing. Ľudovít Fillo, PhD., Prof. RNDr. Radko Mesiar, DrSc. Bc. Gabriela Szántová, František Hric

Members of the Academic Senate:

Assoc. Prof. Ing. Rudolf Ároch, PhD., Department of Steel and Timber Structures
Assoc. Prof. Ing. Katarína Bačová, PhD., Department of Transportation Engineering
Assoc. Prof. Ing. Michal Božík, PhD., Department of Building Technology
Mgr. Tatiana Filipoiu, Department of Languages
Prof. Ing. Ľudovít Fillo, PhD., Department of Concrete Structures and Bridges
Ing. Róbert Geisse, PhD., Department of Mapping and Land Consolidation
Ing. Silvia Gregušová, The Institute for Forensic Engineering
Mgr. Zita Herzánová, Department of Physical Education
Prof. Ing. Jozef Hraška, PhD., Department of Building Structures
Ing. Ľuboš Hruštinec, PhD., Department of Geotechnics
Assoc. Prof. Ing. Ladislav Husár, PhD., Department of Theoretical Geodesy
Assoc. Prof. Ing. arch. Jarmila Húsenicová, Department of Architecture
Prof. Ing. Juraj Králik, PhD., Department of Structural Mechanics
Ing. Miroslav Lipták, PhD., Department of Surveying
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Prof. RNDr. Radko Mesiar, DrSc., Department of Mathematics and Constructive Geometry
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Ing. Gabriela Pavlendová, PhD., Department of Physics
Assoc. Prof. Ing. Štefan Stanko, PhD., Department of Sanitary and Environmental Engineering
Ing. Jana Šabíková, PhD., Department of Building Services
Assoc. Prof. Ing. Stanislav Unčák, PhD., Department of Material Engineering
JUDr. Jana Zajacová, Department of Humanities
Vladimír Badura, Gabriel Čipak, František Hric, Beáta Kánová, Bc. Mária Kočnerová, Bc. Soňa Kolenčíková, Anna Kosíková, Bc. Soňa Medvecká, Ing. Monika Novotná, Bc. Gabriela Szántová, Jaroslav Urík, Kristína Vaňová.

6. Industrial Board

Ing. Daniel Baláž, Managing Director of Saint-Gobain Construction Products, Ltd., Division Weber – Terranova
Assoc. Prof. Ing. Vladimír Benko, PhD., FCE STU Bratislava, Vice-Dean for Public Relations
Ing. Imrich Béreš, Prvá stavebná sporiteľňa, a. s. Bratislava, Chairman
Ing. Igor Beroun, Managing Director JOHNSON CONTROLS CZ and SK
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Assoc. Prof. Ing. Boris Bielek, PhD., FCE STU Bratislava, Vice - Dean for Development of the Faculty
Ing. Mikuláš Bobik, CSc., Director of Applied Precision Ltd., Bratislava
Prof. Ing. Ľudovít Fillo, PhD., FCE STU Bratislava
Ing. Ľuboš Fúsek, Director of Baumit, Ltd.
Ing. Marek Gálik, CSc., Managing Director of the Trnava Water Company, a.s. Piešťany
Ing. Ladislav Gáll, 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. Oto Hornáček, Managing Director of Hornex, a.s. Bratislava
Ing. Miloš Klein, Statutory of Wienerberger – The Slovak Brick Factory, Ltd.
Ing. Marián Kmeť, Director of SOLHYDRO, Ltd., Bratislava
Ing. František Kmiť, Director of PREMAC, Ltd., Bratislava
Ing. Tibor Kočvara, Managing Director Skanska SK
Prof. Ing. Alojz Kopáček, PhD., FCE STU Bratislava, the Dean
Ing. Daniel Kvocera, Managing Director of SVP National Enterprise, Banská Štiavnica
Ing. Zsolt Lukáč, President of ZSPS (The Association of Construction Entrepreneurs of Slovakia)
Ing. Ján Majerský, PhD., Director of Proma, Ltd., Žilina
Assoc. Prof. Ing. Peter Makýš, PhD., FCE STU Bratislava, Vice-Dean for Education
Prof. Ing. František Ohrablo, PhD., Honorary Chairman of the Alumni Club of FCE, STU in Bratislava
Prof. Ing. Dušan Petráš, PhD., FCE STU Bratislava
Ing. Slavomír Podmanický, Managing Director of Reming Consult, Slovakia

Ing. Peter Pochaba, Managing Director of ABC Klíma, Ltd., Bratislava
Ing. Jozef Ružanský, PhD., Managing Director of DREVONA a.s. Bratislava
Prof. Ing. Milan Sokol, PhD., STU Bratislava, Vice Rector for the Development of STU
Assoc. Prof. Ing. Peter Suchánek, PhD., REHAU, Ltd., Bratislava
Prof. Ing. Ján Szolgay, PhD., Vice-Dean for Science, Research and Foreign Relations at FCE STU
Ing. Dušan Šamudovský, PhD., Managing Director of Doprastav, a.s.
Alan Šišinački, Holcim Slovakia, Chairman
Prof. Ing. Andrej Šoltész, PhD., The Chairman of the Alumni Club of FCE STU
Ing. Miroslav Trnovský, Statutory of SkyBau, Ltd., Žilina
Ing. Vladimír Uhlík, Managing Director of Geodesy a.s. Bratislava
Assoc. Prof. Ing. Stanislav Unčík, PhD., Chairman of the Academic Senate
Ing. Anton Viazanko, Director of Durisol-Stav, Ltd.
Ing. František Zvrškovec, President of Divident Group Slovakia, Bratislava

DEPARTMENTS

DEPARTMENT OF CONCRETE STRUCTURES AND BRIDGES

Head of Department
Prof. Ing. Juraj Bilčík, PhD.

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E-mail: juraj.bilcik@stuba.sk

1. Education

1.1 Graduate study

Obligatory subjects

Design of Composite Structures
Design of Concrete Bridges I, II
Design of Concrete Members (Slovak and English)
Design of Concrete and Masonry Members
Design of Concrete Structures I, II
Execution of Concrete Structures
High-Rise and Span Structures
Masonry Structures and Bridges
Prestressed Concrete
Reinforced and Prestressed Members
Repair of Concrete Constructions
Special Problems of Concrete Structures

Obligatory elective subjects

Design of Masonry Structures
Design of Environmental Constructions
Experimental Testing of Concrete Structures
Modeling of Civil Engineering Works

Optional subjects

Modeling of Concrete Structures

1.2 Postgraduate courses

Advanced Concrete and Masonry Structures
Advanced Concrete Bridges
Reliability and Strengthening of Concrete Structures
Modeling of Concrete Structures
Structural Materials and Systems
Experimental Testing of Concrete Structures
Advanced Reinforced Concrete Structures

2. Theses

2.1 Bachelor theses

There were 3 works.

2.2 Graduate theses

BASZO, D.: Residential Building: Cast-in-Situ Reinforced Concrete Slab-Wall Structure
Supervisor: HARVAN, I.

BOČEK, J.: Hotel - Staré Grunty, Bratislava: Combined Cast-in-Situ Reinforced Concrete Structure with a Stiffening Core
Supervisor: ABRAHOIM, I.

BREZINOVÁ, M.: Complex of Buildings for Sports: Cast-in-Situ RC Framework Structure and Halls of a Long Span
Supervisor: HARVAN, I.

BUBLIŠ, M.: Multifunctional Building: Cast-in-Situ Hollow Slab Concrete Structure
Supervisor: BORZOVIČ, V.

DUBOVÁ, A.: Office Building: Cast-in-Situ Reinforced Concrete Structure
Supervisor: BORZOVIČ, V.

ĎURAČKA, J.: High-Rise Building: Cast-in-Situ Reinforced Concrete Structure
Supervisor: BENKO, V.

HALAŠKA, M.: Office Building in Bratislava: Cast-in-Situ Reinforced Concrete Structure
Supervisor: BENKO, V.

KÁČEROVÁ, L.: Multifunctional Building: Cast-in-Situ Reinforced Concrete Structure
Supervisor: BORZOVIČ, V.

KLIMEKOVÁ, L.: Hotel "TULA" – Banská Bystrica: Cast-in-Situ Reinforced Concrete Slab-Wall Structure on a Skeleton Pedestal with a Stiffening Core
Supervisor: HARVAN, I.

MÁJOVSKÝ, M.: Multifunctional Apartment House: Cast-in-Situ Reinforced Concrete Framework Structure
Supervisor: BARTÓK, A.

MOROZ, M.: Slovak Savings Bank Building, Bratislava: Cast-in-Situ Reinforced Concrete Structure with Flat Slabs and Stiffening Cores
Supervisor: ABRAHOIM, I.

NOVÁ, P.: Apartment Block: Cast-in-Situ Reinforced Concrete Structure
Supervisor: BORZOVIČ, V.

PASTIER, I.: Multifunctional Apartment Building: Cast-in-Situ Reinforced Concrete Structure
Supervisor: BARTÓK, A.

PEŤKO, V.: Office Building of an Automobile Centre – Bratislava Rožňavská: Cast-in-Situ Reinforced Concrete Combined Bearing Structure with a Stiffening Core
Supervisor: ABRAHOIM, I.

RECHTORÍK, J.: High-Rise Building: Cast-in-Situ Reinforced Concrete Structure
Supervisor: BENKO, V.

SIKLENKA, M.: Shopping Centre: Large-Span Precast Concrete Structure
Supervisor: BORZOVIČ, V.

SONNENSCHNEIN, R.: "Letná" Multifunctional Building: Cast-in-Situ Reinforced Concrete Structure
Supervisor: GAJDOŠOVÁ, K.

VARGOVÁ, M.: Poprad Tax Office: Cast-in-Situ Reinforced Concrete Structure
Supervisor: HARVAN, I.

ÁDÁM, N.: Underground Tank of a Cooling Tower: Cast-in-Situ Reinforced Concrete Structure

Supervisor: HUDOBA, I.

ANDRÁSSY, P.: High-Rise Building: Cast-in-Situ Reinforced Concrete Structure
Supervisor: FILLO, L.

ČANIGA, I.: Concrete Road Bridge: Cast-in-Situ Concrete Structure
Supervisor: FILLO, L.

DOLINAJOVÁ, K.: Bridge on Expressway R1: Nitra West - Seleneč
Supervisor: HALVONÍK, J.

DRÁB, O.: High-Rise Building of an Office Center: Reinforced Concrete and Composite Steel and Concrete Structure
Supervisor: GRAMBLIČKA, Š.

GÁL, A.: Underground Box Cast-in-Situ Tank
Supervisor: HUDOBA, I.

GAŽIOVÁ, J.: Prestressed Cable-Stayed Bridge on Expressway R1 at km 16,044, Section Žarnovica – Šašovské Podhradie
Supervisor: HALVONÍK, J.

GOLEJ, M.: Supporting Structure of a High-Rise Building
Supervisor: GRAMBLIČKA, Š.

GRMAN, A.: Integral Bridge over Highway D3: Kysucké Nové Mesto - Oščadnica
Supervisor: BORZOVIČ, V.

HLÁSNY, L.: Design of a Railway Bridge Made from Prestressed Concrete
Supervisor: FILLO, L.

CHRAPPA, M.: Prestressed Bridge on Highway R3 at km 1,772 over a Brook and Valley
Supervisor: HALVONÍK, J.

JACKOVÁ, A.: Prestressed Extradosed Bridge over Road C/11 and the River Kysuca
Supervisor: HALVONÍK, J.

LÖRINCZ, M.: Four-Span Bridge on Highway D3 at km 23,099
Supervisor: HALVONÍK, J.

MÉZSÁROS, T.: Design of the Underground Parking of the "Vtáčnik" Residential Building as a Watertight Concrete Tank
Supervisor: ŠOLTÉSZ, J.

2.3 Doctoral theses

PAULÍK, P.: Contribution to an Evaluation of the Properties of Concrete Surface Layers
Supervisor: HUDOBA, I.

VÖRÖS, Š.: Analyses of Biaxial Hollow Core Slabs
Supervisor: FILLO, L.

3. Research

3.1 Research projects

Resistance Analysis of Concrete, Masonry and Composite Steel-Concrete Structures (2011-2013, FILLO, L.) VEGA 1/0857/11

Factors Affecting the Effectiveness of Utilization of High Strength Concrete in Load-Bearing Elements and Structures (2011-2013, HUDOBA, I.), VEGA1/0458/11

Application of Probabilistic Methods to Improve the Reliability of Concrete Structures (2009-2011, BILČÍK, J.) VEGA 1/0306/09

3.2 International cooperation

Cooperating institutions

Klokner Institute ČVUT Prague, Czech Republic

Faculty of Civil Engineering, VUT Brno, Czech Republic

ETH - Laboratory for Building Materials, ETH Zurich, Switzerland

Institut für Baustatik und Konstruktion, ETH Zurich, Switzerland

Baustoffinstitut, TU Munich, Germany

Institut für Massivbau und Baustofftechnologie, University of Leipzig, Germany

Katedra Budowy Mostow Politechniki Slaskiej, Gliwice, Poland

Department of Civil and Materials Engineering, University of Illinois at Chicago, USA

RIB Bausoftware, Stuttgart, Germany

Betosan, s.r.o., Prague, Czech Republic

Seidl & Partners, G.m.b.H., Regensburg, Germany

European Commission, DG Research, Brussels, Belgium

Imperial College for Science, Technology and Medicine, London, U.K.

St. Paul University, Brussels, Belgium

Fachhochschule Braunschweig – Wolfenbütel, Germany

Institut für Massivbau, TU Darmstadt, Germany

Fachhochschule Coburg, Germany

Visit of staff members to foreign institutions / Participation in meetings

BENKO, V.: Seminar on Lehrgang für Baudynamik und Erdbebeningenieurwesen für die Praxis, Vienna; Austria, 27.01.2011

BILČÍK, J.: Seminar on Execution and Control of Concrete Structures Repair, Prague, Czech Republic, 7.02.2011

BENKO, V.: TU Vienna, Institut für Tragkonstruktionen – Betonbau, Vorlesung-Betonbau 3, Vienna, Austria, 10.3, 17.3, 24.3 31.3, 7.4, 14.4, 5.5, 12.5, 30.06 2011

BILČÍK, J.: XXI International Symposium on Concrete Structures Repair, Brno, Czech Republic, 18.-20.05.2011

HALVONÍK, J.: 39th CEN TC250 Meeting, Ispra, Italy, 26.-27.5.2011

FILLO, L. - HALVONÍK, J. - BELLOVÁ, M.: Symposium PRAGUE 2011: Concrete Engineering for Excellence and Efficiency, Prague, Czech Republic, 8.-10.6.2011

BENKO, V.: SCIA Engineer Seminar, Salzburg, Austria, 30.06 2011

HALVONÍK, J.: 7th Central European Congress on Concrete Engineering, Hungary, 22.-23.9.2011 - Balatonfüred

BILČÍK, J. – BRONDOŠ, J.: Conference on Testing and Quality in the Building Industry, Brno, Czech Republic, 4.-5.10.2011

BENKO, V.: Second Balkan Seminar on Earthquake Engineering, Sofia, Bulgaria, 6.-7.10.2011

HALVONÍK, J.: 40th CEN TC250 Meeting, Prague, Czech Republic, 14.-15.11.2011

BENKO, V.: SCIA USER Meeting, Mondsee, Austria, 25.11.2011

BENKO, V.: 1st European Engineers' Day and GAM ECEC (European Council of European Chambers), Brussels, Belgium, 8.-9.12.2011

BENKO, V. - BORZOVIČ, V. - DOLNÁK, J. - FILLO, Ľ. - HALVONÍK, J. - PAULÍK, P. – PORUBSKÝ, T.: 18th Concrete Days 2011, Hradec Králové, Czech Republic, 23.-24.11.2011

Membership in international professional organizations

BILČÍK, J.: American Concrete Institute

FILLO, Ľ.: Representative of the Slovak Republic in CEN TC 250 – SC2 Eurocodes – Design of Concrete Structures

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

FILLO, Ľ.: Honorary Member of Czech Concrete Society, Hradec Králové, Czech Republic, 25.11.2009

HALVONÍK, J.: Representative of the Slovak Republic on CEN TC 250 – SC1 Eurocodes – Actions on Structures

HALVONÍK, J.: Representative of the Slovak Republic on CEN TC 250 Eurocodes

4. Publications

Books

GAJDOŠOVÁ, K.: Strengthening Slender Reinforced Concrete Columns with the Use of Fibre-Reinforced Polymers, Slovak University of Technology in Bratislava, 2011, (Edition of Scientific Works; Workbook No.109), ISBN 978-80-227-3562-9, 144 pp. (in Slovak)

HARVAN, I.: Concrete Structures, Tall Buildings, Design According to Common European Standards, Slovak University of Technology in Bratislava, 2011, ISBN 978-80-227-3458-5, 206 pp. (in Slovak)

Parts of books

Textbooks

ABRAHOIM, I. - BORZOVIČ, V.: Reinforced Concrete Supporting Structures, Instructions for Practice, Slovak University of Technology in Bratislava, 2011, ISBN 978-80-227-3598-8, 189 pp. (in Slovak)

Journals

BARTÓK, A.: Impact of an Earthquake on Building Structures. In: Stavebné materiály, ISSN 1336-7617, Vol. 7, No. 2 (2011), pp. 18-19 (in Slovak)

BELLOVÁ, M.: Determining the Fire Resistance of the Design of Concrete Members According to Current Standards. In: Materiály pro stavbu, ISSN 1213-0311, Vol. 17, No. 2 (2011), pp. 42-43 (in Slovak)

BELLOVÁ, M.: Determining the Fire Resistance of the Design of Masonry Members According to Current Standards. In: Materiály pro stavbu, ISSN 1213-0311, Vol. 17, No. 8 (2011), pp. 46-49 (in Slovak)

BELLOVÁ, M.: Fire Resistance of Concrete Structures and Its Assessment According to Current Standards. In: Stavebnictví, ISSN 1802-2030, Vol. 5, Nos. 11-12 (2011), pp. 24-28 (in Slovak)

BILČÍK, J. - HALAŠA, I.: Concrete for Watertight Concrete Structures (White Tanks). In: Stavebné hmoty, ISSN 1336-6041, Vol. 7, Nos. 1-2 (2011), pp. 15-16 (in Slovak)

BILČÍK, J.: Products and Systems for the Protection and Repair of Concrete Structures. In: Beton. Technologie - Konstrukce - Sanace, ISSN 1213-3116, Vol. 11, No. 3 (2011), pp. 52-55 (in Slovak)

BORZOVIČ, V. - HÁJEK, F.: Analysis of Floating Floor Screed Slab Loaded with a Hand Pallet Truck. In: Beton. Technologie - Konstrukce - Sanace, ISSN 1213-3116, Vol. 11, No. 2 (2011), pp. 58-61 (in Slovak)

GAJDOŠOVÁ, K. - BILČÍK, J.: Slender Reinforced Concrete Columns Strengthened with Fibre-Reinforced Polymers. In: Slovak Journal of Civil Engineering, ISSN 1210-3896, Vol. 19, No. 2 (2011), pp. 27-31 (in English)

GRAMBLIČKA, Š.: Reinforcing Cast-in-Situ Reinforced Concrete Bearing Structures. In: Stavebnictví, ISSN 1802-2030, Vol. 5, Nos. 6-7 (2011), pp. 4-9 (in Slovak)

HARVAN, I.: Assessment of the Concrete Structures of Existing Panel Buildings. In: Správa budov, ISSN 1337-6233, Vol. 5, No. 1 (2011), pp. 32-34 (in Slovak)

HARVAN, I.: New Code for the Verification of the Concrete Structures of Existing Panel Buildings. In: Normalizácia, ISSN 1335-5511, Vol. 17, No. 1 (2011), pp. 3-7 (in Slovak)

HUDOBA, I.: Problems of the Execution of Concrete Structures in Light of the New Standard STN EN 13670. In: Stavebné hmoty, ISSN 1336-6041, Vol. 7, Nos. 1-2 (2011), pp. 23-25 (in Slovak)

HUDOBA, I. - ŠOLTÉSZ, J.: Repair of Reinforced Concrete Floor and Balcony Slabs Damaged by Cracks. In: Stavebné materiály, ISSN 1336-7617, Vol. 7, No. 7 (2011), pp. 38-41 (in Slovak)

HUDOBA, I.: Standard STN EN 13670: Execution of Concrete Structures and Adopting Its Aspects in Concrete Practice. In: Stavebné hmoty, ISSN 1336-6041, Vol. 7, No. 6 (2011), pp. 45-49 (in Slovak)

PRIECHODSKÝ, V. - NIČ, M. - CICANIČ, M.: Identify the Reasons for the Collapse of a School Building. In: Almanach znalca. - ISSN 1336-3174. - Vol. 10, Nos. 2-3 (2011), pp. 48-52 (in Slovak)

Conferences

BARTÓK, A.: Flat Slabs: Moments Distribution and Design of Reinforcement. In: Design of Concrete Structures and Bridges Using Eurocodes, Second International Workshop, Bratislava, Slovak Republic, 12.-13.9.2011, Slovak University of Technology in Bratislava, ISBN 978-80-8076-094-6, pp. 169-172 (in English)

BELLOVÁ, M.: Contribution of Surface Reinforcement to the Resistance of Reinforced Concrete Members. In: 16th Conference on Statics of Buildings 2011, Piešťany, Slovak Republic, 17.-18.3.2011, ISBN 978-80-970037-6-0, pp. 47-52 (in Slovak)

BELLOVÁ, M.: Fire Resistance of Concrete Structures in Accordance with the European Standards. In: 16th Conference on Statics of Buildings 2011, Piešťany,

- Slovak Republic, 17.-18.3.2011, ISBN 978-80-970037-6-0, pp. 23-32 (in Slovak)
- BELLOVÁ, M.: Detailing of Members According to the New Model Code. In: Concrete Engineering for Excellence and Efficiency, Vol. 1, Symposium Prague 2011, Czech Republic, 8.-10.6.2011, ISBN 978-80-87158-29-6, pp. 235-238 (in English)
- BENKO, V. - BORZOVIČ, V.: Tanks and Buildings. In: Proceedings of 4th Postcongress Colloquium on Concrete at the Third International Congress and Exhibition in Washington, D.C., Nitra, Slovak Republic, 6.-7.4.2011, Jaga Group 2011, ISBN 978-80-8076-091-5, pp. 159-175 (in Slovak)
- BENKO, V. - FILLO, Ľ.: Ultimate Resistance of an RC Cross-Section Subjected to Compressive Force. In: Design of Concrete Structures and Bridges Using Eurocodes, The Second International Workshop, Bratislava, Slovak Republic, 12.-13.9.2011, Slovak University of Technology in Bratislava, ISBN 978-80-8076-094-6, pp. 141-147 (in English)
- BILČÍK, J. - HOLLÝ, I.: Design and Verification of the Durability of a Concrete Infrastructure. In: Repair of Concrete Structures 2011, Proceedings of the 22th International Symposium, Brno, Czech Republic, 18.-20.5.2011, Brno, The Concrete Structure Repair Association, 2011, pp. 241-245 (in Slovak)
- BILČÍK, J. - HOLLÝ, I.: Probability Models for the Deterioration of Concrete Structures. In: Preparation, Design and Execution of Civil Engineering Works, CONECO 2011, International Research Conference, 31.3.2011, SUT in Bratislava, ISBN 978-80-277-3469-1 (in Slovak)
- BORZOVIČ, V. - LACO, J.: Design of Bridge Approach Slabs for a Motorway and Highway in Slovakia According to EN 1992-2. In: Design of Concrete Structures and Bridges Using Eurocodes, Second International Workshop, Bratislava, Slovak Republic, 12.-13.9.2011, Slovak University of Technology in Bratislava, ISBN 978-80-8076-094-6, pp. 259-266 (in English)
- BORZOVIČ, V. - KÓŇA, D. - HALVONÍK, J.: Continuous Composite Concrete Girder. In: Design of Concrete Structures and Bridges Using Eurocodes, Second International Workshop, Bratislava, Slovak Republic, 12.-13.9.2011, Slovak University of Technology in Bratislava, ISBN 978-80-8076-094-6, pp. 197-205 (in English)
- BORZOVIČ, V.: Plain Concrete Loaded With an Eccentric Compressive Force. In: 16th Conference on Statics of Buildings 2011, Piešťany, Slovak Republic, 17.-18.3.2011, ISBN 978-80-970037-6-0, pp. 67-74 (in Slovak)
- BORZOVIČ, V. - HÁJEK, F.: Static Analysis of a Screed Floating Floor. In: 16th Conference on Statics of Buildings 2011, Piešťany, Slovak Republic, 17.-18.3.2011, ISBN 978-80-970037-6-0, pp. 99-106 (in Slovak)
- BRONDOŠ, J. - BILČÍK, J.: Testing of Columns Strengthened with CFRP under an Impact Load. In: Investigation and Quality in Civil Engineering 2011, Reviewed Proceedings of Conference, Czech Republic, 4.-5.10.2011, Brno University of Technology, ISBN 978-80-214-3438-9, pp. 37-43 (in Slovak)
- CHANDOGA, M. - PRÍTULA, A.: Precast Concrete Bridge Girders. In: Proceedings of 4th Postcongress Colloquium on Concrete at the Third International Congress and Exhibition in Washington, D.C., Nitra, Slovak Republic, 6.-7.4.2011, Jaga Group 2011, ISBN 978-80-8076-091-5, pp. 113-132 (in Slovak)
- ČABRÁK, M.: Contemporary State and Future of the Design of Masonry Structures in the Slovak Republic. In: 16th Conference on Statics of Buildings 2011, Piešťany, Slovak Republic, 17.-18.3.2011, ISBN 978-80-970037-6-0, pp. 53-60 (in Slovak)
- ČUHÁK, M. - BOHUNICKÝ, B.: Quick Calculation of the Cross-Sectional Characteristics of a One-Sided Reinforced Concrete Section with a Crack. In: 16th Conference on Statics of Buildings 2011, Piešťany, Slovak Republic, 17.-18.3.2011, ISBN 978-80-970037-6-0, pp. 33-36 (in Slovak)
- FILLO, Ľ. - BENKO, V.: Biaxial Bending of Slender Columns. In: Design of Concrete Structures and Bridges Using Eurocodes, Second International Workshop, Bratislava, Slovak Republic, 12.-13.9.2011, Slovak University of Technology in Bratislava, ISBN 978-80-8076-094-6, pp. 135-141 (in English)
- FILLO, Ľ. - BORZOVIČ, V.: Extension of a Bridge's Structural Effectiveness by a Fixed Railway Track. In: The 7th Forum on Rail Transport Conference with international participation, Bratislava, Slovak Republic, 15.-16.3.2011, ISBN 978-80-88973-68-3, pp. 31-34 (in Slovak)
- FILLO, Ľ.: Model Code 2010 - New Aspects. In: Proceedings of 4th Postcongress Colloquium on Concrete at the Third International fib Congress and Exhibition in Washington, D.C., Nitra, Slovak Republic, 6.-7.4.2011, Jaga Group 2011, ISBN 978-80-8076-091-5, pp. 201-207 (in Slovak)
- FILLO, Ľ.: Structural Analysis of Beams by the New Model Code. In: Concrete Engineering for Excellence and Efficiency, Vol. 1, Symposium Prague 2011, Czech Republic, 8.-10.6.2011, ISBN 978-80-87158-29-6, pp. 103-107 (in English)
- GAJDOŠOVÁ, K.: The Use of CFRP Materials for Strengthening Columns. In: Preparation, Design and Execution of Engineering Works, CONECO 2011, International Scientific Conference, 31.03.2011, Slovak University of Technology in Bratislava, ISBN 978-80-277-3469-1 (in Slovak)
- GRAMBLIČKA, Š. - VALACH, P.: Composite Steel-Reinforced Concrete (SRC) Columns: Theoretical Design Analysis. In: 11th International Scientific Conference VSU' 2011, Vol. 1, Sofia, Bulgaria, 2.-3.6.2011, L. Karavelov Civil Engineering High School Sofia, 2011, pp. 139-145 (in English)
- GRAMBLIČKA, Š.: Deflection of Cast-in-Place Reinforced Concrete Slabs. In: 16th Conference on Statics of Buildings 2011, Piešťany, Slovak Republic, 17.-18.3.2011, ISBN 978-80-970037-6-0, pp. 43-46 (in Slovak)
- GRAMBLIČKA, Š.: Errors in the Design of Building Foundations. In: Foundations of Buildings 2011, Eurocodes - Slidings - Floods - Failures, Proceedings of 13th Conference, High Tatras – Stará Lesná, SR, 12.-14.10.2011, ISBN 978-80-970037-7-7, pp. 131-135 (in Slovak)
- HALVONÍK, J. - DOLNÁK, J.: Science, Research and Developments in the Field of Concrete Construction and Bridge Design. In: Proceedings of 4th Postcongress Colloquium on Concrete at the Third International

Congress and Exhibition in Washington, D.C., Nitra, Slovak Republic, 6.-7.4.2011, Jaga Group 2011, ISBN 978-80-8076-091-5, pp. 175-200 (in Slovak)

HALVONÍK, J. - DOLNÁK, J.: Verification of Prestressed Bridges for Brittle Failure Avoidance. In: Design of Concrete Structures and Bridges Using Eurocodes, The Second International Workshop, Bratislava, Slovak Republic, 12.-13.9.2011, Slovak University of Technology in Bratislava, ISBN 978-80-8076-094-6, pp. 233-241 (in English)

HARVAN, I.: Assessment of Panel Building Foundations with Additional Reconstructions and Extensions. In: 16th Conference on Statics of Buildings 2011, Piešťany, Slovak Republic, 17.-18.3.2011, ISBN 978-80-970037-6-0, pp. 219-228 (in Slovak)

HARVAN, I.: New Code for Verification of Existing Panel Buildings of Concrete Structures. In: Design of Concrete Structures and Bridges Using Eurocodes, The Second International Workshop, Bratislava, Slovak Republic, 12.-13.9.2011, Slovak University of Technology in Bratislava, ISBN 978-80-8076-094-6, pp. 117-124 (in English)

HUDOBA, I.: Execution of Concrete Structures According to STN EN 13670. In: Concrete Production 2011, 12th Professional Seminar, Vyhne, Slovak Republic, 2.-3.2.2011, 2011, ISBN 978-80-970210-3-0, pp. 12-17 (in Slovak)

HUDOBA, I.: Practical Aspects of Adopting Standard STN EN 13670 in Practice. In: Concrete 2011, Proceedings of national conference with international participation, Štrbské Pleso, Slovak Republic, 5.-7.10.2011, Bratislava, Slovak Association of Ready Mix Producers, 2011, ISBN 978-80-970210-4-7, pp. 32-40 (in Slovak)

HUDOBA, I. - MIKUŠ, J.: Ultra High Performance Concrete and Its Utilization in Practice. In: Beton on 3th fib Congress and Exposition in Washington, Proceedings of 4th Postcongress Colloquium, Nitra, Slovak Republic, 6.-7.4.2011, Jaga Group 2011, ISBN 978-80-8076-091-5, pp. 23-32 (in Slovak)

IGNAČÁK, M. - ŠOLTÉSZ, J.: Assesment of AUS (Air Ventilation Systems) Pipeline Systems at Nuclear Power Plant EMO34. In: Education and Research in the Field of Concrete and Masonry Structures (electronic source), International Seminar of Representatives of the Departments and Institutes of Concrete and Masonry Structures from the Slovak and Czech Republics, Košice, Slovak Republic, 3.10.2011, Košice, University of

Technology in Košice, 2011, ISBN 978-80-553-0748-0, (in Slovak)

KÓŇA, D.: Redistribution of Bending Moments on Bridges Consisting of Composite Prestressed Precast Beams with a Cast in-Situ RC Deck. In: Preparation, Design and Execution of Engineering Works, CONECO 2011, International Scientific Conference, 31.03.2011, Slovak University of Technology in Bratislava, ISBN 978-80-277-3469-1 (in Slovak)

PAULÍK, P. - PÁNIK, M. - HRNČÍŘ, T.: Future of the Utilization of Radioactive Steel for Construction. In: Preparation, Design and Execution of Engineering Works, CONECO 2011, international scientific conference, 31.03.2011, Slovak University of Technology in Bratislava, ISBN 978-80-277-3469-1 (in Slovak)

PAULÍK, P.: PhD Theses Defended at the Department of Concrete Structures and Bridges in 2011. In: Education and Research in the Field of Concrete and Masonry Structures (electronic source), International Seminar of the Representatives of the Departments and Institutes of Concrete and Masonry Structures from the Slovak and Czech Republics, Košice, Slovak Republic, 3.10.2011, Košice, University of Technology in Košice, 2011, ISBN 978-80-553-0748-0 (in Slovak)

ŠOLTÉSZ, J.: Statical Problems in the Design of an AUS Air Ventilation System/Pipeline Systems and Supporting Frames at the Mochovce Nuclear Power Plant. In: Education and Research in the Field of Concrete and Masonry Structures (electronic source), International Seminar of the Representatives of the Departments and Institutes of Concrete and Masonry Structures from the Slovak and Czech Republics, Košice, Slovak Republic, 3.10.2011, Košice, University of Technology in Košice, 2011, ISBN 978-80-553-0748-0 (in Slovak)

ŠOLTÉSZ, J. - BINDER, I.: Strength and Seismic Calculations of a Pipeline and Its Supporting Frameworks of the Nuclear Power Plant at Mochovce. In: Preparation, Design and Execution of Engineering Works, CONECO 2011, International Scientific Conference, 31.03.2011, Slovak University of Technology in Bratislava, ISBN 978-80-277-3469-1 (in Slovak)

Patents and standards

HARVAN, I.: STN 73 1211, Verification of the Existing Panel Buildings of Concrete Structures, Slovak Standards Institute, Bratislava 2011, 48 pp. (in Slovak)

DEPARTMENT OF TRANSPORTATION ENGINEERING

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1. Education

1.1 Graduate study

Obligatory subjects

Urban Roads
Project I
Design Studio of Urban Planning I - Town
Design Studio of Urban Planning II - Zone
Design Studio of Spatial Planning

Obligatory elective subjects

Airports
Railways
Project II
Project III
Diploma Thesis
Excursion
Modeling and Graphics in Road Construction
Pavement Mechanics
Diagnosis and Reconstruction
Predictions and Scenarios for the Development of Transport
Road Intersections
Traffic Management
Selected Chapters on Roads and Motorways

Optional subjects

Experiment and Testing
Ecology of Urban Settlements and Urban Transportation Planning
Transport Construction
Urban Transportation Planning
Urban Planning I

Recommended subjects

Concrete Structures

1.2 Postgraduate courses

Innovation in Traffic Engineering

2. Theses

2.1 Bachelor theses

There were 11 works.

2.2 Graduate theses

ZEMIANSKA, M.: Evaluation of Pavements on Airport Movement Areas
Supervisor: BARTOŠOVÁ, Ľ.

REHÁČEK, J.: Evaluation of the Environmental Impact on the Surroundings of a Road II/502 in Svätý Jur and a Proposed Solution
Supervisor: BARTOŠOVÁ, Ľ.

TÓTH, F.: Study of the Road Design in the Region between Senec and Sereď, Part I
Supervisor: BAČOVÁ, K.

HAMAĎÁKOVÁ, Z.: Study of the Pedestrian Zone in Malacky
Supervisor: ONDROVIČ, M.

BALKÓ, G.: Feasibility Study of the Tramway Line in Vajnory
Supervisor: BEZÁK, B.

BOŠANSKÝ, L.: Study of the Road Around the Town of Modra, with an Emphasis on Environmental Quality
Supervisor: BARTOŠOVÁ, Ľ.

VRÁBLIKOVÁ, L.: Study of the Road Design in the Region between Senec and Sereď, Part II
Supervisor: BAČOVÁ, K.

ONDERČINOVÁ, M.: Road Temperature Regime and Its Characteristics
Supervisor: BAČOVÁ, K.

TIRINDA, T.: Rolling Noise in Contact: Tyre on Road
Supervisor: NEMČEK, M.

SAMEK, M.: Improving Road Safety Construction and Technical Measures for a Selected Section of a Communication Network
Supervisor: ONDROVIČ, M.

2.3 Doctoral theses

ŠTEFUNKOVÁ, S.: Determination of the Qualitative Parameters of the Construction Layers of Roads from Recycled Materials
Supervisor: BAČOVÁ, K.

3. Research

3.1 Research projects

CENEX subcentre CETIS - Transportation Centre Infrastructure of Settlements (2009, BEZÁK, B.)
Project No.: 26240120002

Road Safety Management – ROSEMAN (2009-20012, RAKŠÁNYI, P.) Project No.: 00022

Sustainable Spatial and Energy Transport Construction (2009-2012., BAČOVÁ, K.) Project No.: 1/0580/09

Austria-Slovakia Traffic Model (2009-2012, BEZÁK, B.)
Project No.: 00043

3.2 International cooperation

Cooperating institutions

TU Vienna, Austria

Austrian Road Safety Board, Austria

Federal Ministry for Transport, Innovation and Technology, Austria

University of Natural Resources and Life Sciences, Vienna, Austria

Municipality of Vienna, Austria

SIU-Győr, Hungary

FHK Köln, Germany

DASL, Hanower, Germany

TU Cracow, Poland

Czech Technical University in Prague, Czech Republic

Brno University of Technology, Czech Republic

TU of Ostrava, Czech Republic

TU Maribor, Slovenia

GTU Vilnius, Latvia

TU Beograd, Serbia

Visit of staff members to foreign institutions / Participation in meetings

BEZÁK, B.: Project VKM AT-SK, Vienna, Austria, 25.2., 4.4., 4.7., 8.11., 14.11., 14.12. 2011

NEUMANNOVÁ, M.: Project VKM AT-SK, Vienna, Austria, 4.4. 2011

ONDROVIČ, M.: Project VKM AT-SK, Vienna, Austria, 4.4., 14.12. 2011

IVANKO, J., BÁLINT, G.: Project VKM AT-SK, Vienna, Austria, 14.12. 2011

BEZÁK, B.: Head of the examining board on final defenses Study Civil Engineering and Construction, Ostrava, Czech Republic, 10.1.- 11.1.2011

BAČOVÁ, K.: Head of the examining board, Brno, Czech Republic, 1.2. 2011

PIATRIKOVÁ, K.: Conference Juniorstav 2011, Brno, Czech Republic, 3.2.-5.2. 2011

ŠTEFUNKOVÁ, S.: Conference Juniorstav 2011, Brno, Czech Republic, 4.2.-5.2. 2011

BEZÁK, B.: Mobilita ERAZMUS, Köln, Deutschland, 15.3.-19.3. 2011

RAKŠÁNYI, P.: Conference BRNOSAFETY, Brno, Czech Republic, 2.6. 2011

BEZÁK, B.: Seminar "XII. Traffic Engineering Days" Hustopeče, Czech Republic, 31.5.-2.6. 2011

BEZÁK, B.: Meeting MAUT – SCS, Balatonfoldvár, Hungary, 7.6.-8.6. 2011

BEZÁK, B.: Meeting RECOM Netzwerktreffem MOBILITÄT, Bruckan der Leitha, Austria, 21.6.,

ONDROVIČ, M.: Workshop City and Traffic, Krakow, Poland, 9.7.-17.7.

BEZÁK, B.: Congress XXIV WRC PIARC, Mexico-City, Mexico, 23.9.-2.10.

BEZÁK, B.: Meeting of Science Board ČVUT FD, andopponent of habilitation commission, Prague, Czech Republic, 20.10.-21.10.2011

BEZÁK, B.: Conference "Road Conference 2011", Zlín, Czech Republic, 10.10.-11.10.2011

ŠTEFUNKOVÁ, S.: Conference "Asfalt pavements 2011", České Budějovice, Czech Republic, 21.11.-23.11.2011

ZUZULOVÁ, A.: Conference "Asfalt pavements 2011", České Budějovice, Czech Republic, 21.11.-23.11.2011

RAKŠÁNYI, P.: Project ROSEMAN, Vienna, Austria, 7.12.2011

BEZÁK, B.: Project ROSEMAM, Vienna, Austria, 7.12.2011

KAPUSTA, V.: Project ROSEMAN, Vienna, Austria, 7.12.2011

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, Gyor, 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

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

Parts of books

ZUZULOVÁ, A.: Pavements with Concrete Cement Blocks for Different Traffic Loads. In: Preparation, Design and Implementation of Civil Engineering Constructions : CONECO 2011 - international scientific conference. Bratislava, 31.3.2011. - Bratislava : STU in Bratislava SvF, 2011. - ISBN 978-80-277-3469-1. - pp. 225-233 (in Slovak)

Textbooks

BAČOVÁ, K. - GSCHWENDT, I. - ZULUZOVÁ, A.: Diagnostics and Reconstructions of Transport Constructions. - 1st ed. - Bratislava : STU in Bratislava, 2011. - 163 pp. - ISBN 978-80-227-3549-0 (in Slovak)

Journals

BAČOVÁ, K.: The Impact of Congestion on a Road. In: Transfer. - ISSN 1337-9747. - Vol. 3, No. 1 (2011), pp. 22-22 (in Slovak)

BEZÁK, B.: Effect of Transport on the Quality of a Habitation. In: Real Estate and Housing. - ISSN 1336-944X. - Vol. 6, No.1 (2011), pp. 15-22 (in Slovak)

BEZÁK, B.: Project for Modeling Cross-Border Traffic Interrelations. In: Transfer. - ISSN 1337-9747. - Vol. 3, No. 1 (2011), p. 19 (in Slovak)

NEMČEK, M.: ROSEMAN Project - Findings from Road Safety Inspections. In: Traffic Horizons. - ISSN 0322-7154. - Vol.72, No.4 (2011), pp. 112-115 (in Slovak)

RAKŠÁNYI, P. - SZEKERES, K.: Integrated Planning Methods in Slovakia. In: Terra Spectra STU. Planning Studies. - ISSN 1338-0370. - Vol. 3, No. 1 (2011), pp. 19-31 (in English)

ŠPIRKOVÁ, D. - RAKŠÁNYI, P.: Causes and Consequences of the Mortgage Crisis. In: Real Estate and Housing. - ISSN 1336-944X. - Vol. 6, No. 2 (2011), pp. 1-8 (in Slovak)

ŠTEFUNKOVÁ, S.: Building and Rehabilitation of Asphalt Pavements. In: Building Engines and Mechanization. - ISSN 1336-958X. - Vol. 6, No. 2 (2011), pp. 60-61 (in Slovak)

ŠTEFUNKOVÁ, S. - VALENTIN, J. - MONDSCHHEIN, P.: Selected Characteristics of Low-Viscosity Bituminous Binders and Their Comparison with the Additives Used. In: Engineering Constructions. - ISSN 1335-0846. - Vol. 59, No.3 (2011), pp. 23-27 (in Czech)

ŠTEFUNKOVÁ, S. - PIATRIKOVÁ, K.: Suitability of RAP : Application for Road Construction. In: Waste. - ISSN 1335-7808. - Vol.11, No. 8 (2011), pp. 7-12 (in Slovak)

Conferences

BAČOVÁ, K. - PIATRIKOVÁ, K.: Laboratory Design of Cement - Bound Granular Mixtures with Recycled

Asphalt Mix. In: Preparation, Design and Implementation of Civil Engineering Constructions : CONECO - international scientific conference 2011. Bratislava, 31.3.2011. - Bratislava : STU in Bratislava SvF, 2011. - ISBN 978-80-277-3469-1. - unpaginated (in Slovak)

BAČOVÁ, K. - GSCHWENDT, I. - BOROS, Z. - STAŇO, R. - KOMAČKA, J.: Quality of Road Infrastructures. In: Roads for a Better Life : Mobility, Sustainability and Development : 24th World Road Congress. Mexico City, 26.-30.9.2011, 2011. - unpaginated (in English)

BAČOVÁ, K. - ŠTEFUNKOVÁ, S.: Road Pavements and Transfers of Goods and Passengers. In: Problems of Transport on the Doorstep of the Third Millenium : International Experts Seminar. Modra - Harmónia, SR, 12.-13.9.2011. - Bratislava : STU in Bratislava SvF, 2011. - ISBN 978-80-227-3556-8. - pp. 73-81 (in Slovak)

BARTOŠOVÁ, Ľ. - HODÁKOVÁ, D.: Concrete Pavements for Road Areas and Their Specificities. In: Preparation, Projection and Realisation of Constructions : CONECO 2011 - international scientific conference. Bratislava, Slovak Republic, 31.3.2011. - Bratislava : STU in Bratislava SvF, 2011. - ISBN 978-80-227-3469-1. - unpaginated (in Slovak)

BARTOŠOVÁ, Ľ. - HODÁKOVÁ, D.: Development of Pavements in Selected Areas of Transport and Their Mutual Analysis. In: Mobilita '11 : 11th international scientific conference. Bratislava, SR, 26.-27.5.2011. - Bratislava : STU in Bratislava SvF, 2011. - ISBN 978-80-227-3514-8. - pp. 333-338 (in Slovak)

BARTOŠOVÁ, Ľ. - HODÁKOVÁ, D.: Development of Pavements in Selected Areas of Transport and Their Mutual Analysis (poster). In: Mobilita '11 : 11th international scientific conference. Bratislava, SR, 26.-27.5.2011. - Bratislava : STU in Bratislava SvF, 2011. - ISBN 978-80-227-3514-8. - unpaginated (in Slovak)

BARTOŠOVÁ, Ľ.: Pavement Traffic Areas for Heavy Loads. In: Surveys, Analysis and Modeling of Traffic Data for the Development of the Settlement Infrastructure of a Knowledge Economy : Proceedings of scientific colloquium. 24.2.2011. - Bratislava : STU in Bratislava, 2011. - ISBN 978-80-227-3425-7. - unpaginated (in Slovak)

BEZÁK, B.: Data Collection for Modeling Cross-Border Transport. In: Surveys, Analysis and Modeling of Traffic Data for the Development of the Settlement Infrastructure of a Knowledge Economy : Proceedings of scientific colloquium. 24.2.2011. - Bratislava : STU in Bratislava, 2011. - ISBN 978-80-227-3425-7. - unpaginated (in Slovak)

BEZÁK, B. - NEUMANNOVÁ, M.: Data Modeling for Cross-Border Transport. In: Preparation, Projection and Realisation of Constructions : CONECO 2011 - international scientific conference. Bratislava, Slovak Republic, 31.3.2011. - Bratislava : STU in Bratislava SvF, 2011. - ISBN 978-80-227-3469-1. - unpaginated (in Slovak)

BEZÁK, B. - RAKŠÁNYI, P.: Design of Constructions and Proposals for the Safety of the Transport Infrastructure in Slovakia. In: Brnosafety2011 : 5th International conference on Enhancement of Traffic Safety. Brno, ČR, 2.-3.6.2011. - Brno : Brno Fairs, 2011. - ISBN 978-80-7293-280-1. - pp. 12-17 (in Slovak)

- BEZÁK, B.: Integrated and Safe Transport Infrastructure for Sustainable Mobility. In: *Mobilita '11 : 11th international scientific conference*. Bratislava, SR, 26.-27.5.2011. - Bratislava : STU in Bratislava SvF, 2011. - ISBN 978-80-227-3514-8. - pp. 156-161 (in Slovak)
- BEZÁK, B. - NEUMANNOVÁ, M.: Modeling of Cross-Border Interaction in the Central Danube Region. In: *Environmental Engineering.Vol. 3 : 8th International conference*. Vilnius, Lithuania, 19.-20.5.2011. - Vilnius : Vilnius Gediminas Technical University, 2011. - ISBN 978-9955-28-829-9. - pp. 854-859 (in English)
- BEZÁK, B. - NEUMANNOVÁ, M. - ONDROVIČ, M.: Modeling of Transport in Cross-Border Metropolitan Areas. In: *12th Traffic - Engineering Days : International seminar*. Hustopeče, ČR, 1.- 2.6.2011., 2011. - ISBN 978-80-02-02321-0. - pp. 106-110 (in Slovak)
- BEZÁK, B. - KAPUSTA, V. - NEUMANNOVÁ, M. - RAKŠÁNYI, P. - MACHCINÍK, Š.: Safety of the Road System. In: *Roads for a Better Life : Mobility, Sustainability and Development : 24th World Road Congress*. Mexico City, 26.-30.9.2011, 2011. - unpaginated (in English)
- BEZÁK, B.: Sustainable Mobility for a Cross-Border Region. In: *Problems of Transport on the Doorstep of the Third Millenium : International experts seminar*. Modra - Harmónia, SR, 12.-13.9.2011. - Bratislava : STU in Bratislava SvF, 2011. - ISBN 978-80-227-3556-8. - pp. 63-72 (in Slovak)
- BEZÁK, B.: A Corridor for Environmentally Friendly and Sustainable Mobility. In: *Transport and the Environment : 8th SoNorA University Think Tank Conference*. Szczecin, Poland, 16.6.2011., 2011. - pp. 59-70 (in Slovak)
- ĎURIŠOVÁ, A.: Effect of Structural Design on the Stress Distribution of Cement Concrete Pavements. In: *Mobilita '11 : 11th international scientific conference*. Bratislava, SR, 26.-27.5.2011. - Bratislava : STU in Bratislava SvF, 2011. - ISBN 978-80-227-3514-8. - pp. 339-345 (in Slovak)
- ĎURIŠOVÁ, A.: Influence of Structural Design on the Stress Distribution of Cement Concrete Pavements. In: *Mobilita '11 : 11th international scientific conference*. Bratislava, SR, 26.-27.5.2011. - Bratislava : STU in Bratislava SvF, 2011. - ISBN 978-80-227-3514-8. - unpaginated (in Slovak)
- ĎURIŠOVÁ, A.: Load - Bearing Tests of a Concrete Cement Pavement. In: *Surveys, Analysis and Modeling of Traffic Data for the Development of the Settlement Infrastructure of a Knowledge Economy : Proceedings of scientific colloquium*. 24.2.2011. - Bratislava : STU in Bratislava, 2011. - ISBN 978-80-227-3425-7. - unpaginated (in Slovak)
- GSCHWENDT, I. - BAČOVÁ, K.: Scenario of Pavement Innovations with Energy-Saving Materials and Technologies. In: *Mobilita '11 : 11th international scientific conference*. Bratislava, SR, 26.-27.5.2011. - Bratislava : STU in Bratislava SvF, 2011. - ISBN 978-80-227-3514-8. - pp. 302-307 (in Slovak)
- KAPUSTA, V.: Road Traffic Accidents of Foreigners in the Slovak Republic. In: *Mobilita '11 : 11th International scientific conference*. Bratislava, SR, 26.-27.5.2011. - Bratislava : STU in Bratislava SvF, 2011. - ISBN 978-80-227-3514-8. - pp. 220-224 (in English)
- KAPUSTA, V.: Road Safety in the Slovak Republic at the Beginning of the Third Millenium. In: *Problems of Transport on the Doorstep of the Third Millenium : International Experts Seminar*. Modra - Harmónia, SR, 12.-13.9.2011. - Bratislava : STU in Bratislava SvF, 2011. - ISBN 978-80-227-3556-8. - pp. 89-99 (in Slovak)
- NEMČEK, M.: Traffic Accidents with Crashes into Solid Obstacles. In: *Mobilita '11 : 11th international scientific conference*. Bratislava, SR, 26.-27.5.2011. - Bratislava : STU in Bratislava SvF, 2011. - ISBN 978-80-227-3514-8. - pp. 233-238 (in Slovak)
- NEMČEK, M.: Traffic - Engineering Documentation for the Design of Roads. In: *Preparation, Design and Implementation of Civil Engineering Constructions: CONECO 2011 - international scientific conference*. Bratislava, 31.3.2011. - Bratislava : STU in Bratislava SvF, 2011. - ISBN 978-80-277-3469-1. - unpaginated (in Slovak)
- ONDROVIČ, M.: Creating a Barrier - Free Transport Infrastructure. In: *Mobilita '11 : 11th international scientific conference*. Bratislava, SR, 26.-27.5.2011. - Bratislava : STU in Bratislava SvF, 2011. - ISBN 978-80-227-3514-8. - pp. 264-269 (in Slovak)
- ONDROVIČ, M.: Technical Standards: Design of Measures for Barrier-Free Roads. In: *Traffic Safety on Roads : proceedings of conference with international participation*. Vyhne, SR, 21.-23.9.2011., 2011. - ISBN 978-80-970356-8-6. - pp. 52-55 (in Slovak)
- PIATRIKOVÁ, K.: Application of Recycled Material for Hydraulically - Bound Road Bases. In: *Juniorstav 2011 - proceedings of annotations : 13th Experts Conference of Doctoral Study*. Brno, VUT, 4.2.2011. - Brno: Vysokéučenítechnické v Brně - Faculty of Civil Engineering, 2011. - ISBN 978-80-214-4232-0. - unpaginated (in Slovak)
- RAKŠÁNYI, P. - ONDROVIČ, M.: Comprehensive Transport Master Plan of Piešťany. In: *Preparation, Design and Implementation of Civil Engineering Construction : CONECO 2011 - international scientific conference*. Bratislava, 31.3.2011. - Bratislava: STU in Bratislava SvF, 2011. - ISBN 978-80-277-3469-1. - unpaginated (in Slovak)
- RAKŠÁNYI, P. - MAYER, E.: Legal and Technical Obstacles to the Environmental Safety of Open Spaces on Road. In: *Mobilita '11 : 11th international scientific conference*. Bratislava, SR, 26.-27.5.2011. - Bratislava : STU in Bratislava SvF, 2011. - ISBN 978-80-227-3514-8. - pp. 205-212 (in Slovak)

DEPARTMENT OF THEORETICAL GEODESY

Head of Department

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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
Geoinformatics
Local Geodetic Networks
Global Geodesy 1
Geodesy and Cartography (Institute of Management)
Programming
Physical Geodesy 1
Spherical Astronomy and Space Geodesy
Global Navigation Systems
Field Education in Geodetic Controls
Global Geodesy 2
Space Geodesy
Processing and Analysis of Measurements 3
Physical Geodesy 2
Management of Spatial Data
Satellite Geodesy
Spatial Modelling in GIS
Metrology in Geodesy
Mathematical Models in Geodesy
Specialized Field Education

Obligatory elective subjects

Gravimetry
Geodynamics
GIS Design and Implementation
Database Systems in GIS

Optional subjects

Analysis of Geodata Quality
Geometry and Relativity in Geodesy
Object-Oriented Programming in C#
Programming Web Pages Using PHP and JavaScript

1.2 Postgraduate courses

Processing and Analysis of Measurements
Global Geodesy
Geodynamics
Geoinformation Systems

2. Theses

2.1 Bachelor theses

There were 11 works.

2.2 Graduate theses

BÚTOROVÁ, A.: Modelling of Equivocality of Spatial Analyses with Utilization of Fuzzy Logic Principle in ArcGIS Ambient

Supervisor: ĎURAČIOVÁ, R.

FLIMELOVÁ, L.: Web Portal of the Central Europe Permanent Network
Supervisor: PAPČO, J.

GÍRETHOVÁ, J.: Application of Finite Element Method to Specification of a Gravity Field Model
Supervisor: JANÁK, J.

HAJTMAN, Z.: Analysis of Tidal Effects of Long-Term Gravimetric Measurements
Supervisor: HEFTY, J.

HRUŠKA, M.: Application of IERS Conventions 2003 in Astronomical Calculations
Supervisor: HUSÁR, L.

JELENÍKOVÁ, Z.: Analysis of the Test Satellite Signals of Galileo Navigation System
Supervisor: HEFTY, J.

KUČEROVÁ, E.: Analysis of Gradient of Gravitational Acceleration
Supervisor: PAPČO, J.

MAJDAN, M.: Design and Implementation of Geographic Information System of Urban Roads
Supervisor: FAIXOVÁ CHALACHANOVÁ, J.

MAŠICOVÁ, M.: Automated Updating and Harmonization of Spatial Databases
Supervisor: BUČKO, E.

MATUŠOV, L.: Transformation between Coordinates Systems S-JTSK and ETRS 89
Supervisor: GERHÁTOVÁ, Ľ.

PAULIK, O.: Application of Interpolation Methods of GNSS Satellite Geocentric Coordinates and GNSS Satellite Clocks
Supervisor: HEFTY, J.

PAVLIS, D.: The Application of Multi User ZB GIS Up-Dating Methodic
Supervisor: ĎURAČIOVÁ, R.

ŠVARAL, P.: Geometric Aspects of the Reference Surfaces in Geodesy
Supervisor: HUSÁR, L.

TAKÁČOVÁ, V.: Spatial Interpolation Methods Analyses
Supervisor: IGONDOVÁ, M.

2.3 Doctoral theses

HIPMANOVÁ, L.: Geo-Kinematics of Central and Southeastern Europe Based on Integration of Permanent and Epoch-Wise GPS Networks (in English)

Supervisor: HEFTY, J.

LIESKOVSKÝ, T.: Using of Geographical Information Systems in Archaeological Predictive Modeling
Supervisor: BUČKO, E.

3. Research

3.1 Research projects

Prediction of Archeological Sites (2008-2011, FAIXOVÁ CHALACHANOVÁ, J.), APVV-0249-07

Analysis and Interpretation of High-Frequency Positioning Using Global Navigation Satellite Systems (2010-2011, HEFTY, J.), VEGA 1/0569/10

National Centre for Diagnosing the Earth Surface Deformations in Slovakia (2010-2013, MOJZEŠ, M.), ITMS 26220220108

Use of the data of European satellite mission GOCE and its effective combination with the surface gravity data (2011-2013, JANÁK, J.), VEGA 1/1092/11

Detection of Ground Deformation Using Radar Interferometry Technique (2011-2014, PAPČO, J.), ESA Earth Observing Principal Investigator Project, No. 9981

Bouguer Anomalies of New Generation and the Gravimetric Model of Western Carpathians (2011-2014, PAPČO, J., principal investigator PAŠTEKA, R. from Comenius University in Bratislava), APVV-0194-10

Methods of Fuzzy Decision Making and Fractal Geometry Applied on Objects Modeling in Geographical Information Systems (2010-2011, ĎURAČIOVÁ, R., principal investigator VAJSÁBLOVÁ, M. from the Department of Mathematics and Constructive Geometry), VEGA 1/0203/10

Impact of Local Hydrology on Gravimetric Measurements (2011-2012, MIKOLAJ, M.), Fund of STU BA: Program for the Support of Young Researchers

Verification and Improvement of Precipitable Water Vapor Models Obtained from GPS Measurements (2011-2012, IGONDOVÁ, M.), Fund of STU BA: Program for the Support of Young Researchers

Tidal Analysis of Gravity Measurements by Superconducting Gravimeter (2011-2012, HÁBEL, B.), Fund of STU BA: Program for the Support of Young Researchers

3.2 International cooperation

Cooperating institutions

CEGRN Consortium, Department of Meteorology and Geophysics, University of Vienna, Austria

EPN – EUREF Permanent Network, Freie Universität Berlin - Tell Fecheriye Research Project

Italian National Research Council, Institute for Marine Sciences, Italy

Kiel University, Institute of Geosciences, Germany

Research Institute of Geodesy, Topography and Cartography, Czech Republic

Technical University of Ostrava, Institute of geoinformatics, Czech Republic

UNAVCO, University of New Brunswick, Department of Geodesy and Geomatics Engineering, Canada

University of Stuttgart, Institute of Navigation, Germany

University of Trieste, Department of Earth Sciences, Italy

Warsaw University of Technology, Faculty of Geodesy and Cartography, Poland

Visit of staff members to foreign institutions / Participation in meetings

KLIMENT, T.: project EnvEurope, Institute for Marine Sciences, Italian National Research Council, Italy, 1.1.-31.12.2011

CIBULKA, D., KLIMENT, M., GÁLOVÁ, L., KROČKOVÁ, K.: Symposium GIS Ostrava, Czech Republic, 24.-26.1.2011

MOJZEŠ, M., GERHÁTOVÁ, L.: ODAM – Olomoucian Days of Applied Mathematics 2011, Olomouc, Czech Republic, 26.-28.1.2011

GERHÁTOVÁ, L.: GNSS in Geodetic Practice, Brno, Czech Republic, 3.2.2011

HÁBEL, B.: Study stay, topic: Analysis of Continual Superconducting Gravimeter Measurements, Department of Meteorology and Geophysics, University of Vienna, Austria 1.3.2011-30.6.2011

JANÁK, J., PITOŇÁK, M.: 4th GOCE International User Workshop, Munich, Germany, 30.3-2.4.2011

HEFTY, J., MOJZEŠ, M., JANÁK, J., PITOŇÁK, M.: EGU General Assembly 2011, Wien, Austria, 3.-8.4.2011

KLIMENT, T.: AGILE Workshop Testbed Research PTB, Utrecht, The Netherlands, 18.4.2011

LIESKOVSKÝ, T., PAPČO, J.: Computer Support in Archaeology, Dalešice, Czech Republic, 18.5.-20.5.2011

KLIMENT, T.: GI2011-X-Border – SDI/GDI Symposium, Bad Schandau, Decin, Germany and Czech Republic, 23.-24.5.2011

IGONDOVÁ, M.: Symposium of the IAG Subcommission for Europe (EUREF), Chisinau, Moldova, 24.-29.5.2011

KLIMENT, T.: INSPIRE Conference 2011, Edinburgh, Scotland, Great Britain, 27.6-1.7.2011

HEFTY, J., GERHÁTOVÁ, L.: 3rd International Colloquium on Scientific and Fundamental Aspects of the Galileo Programme, Copenhagen, Denmark, 31.8.-2.9.2011

STOPKOVÁ, E.: lecturer at Practical Course on Geophysical Methods in Archaeology, Katarínka, Slovakia, organized for students of Institute of Geosciences, Kiel University, Germany 18.09.-1.10.2011

PAPČO, J., MOJZEŠ, M.: INGEO 2011 – 5th International Conference on Engineering Surveying, Brijuni, Croatia, 22.-24.9.2011

MOJZEŠ, M.: Seminar: Can Modern Geodesy Exist without Geodynamics, Jozefoslaw, Poland, 17.-18.10.2011

HEFTY, J.: GERHÁTOVÁ, L.: 12th Czech-Polish Workshop on Recent Geodynamics of the Sudety Mountains and Adjacent Areas, Jugowice, Poland, 20.-22.10.2011

KROČKOVÁ, K.: 20th Conference on GIS ESRI in Czech Republic, Prague, Czech Republic, 9.-11.11.2011

HEFTY, J., MOJZEŠ, M., HUSÁR, L., JANÁK, J., HÁBEL, B.: Seminar of Center for Earth Dynamics Research, Třešť, Czech Republic, 14.-16.11.2011

Membership in international professional organizations

HEFTY, J.: International Astronomical Union

HEFTY, J.: International Association of Geodesy

HEFTY, J.: European Geosciences Union

HEFTY, J.: American Geophysical Union

IGONDOVÁ, M.: European Geosciences Union

MOJZEŠ, M.: International Association of Geodesy

MOJZEŠ, M.: European Geosciences Union

MOJZEŠ, M.: American Geophysical Union

MOJZEŠ, M.: CERGN Consortium

4. Publications

Books

LIESKOVSKÝ, T., FAIXOVÁ CHALACHANOVÁ, J., ĎURAČIOVÁ, R., BLAŽOVÁ, E.: Archaeological Predictive Modelling from Geoinformatics Point of View. REMPrint, Bratislava 2011, ISBN 978-80-970741-0-4 (in Slovak)

Textbooks

HUSÁR, L.: Spherical Astronomy and Space Geodesy Bratislava : STU, 2011, 185 p., ISBN 978-80-227-3518-6 (in Slovak)

Journals

BEZRUČKA, J.: The USE of Kalman Filter in Geodesy and Navigation. In: Slovak Journal of Civil Engineering. - ISSN 1210-3896. Vol. 19, No. 2 (2011), pp. 8-15 (in English)

BLAŽOVÁ, E., LIESKOVSKÝ, T.: Use of GIS and Its Tools for Predictive Modelling in Archaeology. In: Study News of the Archaeological Institute of the Slovak Academy of Sciences (Študijné zvesti Archeologického ústavu SAV). ISSN 0560-2793. Vol. 49 (2011), pp. 5-23 (in Slovak)

ĎURAČIOVÁ, R., LIESKOVSKÝ, T., KROČKOVÁ, K., SABO, M.: Multi-Criteria Decision-Making Using Fuzzy Sets in a GIS Environment and Its Application in Archaeological Predictions. In: Horizons of Geodesy and Cartography (Geodetický a kartografický obzor). ISSN 0016-7096. Vol. 57 (99), No. 8 (2011), pp. 205-215 (in Slovak)

JANÁK, J., PITOŇÁK, M.: Comparison and Testing of GOCE Global Gravity Models in Central Europe. In: Journal of Geodetic Science. ISSN 2081-9943. Vol. 2, No. 1 (2011), pp. 333-347 (in English)

JANÁK, J., VANÍČEK, P., ALBERTS, B.: Numerical Evaluation of the Mean Values of Topographical Effects. In: Journal of Geodetic Science. ISSN 2081-9943. Vol. 2, No. 1 (2011), pp. 88-93 (in English)

ONDREJKA, P., PAPČO, J., LIŠČÁK, P., PAUDITŠ, P.: Use of GNSS Technology in Engineering Geology in

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PAPČO, J., PAŠTEKA, R., ZÁHOREC, P., BARTON, K., BRADY, C.: In Search of Hidden Chambers at Newgrange Passage Tomb. In: Archeology Ireland. ISSN 0790-892X. Vol.25, No. 4 (2011), pp. 11-12 (in English)

Conferences

BURGAN, J.: ABSOLUTE Program - Current State and Expected Development. In: Juniorstav 2011: 13th Professional Conference of Postgraduate Students. Brno, VUT, 2011. ISBN 978-80-214-4232-0 (in Slovak)

CIBULKA, D.: Testing of View Services. In: Juniorstav 2011: 13th Professional Conference of Postgraduate Students. Brno, VUT, 2011. ISBN 978-80-214-4232-0 (in Slovak)

CIBULKA, D.: Vector Geodata in a Web Environment (abstract). In: Open Software in Education, Research and IT Solutions (Otvorený softvér vo vzdelávaní, výskume a v IT riešeníach): International Conference OSSConf 2011. Žilina, SR, 2011. - Bratislava : Society for Open Information Technologies (Spoločnosť pre otvorené informačné technológie), 2011. ISBN 978-80-970457-1-5. pp. 286-287 (in Slovak)

GÁLOVÁ, L.: KLIMENT, T.: Design and Implementation of a User Scenario for Flood Hazard Maps within SDI. In: Juniorstav 2011: 13th Professional Conference of Postgraduate Students Brno, VUT, 2011. ISBN 978-80-214-4232-0 (in Slovak)

HÁBEL, B.: Application of Spectral Analysis Methods to Tidal Signal Observed by Superconducting Gravimeter. In: Juniorstav 2011: 13th Professional Conference of Postgraduate Students Brno, VUT, 2011. ISBN 978-80-214-4232-0 (in Slovak)

HEFTY, J., GERHÁTOVÁ, L.: Combination of 3D Epoch-Wise and Permanent Geodetic Networks Observed by Global Navigation Satellite Systems (abstract). In: ODAM 2011 : International conference. Olomoucnian Days of Applied Mathematics. Book of abstracts. Olomouc, CR, 2011. ISBN 978-80-244-2684-6. p. 23 (in English)

HEFTY, J. - GERHÁTOVÁ, L. - HIPMANOVÁ, L. - IGONDOVÁ, M. - DROŠČÁK, B.: Refinement of Velocity Field in Central Europe Based on Reprocessed Permanent and Epoch-Wise GPS Observations (abstract). In: Geophysical Research Abstracts. Volume 13/2011 : EGU General Assembly 2011 (in English)

HEFTY, J., GERHÁTOVÁ, L.: Specificities of GLONASS Pseudorange and Phase Processing in Precise Point Positioning Algorithms When Combined with GPS (abstract). In: Geophysical Research Abstracts. Volume 13/2011 : EGU General Assembly, 2011 (in English)

HEFTY, J., GERHÁTOVÁ, L., PAPČO, J.: Analysis of Short-Time Period Movements of the High-Rise Objects. In: GNSS in Geodetical Practice. Brno, 2011. ISBN 978-80-86433-52-3 (in Slovak)

JANÁK, J., GÍRETHOVÁ, J., PITOŇÁK, M., MINARECHOVÁ, Z.: Empirical Test of the Optimal Geometry of a Boundary Value Problem Domain for Regional Applications Using GOCE Measurements (abstract). In: Geophysical Research Abstracts. Volume 13/2011 : EGU General Assembly 2011 (in English)

KLIMENT, M.: FRAŠTIA, M., KLIMENT, T.: Data Acquisition with a Non-Metric Digital Camera for Thematic Mapping. In: Cartography and Geoinformatics

in Today's Light (Kartografia a geoinformatika vo svetle dneška): 19th Cartographic conference. Bratislava, SR, 2011. Bratislava: Cartographic Society (Kartografická spoločnosť) SR, 2011. ISBN 978-80-89060-19-1. pp. 92-101 (in Slovak)

KLIMENT, T., ĎURAČIOVÁ, R., GÁLOVÁ, L., CIBULKA, D., TUCHYŇA, M.: Theoretical Aspects and Open Questions in SDI Infrastructures in Geodesy and Cartography Domain at SUT. In: GIS. Ostrava 2011: VŠB - Technical University of Ostrava, 2011. ISBN 978-80-248-2366-9 (in Slovak)

KLIMENT, T. , CIBULKA, D.: Testing of Discovery Services and View Services According to INSPIRE Demands. In: GIS. Ostrava 2011: VŠB - Technical University of Ostrava, 2011. ISBN 978-80-248-2366-9. pp. 1-9 (in Slovak)

LIPTÁK, M., PAPČO, J. ,SOKOL, Š.: Mathematical Models for Expressing the Impact of a Vertical Refraction in the Processing of a Vertical Network and Comparison of the Estimated Parameters with Results Obtained by Means of GNSS. In: Current Problems of Surveying, Engineering Surveying and Photogrammetry. Seminar with International Participation on the 60th Anniversary of the Department of Surveying of FCE, SUT in Bratislava, 2011. ISBN 978-80-227-3501-8 (in Slovak)

MIKOLAJ, M., MOJZEŠ, M.: Hydrological Effects on Absolute Gravity Measurements Using the GLADS Model (abstract). In: Geophysical Research Abstracts. Vol. 13/2011: EGU General Assembly 2011 (in English)

MIKOLAJ, M.: Possibility of Using the GLDAS Global Hydrological Model for Correction of Gravity Measurements. In: Juniorstav 2011: 13th Professional Conference of Postgraduate Students. Brno, VUT, 2011. ISBN 978-80-214-4232-0 (in Slovak)

MOJZEŠ, M.: Determination of Physical Heights by Satellite and Gravity Measurements (abstract). In: ODAM 2011 : International conference. Olomoucian Days of Applied Mathematics. Book of abstracts. Olomouc, CR, 2011. ISBN 978-80-244-2684-6. p. 44 (in English)

MOJZEŠ, M., MIKOLAJ, M.: Repeated Absolute Gravity Measurements in the Area of Slovakia. In: Terrestrial Gravimetry : Static and Mobile Measurements : IAG symposium. Saint Petersburg, Russia, 2010. 2011. ISBN 978-5-91995-017-2. pp. 108-111 (in English)

PITOŇÁK, M.: Comparison of Earth Gravity Models from GOCE Satellite Mission. In: Juniorstav 2011: 13th Professional Conference of Postgraduate Students. Brno, VUT, 2011. ISBN 978-80-214-4232-0 (in Slovak)

PAPČO, J., GERHÁTOVÁ, Ľ. ,BARANČÍK, M.: Specific Problems Related to Analysis and Interpretation of Highfrequency GNSS Monitoring of Short-term Positional Changes. In: INGENEO 2011 : 5th International Conference on Engineering Surveying. Brijuni, Croatia : University of Zagreb, 2011. ISBN 978-953-6082-15-5. - pp. 247-252 (in English)

DEPARTMENT OF SURVEYING

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1. Education

1.1 Graduate study

Obligatory subjects

Diploma Thesis
Engineering Surveying I, II
Geodesy, Cartography and Cadastre
Geodetic Work Legislation
History of Surveying
Industrial Surveying
Photogrammetry II
Special Seminar
Surveying I, II, III
Surveying (branch of study: Building Constructions and Architecture)
Surveying (branch of study: Building Technology and Management)
Surveying (branch of study: Hydraulic Engineering and Water Resources Management)
Surveying in Building Construction (branch of study: Engineering Constructions and Transportation Structures)
Surveying in Civil Engineering

Obligatory elective subjects

Applied Close-Range Photogrammetry
Bachelor's Thesis
Photogrammetry I
Surveying in Underground Areas

Optional subjects

Measuring Systems in Engineering Surveying

1.2 Postgraduate courses

Engineering Surveying
Photogrammetry

2. Theses

2.1 Bachelor theses

There were 17 works.

2.2 Graduate theses

BAŇKOS, M.: Determination of a 3D Location Using WLAN Technology
Supervisor: KOPÁČIK, A.

BARANČÍK, M.: Stability Control of a Bridge by GNSS
Supervisor: KYRINOVIČ, P.

BUGÁŇ, M.: Analysis of the Accuracy of the Coordinates of Observed Points Obtained by Geodetic Methods
Supervisor: BAJTALA, M.

DEBNÁR, P.: Automated Measuring System to Assess Displacement and Deformation of Bridge Structures

Supervisor: KOPÁČIK, A.

FAŠÁNEKOVÁ, I.: Long-Term Measurement of Vertical Displacements of Bridge Structures
Supervisor: JEŽKO, J.

GÁLIKOVÁ, J.: Calibration of the Leica Nivel 220 Twin-Axis Tilt Sensor
Supervisor: KYRINOVIČ, P.

JENČOVÁ, D.: Geometric Quality of the Surfaces Achieved by Photogrammetric Scanning
Supervisor: FRAŠTIA, M.

KLOSKA, M.: Possibilities of Processing Height Data and Their Evaluation
Supervisor: BAJTALA, M.

KMEŤKOVÁ, R.: Possibilities of Using Terrestrial Laser Scanning for Measuring Structural Deformations
Supervisor: BAJTALA, M.

LEPÁČEK, P.: Possibilities of a Middle Format Digital Camera in Aircraft Imaging
Supervisor: FRAŠTIA, M.

LIPTÁKOVÁ, L.: Estimating Parameters of a Vertical Network from Terrestrial and Satellite Measurements
Supervisor: LIPTÁK, M.

MAREKOVÁ, V.: Geodetic Measurement of the Points of a Setting-Out Network for the Reconstruction of Railroads
Supervisor: SOKOL, Š.

MLYNÁRIKOVÁ, M.: Testing the Stability of Second Order Accuracy Digital Levels
Supervisor: SOKOL, Š.

PAULÍK, J.: Creation of 3D Models Using Surveying Methods
Supervisor: JEŽKO, J.

ŠTELLMACH, M.: Photogrammetric Determination of Selected Parameters of a Testing Device
Supervisor: FRAŠTIA, M.

TUCÍKOVÁ, M.: Use of GNSS Technology and Terrestrial Methods for Determining Spatial Coordinates
Supervisor: SOKOL, Š.

VAILING, M.: Measurement of the Dynamic Properties of the Apollo Bridge in Bratislava
Supervisor: KYRINOVIČ, P.

VLADÁR, G.: Determination of the Displacement and Deformation of Bridge Structures with Terrestrial Laser Scanners
Supervisor: KOPÁČIK, A.

VOŠKA, J.: Documentation of Archaeological Sites Using Geodetic Methods
Supervisor: FRAŠTIA, M.

2.3 Doctoral theses

HALIČKOVÁ, J.: 3D Model Creation Using Laser Scanning Technology
Supervisor: KOPÁČIK, A.

CHLEPKOVÁ, M.: Application of Digital Photogrammetry in Engineering Geology in Monitoring Geodynamic Processes
Supervisor: SOKOL, Š.

3. Research

3.1 Research projects

The Development of a Measuring System for Continual Monitoring of the Bridges in Bratislava (2009-2011, KOPÁČIK, A.), VEGA 1/0706/09

The Qualitative Aspects of Creating Spatial Models by Surveying and Photogrammetric Methods (2010-2011, SOKOL, Š.), VEGA 1/0142/10

Detailed Virtual Model of the Calvary in Banská Štiavnica as the Basis for the Preservation of a World-Wide Cultural Monument (2010-2011, FRAŠTIA, M.), VEGA 1/0680/10

3.2 International cooperation

Cooperating institutions

Department of Special Geodesy, Czech Technical University in Prague, Czech Republic

Institute of Geodesy, Brno University of Technology, Czech Republic

Institute of Geodesy and Mine Surveying, Technical University of Ostrava, Czech Republic

Visit of staff members to foreign institutions/Participation in meetings

BRUNČÁK, P. - ERDÉLYI, J. - CHLEPKOVÁ, M. - LIPTÁK, I. - MARČIŠ, M.: 13th Professional Conference of Postgraduate Students, Brno, Czech Republic, 4.2.2011

ERDÉLYI, J. - KYRINOVIČ, P. - KOPÁČIK, A.: X Konferencja Naukowo-Techniczna: Aktualne Problemy w Geodezji Inżynierskiej, Warszawa, Poland, 24.-25.3.2011

KYRINOVIČ, P.: Current Problems of Engineering Surveying, Brno, Czech Republic, 14.4.2011

BRUNČÁK, P. - LIPTÁK, I. - LUKÁČ, Š.: XVII Międzynarodowe Polsko-Czesko-Słowackie Dni Geodezji, Craków, Poland, 19.-21.5.2011

FRAŠTIA, M. – XI: Dni Miernictwa Górniczego i Ochrony Terenów Górniczych, Katowice, Poland, 20.5.2011

KOPÁČIK, A.: FIG Working Week 2011: 6th National Congress of ONIGT, Marrakech, Morocco, 18.-22.5.2011.

SOKOL, Š.: Institute of Geodesy and Mine Surveying, Ostrava, Czech Republic, 1.-2.6.2011

KOPÁČIK, A. - SOKOL, Š.: Institute of Geodesy, Brno, Czech Republic, 16.6.2011

BAJTALA, M. - ERDÉLYI, J. - CHLEPKOVÁ, M. - KOPÁČIK, A. - LIPTÁK, I. - LIPTÁK, M. - MARČIŠ, M.: 5th International Conference on Engineering Surveying, Brijuni, Croatia, 22.-24.9.2011

JEŽKO, J.: Conference on Testing and Quality in the Building Industry, Brno, Czech Republic, 4.-5.10.2011

BAJTALA, M. - BRUNČÁK, P. - JEŽKO, J. - SOKOL, Š.: 18th SDMG Conference, Prague, Czech Republic, 5.-7.10.2011

BAJTALA, M. - ERDÉLYI, J. - CHLEPKOVÁ, M. - KYRINOVIČ, P. - LIPTÁK, I.: 47th Surveying Information Days, Brno, Czech Republic, 8.-9.11.2011

KOPÁČIK, A.: Joint International Symposium on Deformation Monitoring, HongKong, China, 2.-4.11.2011

SOKOL, Š.: Institute of Geodesy, Brno, Czech Republic, 13.12.2011

Membership in international professional organizations

FRAŠTIA, M.: Member of International Society for Photogrammetry and Remote Sensing

KOPÁČIK, A.: Deutsche Geodätische Kommission bei der Bayerischen Akademie der Wissenschaften - Correspondent

KOPÁČIK, A.: National delegate to FIG Commission 2: Professional Education

KOPÁČIK, A.: Chair of Commission 6: Engineering Surveying

KOPÁČIK, A.: Member of FIG Advisory Committee of Commission Officers (ACCO)

KOPÁČIK, A.: European Education in Geodesic Engineering, Cartography and Surveying - WG1: Undergraduate Education

KYRINOVIČ, P.: Vice - chair of WG 6.2: Engineering survey for industry measurement and research

LUKÁČ, Š.: National delegate to FIG Commission 1: Professional Standards & Practice

LUKÁČ, Š.: Member of WG 6.1: Deformation Measurements

4. Publications

Books

KYRINOVIČ, P.: Automated Measuring of the Geometric Parameters of Crane Rails. Bratislava : Slovak University of Technology in Bratislava, 2011. 155 pp. (Edition of Scientific Works; Workbook No. 110), ISBN 978-80-227-3563-6 (in Slovak)

LIPTÁK, M.: Elimination of the Impact of a Vertical Refraction on the Trigonometric Measurements of Elevations. Bratislava: Slovak University of Technology in Bratislava, 2011. 82 pp. (Edition of Scientific Works; Workbook No. 96), ISBN 978-80-227-3450-9 (in Slovak)

Journals

FRAŠTIA, M.: Lessons Learned from the Optical Scanning of the Calvary Structures in Banská Štiavnica. In: Slovenský geodet. a kartograf. ISSN 1335-4019. Vol. 16, No. 4 (2011), pp. 10-13 (in Slovak)

JEŽKO, J.: Testing Electronic Tacheometers According to STN ISO 17123-5. In: Slovenský geodet a kartograf. ISSN 1335-4019. Vol. 16, No. 1 (2011), pp. 5-9 (in Slovak)

KYRINOVIČ, P. - LIPTÁK, I. - ERDÉLYI, J. - KOPÁČIK, A.: Automated Measurement System for Continuous

Bridge Monitoring. In: Geodetický a kartografický obzor. ISSN 0016-7096. Vol. 57 (99), No.12 (2011), pp. 285-294 (in Slovak)

LIPTÁK, M. - SOKOL, Š.: Reducing the Impact of a Vertical Refraction by a Two-Regime Model. In: Slovak Journal of Civil Engineering. - ISSN 1210-3896. - Vol. 19, No. 2 (2011), pp. 21-26 (in English)

LUKÁČ, Š.: XI. International Conference on Geodesy and Cartography in Transportation. In: Slovenský geodet a kartograf. ISSN 1335-4019. Vol. 16, No. 4 (2011), pp. 14-16 (in Slovak)

Conferences

BAJTALA, M. - BRUNČÁK, P. - Kubinec, J. - LIPTÁK, M. - SOKOL, Š.: Determination of the Geometric Parameters and Monitoring of a Factory Chimney Using TLS. In: 47th Surveying Information Days. Brno, Czech Republic, 8.-9.11.2011. Brno : Český svaz geodetů a kartografů, 2011. ISBN 978-80-02-02350-0. pp. 52-57 (in Slovak)

BAJTALA, M. - BRUNČÁK, P. - Kubinec, J. - LIPTÁK, M. - SOKOL, Š.: Exploitation of Terrestrial Laser Scanning in Determining the Geometry of a Factory Chimney. In: INGENEO 2011 : 5th International Conference on Engineering Surveying. Brijuni, Croatia, 22.-24.9.2011. Zagreb : University of Zagreb, 2011. ISBN 978-953-6082-15-5. pp. 77-82 (in English)

BAJTALA, M. - BRUNČÁK, P. - LIPTÁK, M. - SOKOL, Š.: Effects of the Density of the Input Data for Determining the Accuracy of Volumes. In: 18th SDMG Conference. Prague, Czech Republic, 5.-7.10.2011. Ostrava: Vysoká škola báňská - Technická univerzita v Ostravě, 2011. ISBN 978-80-248-2489-5. pp. 5-12 (in Slovak)

BAJTALA, M. - BRUNČÁK, P. - Kubinec, J. - LIPTÁK, M. - SOKOL, Š.: The Problem of Determining Volumes Using Modern Surveying Techniques. In: CzechSTAV 2011 : Innovations in Civil Engineering. Hradec Králové, Czech Republic, 24.-28.10.2011. Hradec Králové: Magnanimitas, 2011. ISBN 978-80-904877-5-8. pp. 130-138 (in English)

BRUNČÁK, P.: Creation of DEM by Means of Various Interpolation Methods. In: Juniorstav 2011: 13th Professional Conference of Postgraduate Students. Brno, Czech Republic, 4.2.2011. Brno : Vysoké učení technické v Brně - Fakulta stavební, 2011. ISBN 978-80-214-4232-0 (in Slovak)

BRUNČÁK, P.: Possibilities of Using Interpolation Methods for Creating a Digital Elevation Model. In: XVII Miedzynarodowe Polsko-Czesko-Slowackie Dni Geodezji. Craków, Poland, 19.-21.5.2011. Warsaw: Stowarzyszenie Geodetów Polskich, 2011. ISBN 978-83-61576-11-2. p. 28 (in Slovak)

BRUNČÁK, P. - BAJTALA, M. - CHLEPKOVÁ, M. - SOKOL, Š.: Consideration of the Elevation Accuracy of a Digital Elevation Model from Data Obtained by the Terrestrial Laser Scanning Method and Photogrammetry. In: Current Problems of Surveying, Engineering Surveying and Photogrammetry. Bratislava, Slovak Republic, 14.6.2011. Bratislava : Slovak University of Technology in Bratislava, 2011. ISBN 978-80-227-3501-8 (in Slovak)

CHLEPKOVÁ, M.: Application of Photogrammetric Scanning in a Fire Testing Procedure for Concrete Tunnel Linings. In: 47th Surveying Information Days. Brno, Czech Republic, 8.-9.11.2011. Brno : Český svaz

geodetů a kartografů, 2011. ISBN 978-80-02-02350-0. pp. 64-69 (in Slovak)

CHLEPKOVÁ, M.: Automated Detection of Changes in a Rock Mass Using Image Processing. In: Juniorstav 2011: 13th Professional Conference of Postgraduate Students. Brno, Czech Republic, 4.2.2011. Brno : Vysoké učení technické v Brně - Fakulta stavební, 2011. ISBN 978-80-214-4232-0 (in Slovak)

CHLEPKOVÁ, M.: Digital Photogrammetry in a Fire Testing Procedure for Concrete Tunnel Linings. In: INGENEO 2011 : 5th International Conference on Engineering Surveying. Brijuni, Croatia, 22.-24.9.2011. Zagreb : University of Zagreb, 2011. ISBN 978-953-6082-15-5. pp. 295-300 (in English)

ERDÉLYI, J.: Determination of Bridge Defects Using TLS. In: Juniorstav 2011 : 13th Professional Conference of Postgraduate Students. Brno, Czech Republic, 4.2.2011. Brno : Vysoké učení technické v Brně - Fakulta stavební, 2011. ISBN 978-80-214-4232-0 (in Slovak)

ERDÉLYI, J.: Determination of Bridge Defects Using TLS. In: X Konferencja Naukowo-Techniczna : Aktualne Problemy w Geodezji Inzynieryjnej. Warsaw, Poland, 24.-25.3.2011. Warsaw : Politechnika Warszawska, 2011. ISBN 978-83-61576-14-3. p. 31 (in English)

ERDÉLYI, J.: Exploitation of TLS in Monitoring Defects of a Bridge Structure. In: INGENEO 2011 : 5th International Conference on Engineering Surveying. Brijuni, Croatia, 22.-24.9.2011. Zagreb : University of Zagreb, 2011. ISBN 978-953-6082-15-5. pp. 65-70 (in English)

ERDÉLYI, J.: Exploitation of TLS in Monitoring Defects of a Bridge Structure. In: Geodesy and Cartography in Transportation : 11th International Conference. Skalica, Slovak Republic, 12.-13.9.2011. Bratislava : Slovenská spoločnosť geodetov a kartografov, 2011. ISBN 978-80-969692-7-2 (in Slovak)

ERDÉLYI, J. - LIPTÁK, I.: Monitoring a Bridge Structure Using TLS Technology. In: 47th Surveying Information Days. Brno, Czech Republic, 8.-9.11.2011. Brno : Český svaz geodetů a kartografů, 2011. ISBN 978-80-02-02350-0. pp. 58-63 (in Slovak)

ERDÉLYI, J. - KYRINOVIČ, P. - KOPÁČIK, A. - LIPTÁK, I.: Practical Use of Terrestrial Laser Scanning Technology. In: 19th Slovak Geodetic Days. Žilina, Slovak Republic, 3.-4.11.2011. Bratislava : Komora geodetov a kartografov, 2011. ISBN 978-80-969809-8-7 (in Slovak)

ERDÉLYI, J. - KYRINOVIČ, P. - JEŽKO, J.: Research Activities and Cooperation of the Department of Surveying with the Commercial Sector from 2001-2011. In: Current Problems of Surveying, Engineering Surveying and Photogrammetry. Bratislava, Slovak Republic, 14.6.2011. Bratislava : Slovak University of Technology in Bratislava, 2011. ISBN 978-80-227-3501-8 (in Slovak)

FRAŠTIA, M.: Close Range Photogrammetry, Its Application and Tools. In: 19th Slovak Geodetic Days. Žilina, Slovak Republic, 3.-4.11.2011. Bratislava : Komora geodetov a kartografov, 2011. ISBN 978-80-969809-8-7 (in Slovak)

FRAŠTIA, M. - BECK, J. - PLAKINGER, M.: Photogrammetric Monitoring of a Vertical Mine Shaft. In: 18th SDMG Conference. Prague, Czech Republic, 5.-7.10.2011. Ostrava : Vysoká škola báňská - Technická

- univerzita v Ostravě, 2011. ISBN 978-80-248-2489-5. pp. 28-39 (in Slovak)
- FRAŠTIA, M. - BECK, J. - PLAKINGER, M.: Photogrammetric Monitoring of a Vertical Mine Shaft. In: Prace naukowe GIG. ISSN 1643-7608. No. 2 : XI Dni Miernictwa Górniczego i Ochrony Terenów Górniczych 2011, pp. 128-134 (in English)
- FRAŠTIA, M. - MARČIŠ, M.: Photogrammetric Scanning of the Calvary Structures in Banská Štiavnica. In: Current Problems of Surveying, Engineering Surveying and Photogrammetry. Bratislava, Slovak Republic, 14.6.2011. Bratislava : Slovak University of Technology in Bratislava, 2011. ISBN 978-80-227-3501-8 (in Slovak)
- HALIČKOVÁ, J. - Mikula, K. - KOPÁČIK, A.: Automated Creation of 3D Models. In: INGENEO 2011 : 5th International Conference on Engineering Surveying. Brijuni, Croatia, 22.-24.9.2011. Zagreb : University of Zagreb, 2011. ISBN 978-953-6082-15-5. pp. 35-40 (in English)
- HALIČKOVÁ, J. - KOPÁČIK, A.: Automated Model Creation from TLS Data. In: FIG Working Week 2011 : 6th National Congress of ONIGT. Marrakech, Morocco, 18.-22.5.2011. ISBN 978-87-90907-92-1 (in English)
- HALIČKOVÁ, J. - KOPÁČIK, A. - Mikula, K.: Automated Processing of TLS Data. In: 19th Slovak Geodetic Days. Žilina, Slovak Republic, 3.-4.11.2011. Bratislava : Komora geodetov a kartografov, 2011. ISBN 978-80-969809-8-7 (in Slovak)
- HALIČKOVÁ, J. - FRAŠTIA, M. - MARČIŠ, M.: Data Integration from Terrestrial Laser and Photogrammetric Scanning. In: Current Problems of Surveying, Engineering Surveying and Photogrammetry. Bratislava, Slovak Republic, 14.6.2011. Bratislava : Slovak University of Technology in Bratislava, 2011. ISBN 978-80-227-3501-8 (in Slovak)
- JEŽKO, J. - MERVOVÁ, D.: Application of STN ISO 17123-2 in Levelling Instrument Testing in Civil Engineering. In: CzechSTAV 2011 : Innovations in Civil Engineering. Hradec Králové, Czech Republic, 24.-28.10.2011. Hradec Králové : Magnanimitas, 2011. ISBN 978-80-904877-5-8. pp. 6-14 (in Slovak)
- JEŽKO, J. - SOKOL, Š.: Interest of the Department of Surveying in the Realization of the Measuring of Mining Works in the Slovak and Czech Republics. In: 18th SDMG Conference. Prague, Czech Republic, 5.-7.10.2011. Ostrava : Vysoká škola báňská - Technická univerzita v Ostravě, 2011. ISBN 978-80-248-2489-5. pp. 71-81 (in Slovak)
- JEŽKO, J.: Technical Standardisation in Geodesy and Cartography in the Slovak Republic. In: Conference on Testing and Quality in the Building Industry 2011. Brno, Czech Republic, 4.-5.10.2011. Brno : Vysoké učení technické v Brně, 2011. ISBN 978-80-214-3438-9. pp. 113-122 (in Slovak)
- JEŽKO, J.: Test of Levelling Instruments According to International Norm STN ISO 17123-2. In: Current Problems of Surveying, Engineering Surveying and Photogrammetry. Bratislava, Slovak Republic, 14.6.2011. Bratislava : Slovak University of Technology in Bratislava, 2011. ISBN 978-80-227-3501-8 (in Slovak)
- JEŽKO, J. - LUKÁČ, Š.: Glance at the 60 Year History of the Department of Surveying FCE of SUT. In: 19th Slovak Geodetic Days. Žilina, Slovak Republic, 3.-4.11.2011. Bratislava : Komora geodetov a kartografov, 2011. ISBN 978-80-969809-8-7 (in Slovak)
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- KYRINOVIČ, P. - LIPTÁK, I. - ERDÉLYI, J.: Geodetic Monitoring of the Dynamic Deformation of Technological Equipment. In: Current Problems of Surveying, Engineering Surveying and Photogrammetry. Bratislava, Slovak Republic, 14.6.2011. Bratislava : Slovak University of Technology in Bratislava, 2011. ISBN 978-80-227-3501-8 (in Slovak)
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LUKÁČ, Š. - ŽÁK, M.: Activities and Tasks of Surveyors in the Construction of the Bridge Structures of D1 Highway Sverepec-Vrtižer. In: Geodesy and Cartography in Transportation : 11th International Conference. Skalica, Slovak Republic, 12.-13.9.2011. Bratislava : Slovenská spoločnosť geodetov a kartografov, 2011. ISBN 978-80-969692-7-2 (in Slovak)

LUKÁČ, Š.: Activity of Authorized Surveyors and Cartographers in Slovakia. In: Current Problems of Engineering Surveying 2011. Prague : Český svaz geodetů a kartografů, 2011. ISBN 978-80-02-02284-8. pp. 27-31 (in Slovak)

LUKÁČ, Š.: Participation of the Department of Surveying in Designing, Measuring and Monitoring Structures at Nuclear Power Plants in Slovakia. In: Current Problems of Surveying, Engineering Surveying and Photogrammetry. Bratislava, Slovak Republic, 14.6.2011. Bratislava : Slovak University of Technology in Bratislava, 2011. ISBN 978-80-227-3501-8 (in Slovak)

MARČIŠ, M.: Convergent Photogrammetry for Very Close Distances. In: Current Problems of Surveying, Engineering Surveying and Photogrammetry. Bratislava, Slovak Republic, 14.6.2011. Bratislava : Slovak University of Technology in Bratislava, 2011. ISBN 978-80-227-3501-8 (in Slovak)

MARČIŠ, M. - FRAŠTIA, M.: Measuring the Deformations of a Steel Column Using Convergent Photogrammetry. In: INGENIO 2011 : 5th International Conference on Engineering Surveying. Brijuni, Croatia, 22.-24.9.2011. Zagreb : University of Zagreb, 2011. ISBN 978-953-6082-15-5. pp. 211-218 (in English)

MARČIŠ, M. - FRAŠTIA, M.: Photogrammetric Documentation of the Ruins of Monuments. In: Juniorstav 2011 : 13th Professional Conference of Postgraduate Students. Brno, Czech Republic, 4.2.2011. Brno : Vysoké učení technické v Brně - Fakulta stavební, 2011. ISBN 978-80-214-4232-0 (in Slovak)

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DEPARTMENT OF GEOTECHNICS

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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

Obligatory elective subjects

Bachelor's Thesis
Bachelor's Thesis Seminar

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

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

2. Theses

2.1 Bachelor theses

There were 9 works.

2.2 Graduate theses

ĎURANNOVÁ, M.: Positive Effects of Reservoirs on the Environment
Supervisor: MINÁRIK, M.

HROMADA, M.: Analysis of Subsoil Deformation in Navigation Lock in Gabčíkovo
Supervisor: HRUŠTINEC, Ľ.

IGNAČÁK, M.: Alternative Solution to Sheet Pile Construction
Supervisor: TURČEK, P.

LUCKÝ, M.: Impact of Operation of the Vlčia Dolina Reservoir on Dam Safety
Supervisor: BEDNÁROVÁ, E.

SODOMA, M.: Temporary Securing of the Eastern Portal of the Rojkov Tunnel
Supervisor: SÚĽOVSKÁ, M.

STACHO, J.: Reliability of the Pile Design According to Eurocode 7
Supervisor: FRANKOVSKÁ, J.

VOZÁR, M.: Alternative Design of the Larsen Structure
Supervisor: TURČEK, P.

WINKLER, M.: Analyses of Problems of Small Water Reservoirs
Supervisor: BEDNÁROVÁ, E.

3. Research

3.1 Research projects

Implementation of Progressive Methods for Reviewing the Safety and Reliability of Water Structures (2009-2012, BEDNÁROVÁ), VEGA 1/0704/09,

Geotechnical Risks and Innovations in Environmental Structures and Burdens (2010-2011, MASAROVIČOVÁ), VEGA 1/0892/09,

Estimating the Effect of the Geotechnical Soil Properties on an Effective Design for Treating Landslides (2011-2013 KOPECKÝ), VEGA 1/0944/11

Risks Taken into Account in the Design of Geotechnical Constructions (2009-2012, TURČEK), VEGA 1/0619/09,

Integration of New Trends in the Brownfields of an Urban Environment in Underground Civil Engineering (2010-2011 TURČEK), KEGA 344-0075STU-4/2010,

3.2 International cooperation

Membership in international professional organizations

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

FRANKOVSKÁ, J.: Member of CEN – TC 250/SC7 Geotechnics

FRANKOVSKÁ, J.: Member of ETC 10 Evaluation of Eurocode 7 of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE)

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

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

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

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.

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

SÚĽOVSKÁ, M.: 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

TURČEK, P.: Member of ETC 10 Evaluation of Eurocode 7 of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE)

4. Publications

Parts of books

BEDNÁROVÁ, E. - MINÁRIK, M. - GRAMBLIČKOVÁ, D.: Lessons Learned from Reviewing the Safety of Slovak Dams. In: Bezpieczeństwo zapór – nowe wyzwania, Warszawa, Instytut Meteorologii i Gospodarki Wodnej – Państwowy Instytut Badawczy, 2011, pp. 129-135 (in English)

BEDNÁROVÁ, E. - GRAMBLIČKOVÁ, D. - MINÁRIK, M.: Safety of Hydraulic Structures Affected by Natural Environment. In: Current Events in Hydraulic Engineering, Gdańsk, Wydawnictwo Politechniki Gdańskiej, 2011, pp. 12-20 (in English)

MARIKOVIČOVÁ, A. - MINÁRIK, M.: Importance of Dam Turček in the Flood Protection. In: Ecohydrological Methods in Water Management, Gdańsk, Wydawnictwo Politechniki Gdańskiej, 2011, pp. 89-94 (in English)

Textbooks

FRANKOVSKÁ, J. – SÚĽOVSKÁ, M. – TURČEK, P.: Foundations. Geotechnical Parameters, Spread and Deep Foundations, Bratislava, STU Bratislava, 2011, 162 pp. (in Slovak)

Journals

BALIAK, F.: Classification of Slope Movements and Their Final Failures. In: Almanach znalca, Vol. 10, Nos. 2-3 (2011), pp. 31-34 (in Slovak)

BALIAK, F.: The Core of the Earth is Like the Human Heart. In: Púchovské noviny, Vol. 11, No. 27 (2011), pp. 11-13 (in Slovak)

BEDNÁROVÁ, E.: Dams and Reservoirs - from the Past to the Present - and What is Next? In: Eurostav, Vol. 17, Nos. 7-8 (2011), pp. 8-11 (in Slovak)

FRANKOVSKÁ, J. - DERCOVÁ, K.: Remediation Methods for Environmental Burdens. In: Odpady, Vol. 11, No. 3 (2011), pp. 15-17 (in Slovak)

GALLIKOVÁ, Z. - SLÁVIK, I.: Utilization of Experimentally Verified Deformation Parameters of Soils in the Prognosis of Settlement of a High-Rise Building Founded in Deep Excavation Pit. In: Roczniki inżynierii budowlanej, Zeszyt 11 (2011), pp. 53-58 (in English)

GRAMBLIČKOVÁ, D. - BEDNÁROVÁ, E. - MINÁRIK, M.: Numerical Analysis of the Seepage Conditions of the Flood Protection Dyke of the Right Bank of the River Danube in Bratislava - Petržalka. In: Geotechnika, Vol. 14, Nos. 1-2 (2011), pp. 11-14 (in Slovak)

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HAKÁČ, J. - BEDNÁROVÁ, E.: Time Series for Prediction of the Seepage Water Level of the Liptovská Mara Dam. In: DAM Engineering, Vol. 21, No. 3 (2011), pp. 235-247 (in English)

HRUŠTINEC, Ľ. - KUZMA, J. - SUMEC, J.: Numerical Analysis of Contact Stresses under Rectangular (Square and Strip) Shallow Foundations. In: Roczniki inżynierii budowlanej, Zeszyt 11 (2011), pp. 63-68 (in English)

HRUŠTINEC, Ľ. - SUMEC, J. - KUZMA, J.: Numerical Analysis of Deformations of the Rectangular (Square and Strip) Shallow Foundations. In: Roczniki inżynierii budowlanej, Zeszyt 11 (2011), pp. 75-80 (in English)

TURČEK, P.: Modern Foundations in Gaps. In: Stavebné materiály. Vol. 6, No.3/2010, pp. 38-40 (in Slovak)

HRUŠTINEC, Ľ. - SUMEC, J. - KUZMA, J.: Numerical Analysis of the Interaction of the Shallow (Circular, Square, Strip) Foundations with Subsoil. In: Roczniki inżynierii budowlanej, Zeszyt 11 (2011), pp. 85-88 (in English)

HULLA, J. - KMEŤ, M.: Screwsol Piles for a Foundation. In: Stavebné materiály, Vol. 7, No. 1 (2011), pp. 18-20 (in Slovak)

KOPECKÝ, M.: Engineering Geological Investigations in Construction Practice. In: Eurostav, Vol.17, No.4 (2011), pp. 22-24 (in Slovak)

KOPECKÝ, M. - ONDRÁŠIK, M. - ANTOLOVÁ, D.: Unstable Slopes on the Right Side of the End of the Dam

Body of the Liptovská Mara Water Reservoir. In: *Górnictwo i geoinżynieria*, Vol. 35, zeszyt 2 (2011), pp. 375-382 (in English)

MASAROVIČOVÁ, M. - SLÁVIK, I.: Geotechnical Aspects of Desludging Sites – A Systematic Solution. In: *Roczniki inżynierii budowlanej*, Zeszyt 11 (2011), pp. 117-122 (in English)

SLÁVIK, I.: The Method of Expression of the Deformation Parameters of Soils for the Prognosis of Settlement of High-Rise Buildings Founded in Deep Excavation Pits. In: *Roczniki inżynierii budowlanej*, Zeszyt 11 (2011), pp. 139-144 (in English)

STRÍČEK, I. - BALIAK, F. - UHLÍK, P.: Mock-Up Experiment for Bentonite Barrier Testing. In: *Górnictwo i geoinżynieria*. Vol. 35, Zeszyt 2 (2011), pp. 543-548 (in English)

Conferences

BALIAK, F. - STRÍČEK, I.: Landslides in Slovakia and Their Impact on Engineering Constructions. In: *Proceedings of 10th International Geotechnical Conference on Problems of Line Structures*, Bratislava, Slovakia, 2011, pp. 137-146 (in Slovak)

BALIAK, F.: The Relation between the Internal and External Geodynamic Processes of the Earth to the Human Body. In: *Proceedings of 15th Interdisciplinary Congress on Natural Medicine*, Trnava, Slovakia, 2011, pp. 1-2 (in Slovak)

BALIAK, F. - STRÍČEK, I.: What Landslides Are and Why They Occur. In: *Proceedings of 10th Conference on Urban, Architectonical and Technical Aspects of the Restoration of the Countryside*, Bratislava, Slovakia, 2011, pp. 38-43 (in Slovak)

BARTOŠ, V. - HRUŠTINEC, Ľ.: Material Models of Sprayed Concrete in Analyses of Tunnels. In: *Proceedings of 10th International Geotechnical Conference on Problems of Line Structures*, Bratislava, Slovakia, 2011, pp. 376-384 (in Slovak)

BARTOŠ, V. - HRUŠTINEC, Ľ.: 3D Numerical Analysis of an Underground Opening in an Anisotropic Stress Field. In: *Proceedings of 3rd International PhD. Student Conference on Civil Engineering and Architecture*, Herľany, Slovakia, 2011 (in English)

BARTOŠ, Z. - KURIMSKÝ, J. - HULLA, J. - BALIAK, F.: Risks for Transportation Structures in East Slovakia. In: *Proceedings of CONECO 2011 International Scientific Conference on Preparation, Design and Realization of Constructions*, Bratislava, Slovakia, 2011 (in Slovak)

BEDNÁROVÁ, E. - GRAMBLIČKOVÁ, D.: Embankments of Water Structures as a Part of Anthropogenic Activities. In: *Proceedings of 13th Scientific International Conference on the Effects of Anthropogenic Activity on the Water Regime in a Lowlands*, Vinianske jazero, Slovakia, pp. 16-21 (in Slovak)

BEDNÁROVÁ, E. - GRAMBLIČKOVÁ, D. - MINÁRIK, M.: Flood Protection of Town Bratislava - Optimization of Flood Protection Measures. In: *Proceedings of 79th ICOLD Annual Meeting on Dams and Reservoirs under Changing Challenges*, Lucerne, Switzerland, 2011 (in English)

BEDNÁROVÁ, E. - MIŠČÍK, M.: The Importance of Reservoirs and Dikes in Flood Prevention. In: *Proceedings of Conference on Management of Basins*

and Flood Risks, Častá - Papiernička, Slovakia, 2011 (in Slovak)

BEDNÁROVÁ, E.: Water Structures - Yes or No? In: *Proceedings of 15th Conference on District Water Days*, Michalovce, Slovakia, 2011, pp. 11-18 (in Slovak)

DVOŘÁKOVÁ, S. - MASAROVIČOVÁ, M.: Environmental Burdens and Legislation. In: *Proceedings of CONECO 2011 International Scientific Conference on Preparation, Design and Realization of Constructions*, Bratislava, Slovakia, 2011 (in Slovak)

DVOŘÁKOVÁ, S. - MASAROVIČOVÁ, M.: Environmental Burdens in the Context of the Legislation of the SR and EU. In: *Proceedings of 39th International Conference on Foundations of Structures*, Brno, Czech Republic, 2011, pp. 237-242 (in Slovak)

DVOŘÁKOVÁ, S. - MASAROVIČOVÁ, M. - SLÁVIK, I.: Geotechnics of Environmental Structures and Burdens. In: *Proceedings of CONECO 2011 International Scientific Conference on Preparation, Design and Realization of Constructions*, Bratislava, Slovakia, 2011 (in Slovak)

FRANKOVSKÁ, J. - STACHO, J.: Reliability of Bored Pile Foundation Designs. In: *Proceedings of 13th Conference on Foundations of Structures*, Stará Lesná, Slovakia, 2011, pp. 15-22 (in Slovak)

FRANKOVSKÁ, J. - DURMEKOVÁ, T.: Specific Features of Weak Rock Laboratory Testing. In: *Proceedings of 15th European Conference on Soil Mechanics and Geotechnical Engineering*, Athens, Greece, 2011, pp. 337-342 (in English)

FRANKOVSKÁ, J. - PRÍTRSKÝ, J. - STRÍČEK, I.: Use of Clays for Design of a Deep Radioactive Waste Repository. In: *Proceedings of CONECO 2011 International Scientific Conference on Preparation, Design and Realization of Constructions*, Bratislava, Slovakia, 2011 (in Slovak)

FRANKOVSKÁ, J. - DURMEKOVÁ, T.: Assessment of Weak Rocks for Soil Investigation of Transport Structures. In: *Proceedings of 10th International Geotechnical Conference on Problems of Line Structures*, Bratislava, Slovakia, 2011, pp. 116-126 (in Slovak)

GRAMBLIČKOVÁ, D. - BEDNÁROVÁ, E. - HRABOVSKÝ, O.: Safety of Flood Dikes on Selected Streams of Eastern Slovakia. In: *Proceedings of 13th Scientific International Conference on the Effects of Anthropogenic Activity on the Water Regime in a Lowlands*, Vinianske jazero, Slovakia, 2011, pp. 111-116 (in Slovak)

HRUŠTINEC, Ľ. - KUZMA, J. - SUMEC, J.: Influences of the Stiffness, Contact Bonding and Load Intensity on the Contact Stresses Distribution of the Square-Type Foundations. In: *Proceedings of 11th VSU International Scientific Conference*, Sofia, Bulgaria, 2011, pp. 66-71 (in English)

HRUŠTINEC, Ľ. - SUMEC, J. - KUZMA, J.: Influences of the Stiffness, Contact Bonding and Load Intensity on the Displacements of Square-Type Foundations. In: *Proceedings of 11th VSU International Scientific Conference*, Sofia, Bulgaria, 2011, pp. 72-77 (in English)

HRUŠTINEC, Ľ. - KUZMA, J.: Optimizing the Design of Foundations of Bridge Structures Located in Difficult Engineering-Geological Conditions. In: *Proceedings of CONECO 2011 International Scientific Conference on*

- Preparation, Design and Realization of Constructions, Bratislava, Slovakia, 2011 (in Slovak)
- HRUŠTINEC, Ľ. - KUZMA, J.: Complex Bridge Structures Located in Complicated Geological Conditions on the D1 Highway at the Jablonov - Studenec Stage. In: Proceedings of 10th International Geotechnical Conference on Problems of Line Structures, Bratislava, Slovakia, 2011, pp. 564-578 (in Slovak)
- HULLA, J. - SLÁVIK, I. - GALLIKOVÁ, Z.: Characteristic and Design Properties of Soils for Calculating Spread Foundations. In: Proceedings of 39th International Conference on Foundations of Structures, Brno, Czech Republic, 2011, pp. 111-116 (in Slovak)
- HULLA, J. - ŠKVARKA, J. - ČAMBAL, Z.: Crash of the Fortifications of a Medieval Castle. In: Proceedings of 13th Conference on Foundations of Structures, Stará Lesná, Slovakia, 2011, pp. 119-126 (in Slovak)
- HULLA, J. - BEDNÁROVÁ, E.: Stability and Seepage Problems of Protective Embankments. In: Proceedings of 10th International Geotechnical Conference on Problems of Line Structures, Bratislava, Slovakia, 2011, pp. 491-503 (in Slovak)
- HULLA, J. - KMEŤ, M.: Strengthening of Soils Surrounding Replacement Piles. Proceedings of 16th International Seminar on Hardening, Tightening and Anchoring of Rock Masses and Constructions, Ostrava, Czech Republic, 2011, pp. 99-104 (in Slovak)
- HULLA, J. - SLÁVIK, I. - GALLIKOVÁ, Z.: The Effect of the Properties of Fine-Grained Soils on Design the Resistance of Shallow Foundations. In: Proceedings of 13th Conference on Foundations of Structures, Stará Lesná, Slovakia, 2011, pp. 7-14 (in Slovak)
- KOPECKÝ, M. - ANTOLOVÁ, D.: Design, Construction and Operation of the D1 Highway in Landslide Areas. In: Proceedings of CONECO 2011 International Scientific Conference on Preparation, Design and Realization of Constructions, Bratislava, Slovakia, 2011 (in Slovak)
- KOPECKÝ, M.: Engineering Geological Investigation for the Foundation of Buildings in Landslide Areas. In: Proceedings of 13th Conference on Foundations of Structures, Stará Lesná, Slovakia, 2011, pp. 67-72 (in Slovak)
- KOPECKÝ, M. - ONDRÁŠIK, M. - SÚĽOVSKÁ, M.: Investigation and Monitoring of Reactivated Landslides in Flysch. In: Proceedings of 15th European Conference on Soil Mechanics and Geotechnical Engineering, Athens, Greece, 2011, pp. 1365-1370 (in English)
- KOPECKÝ, M. - ANTOLOVÁ, D.: Routing of Transportation Constructions Through Landslide Areas. In: Proceedings of 10th International Geotechnical Conference on Problems of Line Structures, Bratislava, Slovakia, 2011, pp. 382-389 (in Slovak)
- LEDÉNYIOVÁ, T.: Reconstruction of Underground Lines with Trenchless Technologies. In: Proceedings of CONECO 2011 International Scientific Conference on Preparation, Design and Realization of Constructions, Bratislava, Slovakia, 2011 (in Slovak)
- MARIKOVIČOVÁ, A.: Water Reservoirs in Slovakia and Their Importance for Water Supplies. In: Proceedings of 13th Juniorstav conference, Brno, Czech Republic, 2011 (in Slovak)
- MASAROVIČOVÁ, M. - SLÁVIK, I.: Systematic Solution of the Geotechnical Aspects of Desludging Sites. In: Proceedings of 39th International Conference on Foundations of Structures, Brno, Czech Republic, 2011, pp. 231-236 (in Slovak)
- ONDRÁŠIK, M. - ONDRÁŠIK, R.: Evaluation and Minimization of the Geological Risks of Roads. In: Proceedings of 10th International Geotechnical Conference on Problems of Line Structures, Bratislava, Slovakia, 2011, pp. 127-136 (in Slovak)
- RAVINGER, R. - SÚĽOVSKÁ, M.: Determination of the Underground Filtration Stability and EN 1997. In: Proceedings of CONECO 2011 International Scientific Conference on Preparation, Design and Realization of Constructions, Bratislava, Slovakia, 2011 (in Slovak)
- RAVINGER, R. - TURČEK, P.: Some Results from Laboratory Verification of Filtration Soil Stability. In: Proceedings of Conference and Workshop on Internal Erosion in Embankment Dams and Their Foundations, Brno, Czech Republic, 2011, pp. 66-73 (in English)
- SLÁVIK, I. - MASAROVIČOVÁ, M.: Specific Approach in the Intensification of Desludging Sites. In: Proceedings of 10th International Geotechnical Conference on Problems of Line Structures, Bratislava, Slovakia, 2011, pp. 713-726 (in Slovak)
- SÚĽOVSKÁ, M. - TURČEK, P.: Design of Geotechnical Precautions for an Access Road on a Downhill Terrain. In: Proceedings of 10th International Geotechnical Conference on Problems of Line Structures, Bratislava, Slovakia, 2011, pp. 308-317 (in Slovak)
- SÚĽOVSKÁ, M. - TURČEK, P.: Supporting Embankments and Cuttings by Gabions. In: Proceedings of CONECO 2011 International Scientific Conference on Preparation, Design and Realization of Constructions, Bratislava, Slovakia, 2011 (in Slovak)
- TURČEK, P.: Design of Slopes Supported by Soil Nailing Using EN 14490. In: Proceedings of 13th Conference on Foundations of Structures, Stará Lesná, Slovakia, 2011, pp. 39-46 (in Slovak)
- TURČEK, P. - KOPECKÝ, M. - HULLA, J. - RAVINGER, R. - SÚĽOVSKÁ, M.: Geotechnical Risks and Preventive Redevelopment Precautions on the Motorway Section D3 Svrčinovec - Skalité. In: Proceedings of 10th International Geotechnical Conference on Problems of Line Structures, Bratislava, Slovakia, 2011, pp. 264-275 (in Slovak)
- TURČEK, P.: Mixed In-Place Used as a Retaining Structure. In: Proceedings of CONECO 2011 International Scientific Conference on Preparation, Design and Realization of Constructions, Bratislava, Slovakia, 2011 (in Slovak)
- TURČEK, P. - SÚĽOVSKÁ, M.: Provision of Deep Excavation Pits by Soil Nailing. In: Proceedings of 13th Conference on Foundations of Structures, Stará Lesná, Slovakia, 2011, pp. 47-54 (in Slovak)

DEPARTMENT OF LAND AND WATER RESOURCES MANAGEMENT

Head of Department
Prof. Ing. Ján Szolgay, PhD.

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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 Engineering

1.2 Postgraduate courses

Hydrology
Hydrology of Surface Waters
Hydrology of Sub-Surface Waters
Hydrodynamics of Porous Media
Methods of Field and Laboratory Experiments in Hydrology
Mathematical Modelling of Hydrological and Hydraulic Processes
Simulation Methods, Algorithms and Programming
Evaluation of the Risk of Extreme Hydrological Processes
Geoinformatics
Methods and Models of Hydrological Balance
Methods of Hydrological Forecasting
Deterministic and Stochastic Models of Hydrological Processes
Landscape Planning
Revitalization of Rivers
Soil Water Regime
Hydrochemistry and Hydrobiology

2. Theses

2.1 Bachelor theses

There were 16 works.

2.1 Graduate theses

BOLGÁČ, D.: Estimating the Impact of Climate Change on the Seasonal Runoff Distribution in a Selected River Basin
Supervisor: HLAVČOVÁ, K.

BORDÁČ, M.: Impact of Meteorological Characteristics on the Simulation of a Soil Water Regime
Supervisor: SKALOVÁ, J.

CALÍK, T.: Impact of Climate Change on a Soil Water Regime
Supervisor: SKALOVÁ, J.

ČURNÝ, J.: Design of a Small Flood Detention Reservoir in Rača
Supervisor: SZOLGAY, J.

DRUGDA, M.: Analysis of Changes in the Soil Water Regime in the Belianske Lúky Region
Supervisor: SKALOVÁ, J.

FICO, M.: Creating Scenarios of Extreme Runoff in a River Basin
Supervisor: HLAVČOVÁ, K.

HOLÝ, M.: Application of Simulation and Optimization Models in the Design of Irrigation Systems
Supervisor: ČISTÝ, M.

HORVÁT, K.: Design of an Automatic Irrigation System
Supervisor: ČISTÝ, M.

JENEIOVÁ, K.: Rainfall-Runoff Modelling in the Vistucky Creek Basin
Supervisor: KOHNOVÁ, S.

JURIČEKOVÁ, K.: Proposals for the Erosion Control of a Selected Region
Supervisor: HLAVČOVÁ, K.

KAŇUKOVÁ, K.: Tracer Methods for Flow Measurements
Supervisor: SZOLGAY, J.

KOHÚT, M.: Proposals for the Flood Protection of a Selected Region
Supervisor: HLAVČOVÁ, K.

KURHAJEC, T.: Modelling of Extreme Runoff in the Turiec Basin
Supervisor: KOHNOVÁ, S.

LIŽICOVÁ, D.: Impact of the Ground Water Level on the Water Regimes of Agricultural and Forest Ecosystems
Supervisor: SKALOVÁ, J.

MASÁR, T.: Revitalization of a Dead Stream Branch of the Váh River in the Area of Dlhá nad Váhom
Supervisor: MACURA, V.

MUDRÁKOVÁ, J.: Diagnostics of the Water Regime of Agricultural and Forest Ecosystems
Supervisor: SKALOVÁ, J.

NEMČEK, A.: Analysis of Flood Volumes at Selected Stations on the Danube River
Supervisor: KOHNOVÁ, S.

RIDILLA, P.: Design of a Flood Detention Reservoir in the Carpathians Near Bratislava
Supervisor: SZOLGAY, J.

STOKLASA, J.: River Training of the Torysa River in the Village of Haniská and the Town of Prešov
Supervisor: MACURA, V.

ŠTELZER, R.: Estimation of Possible Changes in the Flood Regime of the Váh River Basin
Supervisor: HLAVČOVÁ, K.

VÁCLAVOVÁ, K.: Evaluation of the Stability of a Channel Bed and Development of the Corresponding Software in Visual Basic
Supervisor: ČISTÝ, M.

VIDOVÁ, P.: Scaling of Monthly Short-Term Rainfall Intensities in Selected Stations of the Tatra Mountain Region
Supervisor: KOHNOVÁ, S.

2.3 Doctoral theses

DANKO, M.: Modelling Flood Waves for Proposed Flood Protection Measures
Supervisor: HLAVČOVÁ, K.

FRIDRICH TEGELHOFFOVÁ, M.: Modelling Hydrological Balance in Wetland Systems
Supervisor: HLAVČOVÁ, K.

JALČOVÍKOVÁ, M.: Impact of a Channel's Hydraulic and Morphological Characteristics on the Quality of the Aquatic Habitat of a Stream
Supervisor: MACURA, V.

KOVÁČOVÁ, E.: Regional Assessment of the Hydraulic Properties of Vulcanite in Central Slovakia
Supervisor: SKALOVÁ, J.

3. Research

3.1 Research projects

Hydrological Regionalisation – Towards a Coherent Framework (2008-2012, SZOLGAY, J.), (Subcontract of a research project of the Austrian Foundation for Research FWF P 18993)

Modelling of the Local and Spatial Dependence of the Multivariate Characteristics of Hydrological and Hydrometeorological Extremes (2010-2011, KOHNOVÁ, S.), VEGA 1/0103/10

Hybrid Methods for the Modelling and Evaluation of Hydrological Extremes for a Risk Analysis (2011-2014, HLAVČOVÁ, K.), VEGA 1/0908/11

Improvement of the Representation of Processes in Hydrological Modelling (2008-2011, HLAVČOVÁ, K.), APVV-LPP-0254-07

Effect of the Biotic and Abiotic Characteristics of Stream Ecosystems on the Water Regime of Soils (2011-2014, MACURA, V.), VEGA 1/0243/11

Evolutionary Algorithms and Data-Driven Methods in the Water Management of a Landscape (2011-2014, ČISTÝ, M.), VEGA 1/1044/11

Soil Water Storage Diagnosis and Predictions with Regard to Aspects of the Optimal Water Supply for Vegetation (2008-2011, SKALOVÁ, J.), APVV-0271-07

Hybrid Flow Forecasting Model (2008-2011, SZOLGAY, J.), APVV-0443-07

Heuristic Models for the Optimization of Water Management Interventions in a Landscape (2010-2012, ČISTÝ, M.), APVV-LPP-0319-09

Spatial Interpretation of Soil Hydrophysical Characteristics in Relation to Their Hydrological Regime (2011-2014, SKALOVÁ, J.), APVV-0139-10

Multivariate Frequency Analysis of Hydrological Extremes for Water Resources Planning and Design (2011-2014, SZOLGAY, J.), APVV-0496-10

Development of Methods for Determining Climatic and Hydrological Design Characteristics (2011-2014, KOHNOVÁ, S.), Research project of the European Fund for Regional Development

Integrated System for Simulation of Runoff Processes (2010-2013, HLAVČOVÁ, K.), Research project of the European Fund for Regional Development

3.2 International cooperation

Cooperating institutions

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

Visits of staff members to foreign institutions / Participation in meetings

SZOLGAY, J., HLAVČOVÁ, K., KOHNOVÁ, S., GAÁL, L.: Institute for Hydraulic and Water Resources Engineering, Vienna University of Technology, Vienna, Austria (project meetings)

KOHNOVÁ, S., GAÁL, L.: University of Bologna, Bologna, Italy (project meetings)

KOHNOVÁ, S., GAÁL, L., VALENT, P., KARABOVÁ, B.: Tuscia University, Agricultural University, Viterbo, Italy

ZSIDEKOVÁ, B.: Vituki - Research Water Institute, Budapest, Hungary, 1.10.2011-31.12.2011

SZOLGAY, J., HLAVČOVÁ, K., MACURA, V., KOHNOVÁ, S., SKALOVÁ, J.: Technical University in Brno, Faculty of Civil Engineering, Brno, Czech Republic (state exams)

SZOLGAY, J., HLAVČOVÁ, K., MACURA, V., KOHNOVÁ, S., SKALOVÁ, J.: Technical University in Prague, Faculty of Civil Engineering, Prague, Czech Republic (state exams)

SPAL, P.: Technical University in Ostrava, Institute of Geological Engineering, Ostrava, Czech Republic, 1.3.2011- 31.8.2011; 13.9.2011- 31.12.2011

MACUROVÁ, Z.: Vrije University of Brussels, Brussels, Belgium, 2.9.2011-5.12.2011

SUCHÁR, M.: Vienna University of Technology, Institute of Software Technology and Interactive Systems, Vienna, Austria, 1.10. 2011 – 30.11.2011

VITKOVÁ, J.: University of Jan Evangelista Purkyně, Dept. of Natural Sciences, Ústí nad Labem, Czech Republic, 26.9.2011 - 21.12.2011

Membership in international professional organizations

HLAVČOVÁ, K.: Member of the International Association of Hydrological Sciences

HLAVČOVÁ, K.: Member of the European Geosciences Union

KOHNOVÁ, S.: Member of the European Geosciences Union

KOHNOVÁ, S.: Member of the International Association of Hydrological Sciences

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

SZOLGAY, J.: Member of Editorial Board of the Water Resources Management

SZOLGAY, J.: Member of Editorial Board of the Journal of Hydrology

SZOLGAY, J.: Member of Editorial Board of the Journal of Hydrological Sciences

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

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

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

SZOLGAY, J.: Member of Association of Hydrological Sciences

SZOLGAY, J.: Member of the Association of Hydrological Sciences

4. Publications

Books

REMIÁŠOVÁ, R. - GAÁL, L. - HLAVČOVÁ, K. - KOHNOVÁ, S. - SZOLGAY, J.: Spatial Regionalization of Design Precipitation in Slovakia, KEY Publishing, Ostrava 2011, 92 pp., ISBN 978-80-7418-109-2 (in Slovak)

SKALOVÁ, J. - ŠTEKAUEROVÁ, V.: Pedotransfer Functions and Their Application in the Modelling of a Soil Water Regime, SUT in Bratislava, Bratislava 2011, 101 pp., ISBN 978-80-227-3431-8 (in Slovak)

ŠKRINÁR, A.: Impact of Abiotic Factors on Stream Hydrobiology, SUT in Bratislava, Bratislava 2011, 273 pp., (Edition of Scientific Works, No. 105), ISBN 978-80-227-3516-2 (in Slovak)

ŠTEKAUEROVÁ, V. - SKALOVÁ, J. - IGAZ, D.-NOVÁKOVÁ, K.: Processing Data of the Dynamics of Soil Water Storage from Direct Monitoring and Modelling under Expected Climate Change, Institute of Hydrology of IH SAS, Bratislava 2011, 122 pp., ISBN 978-80-89139-25-5 (in Slovak)

Parts of Books

ČISTÝ, M. - BAJTEK, Z.: Evaluation of Introducing Loops into Pressurized Pipe Irrigation Networks During Reconstruction, In: SGEM 2011: 11th International Multidisciplinary Scientific Geoconference, Conference Proceedings, Vol. II, Bulgaria, 20.-25.6.2011, 2011. pp. 815-823 (in English)

LÁTEČKOVÁ, J. - KOHNOVÁ, S. - GAÁL, L. - SZOLGAY, J. - HLAVČOVÁ, K.: Estimation of the Monthly Rainfall Intensity Design Values in the Western Part of Slovakia, In: Ecohydrological Methods in Water Management, Gdańsk: Wydawnictwo Politechniki Gdańskiej, 2011, ISBN 978-83-7348-376-7, pp. 75-81 (in English)

ŠTEVKOVÁ, A. – KOHNOVÁ, S. - HLAVČOVÁ, K.: Comparison of Summer Low Flow Regime Pooling Schemes in Slovakia, In: Ecohydrological Methods in Water Management, Gdańsk: Wydawnictwo Politechniki Gdańskiej, 2011, ISBN 978-83-7348-376-7, pp. 148-153 (in English)

Journals

BARA, M. - KOHNOVÁ, S.: Analysis of the Design Values of Short-Term Rainfall Intensities in the Hron River Basin. In: Acta Hydrologica Slovaca, ISSN 1335-6291, Vol. 12, No. 2 (2011), pp. 377-384 (in Slovak)

BLAŠKOVIČOVÁ, L. - HORVÁT, O.– HLAVČOVÁ, K. - KOHNOVÁ, S. - SZOLGAY, J.: Methodology for Post-Event Analysis of Flash Floods - Svacenický Creek Case Study. In: Contributions to Geophysics and Geodesy, ISSN 1335-2806, Vol. 41, No. 3 (2011), pp. 235-250 (in English)

BULANTOVÁ, M. - HORVÁT, O.: Assessing the Impact of Land Use Changes on the Runoff Processes in the Váh River Basin. In: Water Management Journal, ISSN

0322-886X, Vol. 54, Nos. 5-6 (2011), pp. 18-19 (in Slovak)

BULANTOVÁ, M. - HORVÁT, O. - HLAČOVÁ, K. - KOHNOVÁ, S.: Modelling the Impact of Land Use Changes on the Runoff in the Kysuca and Turiec River Basins. In: Acta Hydrologica Slovaca, ISSN 1335-6291, Vol. 12, No. 1 (2011), pp. 82-91 (in Slovak)

ČISTÝ, M. - SUCHÁR, M.: Evaluation of the Selection of Data for Data-Driven Models in Flow Predictions. In: Acta Hydrologica Slovaca, ISSN 1335-6291, Vol. 12, Special Issue (2011), pp. 64-71 (in Slovak)

DANÁČOVÁ, M.- BALÁŽ, M. - ŠÚREK, P.- SZOLGAY, J.: Hydrological Modelling of Flood Wave Movements in Open Channels. In: Acta Hydrologica Slovaca, ISSN 1335-6291, Vol. 12, Special Issue (2011), pp. 55-63 (in Slovak)

DANKO, M. - HLAČOVÁ, K. - KOHNOVÁ, S. - SZOLGAY, J.: Modelling Design Flood Waves in Small Ungauged Basins Using GIS. In: Acta Hydrologica Slovaca, ISSN 1335-6291, Vol.12, No. 2 (2011), pp. 340-348 (in Slovak)

HLAČOVÁ, K. – KOHNOVÁ, S. – BULANTOVÁ, M.: Scenarios of Extreme Floods Caused by Extreme Rainfalls in the Myjava and Teplica River Basins. In: Acta Hydrologica Slovaca, ISSN 1335-6291, Vol. 12, Special Issue (2011), pp. 40-46 (in Slovak)

JENEIOVÁ, K. - KOHNOVÁ, S.– HLAČOVÁ, K.: Modelling Extreme Runoff in the Winter Season in the Vistucky Stream Catchment. In: Acta Hydrologica Slovaca, ISSN 1335-6291, Vol. 12, No. 2 (2011), pp. 349-359 (in Slovak)

JURIČEKOVÁ, K.: Assessment of Water Erosion in the Territory of the Bardoňovo Cadastre. In: Acta Hydrologica Slovaca, ISSN 1335-6291, Vol. 12, No. 1 (2011), pp. 113-127 (in Slovak)

KYSELÝ, J. - GAÁL, L. – BERANOVÁ, R. – PLAVCOVÁ, E.: Climate Change Scenarios of Precipitation Extremes in Central Europe from ENSEMBLES Regional Climate Models. In: Theoretical and Applied Climatology, Vol. 104, Nos. 3-4 (2011), pp. 529-542 (in English)

LÁTEČKOVÁ, J. - KOHNOVÁ, S. - GAÁL, L. - SZOLGAY, J.: Deriving the Scaling Exponents of Rainfall Intensities for Separate Months in the Warm Season for Selected Raingauge Stations from the Northeastern Parts of Slovakia. In: Acta Hydrologica Slovaca, ISSN 1335-6291, Vol. 12, Special Issue (2011) pp. 47-54 (in Slovak)

MACURA, V. – ŠKROVINOVÁ, M. - STANKOCI, I. - ŠKRINÁR, A. - JALČOVÍKOVÁ, M. - ANDREJI, J. - KRÁĽOVÁ, J.: Effect of the Restoration of a Branch System in Stream Inundations on Ichthyofauna and Recreational Use. In: Acta Hydrologica Slovaca, ISSN 1335-6291, Vol. 12, Special Issue (2011), pp. 72-81 (in Slovak)

PASTUCHOVÁ, E. - SABO, M. - KOHNOVÁ, S.: Comparison of Clustering Methods Applied to Hydrological Data. In: Forum Statisticum Slovacum, ISSN 1336-7420, Vol. 7, No. 7 (2011), pp. 168-175 (in English)

PÁSZTOROVÁ, M. - SKALOVÁ, J.– VITKOVÁ, J.: Analysis of Management Impact on the Groundwater Level in Abrod Wetland. In: Növénytermelés, ISSN 0546-8191(PRINT), ISSN 2060-8543 (ONLINE), Vol. 60, suppl. 3 (2011), pp. 361-364 (in English)

PÁSZTOROVÁ, M. - LAŠTIK, T.– SKALOVÁ, J.: Analysis of the Interactions between the Groundwater Table Level and the Affected Elements. In: Acta Hydrologica Slovaca, ISSN 1335-6291, Vol. 12, No. 2 (2011), pp. 158-170 (in Slovak)

SABO, M. - ŠTEVKOVÁ, A. - KOHNOVÁ, S.: Using Self-Organizing Maps for Deriving the Pooling Groups of the Low Flows in Slovakia. Acta Hydrologica Slovaca, ISSN 1335-6291, Vol. 12, No. 1 (2011), pp. 92-101 (in Slovak)

SZOLGAY, J.: Principles of Flood Protection. In: Eurostav, ISSN 1335-1249, Vol. 17, No. 7-8 (2011), pp. 18-20 (in Slovak)

SZOLGAY, J.: Soil-Water-Plant-Atmosphere Interactions on Various Scales. In: Contributions to Geophysics and Geodesy, ISSN 1335-2806, Vol. 41, Special Issue (2011), pp. 37-56 (in English)

ŠIMOR, V. – HLAČOVÁ, K. - KOHNOVÁ, S. - ČISTÝ, M.: Prediction of the Averages of the Annual Maximum Series (Index Floods) in Selected Catchments in Slovakia Using ANN. In: Acta Hydrologica Slovaca, ISSN 1335-6291, Vol. 12, No. 1 (2011), pp. 78-81 (in Slovak)

ŠKROVINOVÁ, M.: Assessment of the Quality of the Slatina Stream Using Indices. In: Journal of Water Management, ISSN 0322-886X, Vol. 54, No. 5-6 (2011), pp. 16-17 (in Slovak)

UNUCKA, J. - JAŘABÁČ, M. - ŘÍHOVÁ, V. - HOŘINKOVÁ, M. - RICHNAVSKÝ, J. - ŠÍR, B. - ADAMEC, M. - ŽIDEK, D. - MÁLEK, O.– ĎURICHA, M.– PODHORÁNYI, M. - BOBÁL, P. - DEVEČKA, B. - KOLÁŘOVÁ, V. - TĚTHAL, V. - VYLEŽÍKOVÁ, M. - MUDROŇ, I. - SPÁL, P.: Comparison of the Possibility of Using Semi-Distributed and Distributed Rainfall-Runoff Models in Forest Hydrology Using the Example of the Ostravice Catchment. In: Forest Research News, ISSN 0322-9688, Vol. 56, No. 1 (2011), pp. 68-81 (in Czech)

VALENT, P. - HOWDEN, N., J. K. - SZOLGAY, J. - KOMORNÍKOVÁ, M.: Analysis of Nitrate Concentrations Using Nonlinear Time Series Models. In: Journal of Hydrology and Hydromechanics, ISSN 0042-790X, Vol. 59, No. 3 (2011), pp. 157-170 (in English)

VÍTKOVÁ, J. - SKALOVÁ, J. - ŠTEKAUEROVÁ, V.: Estimation of a Soil Water Regime on the Basis of an Agronomical Classification. In: Acta Hydrologica Slovaca, ISSN 1335-6291, Vol. 12, Special Issue (2011), pp. 153-159 (in Slovak)

Conferences

BARA, M.– LÁTEČKOVÁ, J.– KOHNOVÁ, S. - GAÁL, L. - SZOLGAY, J.– HLAČOVÁ, K.: Indirect Estimation of Design Values of Heavy Rainfall in the Alpine Region of Slovakia: A Case Study (Abstract). In: EGU Leonardo Conference: Floods in 3D: Processes, Patterns, Predictions, Bratislava, Slovakia, 23.-25.11.2011, ISBN 978-80-227-3596-4, p. 40 (in English)

BARA, M. - KOHNOVÁ, S.: Sensitivity Analysis of Extreme Rainfall Scaling Exponents. In: Impact of Anthropogenic Activity on the Water Regime of Lowlands. – 8th Scientific Conference: Physics of Water in Soil, Conference Proceedings, Vinianske Lake, Slovakia, 17.-19.5.2011, ISBN 978-80-89139-23-1, pp. 10-15 (in Slovak)

BLAŠKOVIČOVÁ, L. - HORVÁT, O. - HLAČOVÁ, K. - KOHNOVÁ, S. - SZOLGAY, J.: Analysis of the Flash Flood on 6th June 2006 at the Svacenicý and Debernický Creeks. Proceedings, Častá-Papiernička,

- Slovakia, 6.-8.12.2011, ISBN 978-80-89062-83-6 (in Slovak)
- BULANTOVÁ, M. - HLAVČOVÁ, K.- HORVÁT, O. - HLÁSNY, T. - KOHNOVÁ, S.– DANEKOVÁ, J.: Impact of Changes in Forest Composition on Runoff Regime in Selected Basins in Slovakia. In: 25th Conference of the Danubian Countries on the Hydrological Forecasting and Hydrological Bases of Water Management, Conference Proceedings, Budapest, Hungary, 16.-17.6.2011, ISBN 978-963-511-152-7 (in English)
- CASTELLARIN, A. - KOHNOVÁ, S.: European Flood Data Availability and Parent Distribution of Annual Floods (Abstract). In: EGU Leonardo Conference: Floods in 3D: Processes, Patterns, Predictions, Bratislava, Slovakia, 23.-25.11.2011, ISBN 978-80-227-3596-4, p. 43 (in English)
- ČISTÝ, M.: A Two-Stage Neural Network Architecture for Forecasting River Flows. In: The Second International Conference on Soft Computing Technology in Civil, Structural and Environmental Engineering. Conference Proceedings, Chania - Crete - Greece, 6.-9. 9. 2011, ISBN 978-1-905088-49-2 (in English)
- ČISTÝ, M.: Determining Soil - Water Content by Data Driven Modelling When Relatively Small Data Sets Are Available. In: Engineering Applications of Neural Networks: 12th INNS EANN-SIG International Conference, EANN 2011 and 7th IFIP WG 12.5 International Conference, AIAI 2011. Conference Proceedings, Part I. Corfu, Greece, 15.-18.9.2011, ISBN 978-3-642-23957-1, pp. 289-295 (in English)
- ČISTÝ, M. - BAJTEK, Z. - BEZÁK, J.: Pipe Network Design by Differential Evolution and Particle Swarm Optimization. In: The Second International Conference on Soft Computing Technology in Civil, Structural and Environmental Engineering, Conference Proceedings, Chania - Crete - Greece, 6.-9.9. 2011, ISBN 978-1-905088-49-2 (in English)
- ČISTÝ, M. - SUCHÁR, M.– ŠIMOR, V.: Real-Time Short-Term Flow Forecasting with Different Types of Neural Networks Architectures. In: 25th Conference of the Danubian Countries on the Hydrological Forecasting and Hydrological Bases of Water Management, Conference Proceedings, Budapest, Hungary, 16.-17.6.2011, ISBN 978-963-511-152-7 (in English)
- DANÁČOVÁ, M. - ŠÚREK, P. - SZOLGAY, J.: Case Study of Using Hydrologic Flow Routing for Estimating the Relationship between the Time of Flood Peaks and Discharges (Abstract). In: EGU Leonardo Conference: Floods in 3D: Processes, Patterns, Predictions, Bratislava, Slovakia, 23.-25.11.2011, ISBN 978-80-227-3596-4, p. 12 (in English)
- DANEK, L.– DANEKOVÁ, J.: Benefits of GIS and Ontology in Flood Management. In: Juniorstav 2011, Conference Proceedings, 13th Conference of Doctoral Studies, Brno, VUT, 4.2.2011, ISBN 978-80-214-4232-0 (in Slovak)
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- SZOLGAY, J. - DANÁČOVÁ, M. - ŠÚREK, P.: Estimation of Changes of the Flood Regime Caused by River Engineering Works Using Multilinear Flow Routing. In: Hydrologie & Wasserwirtschaft - von der Theorie zur Praxis: Beiträge zum Tag der Hydrologie, Vienna, Austria, 24.-25.3.2011, ISBN 978-3-941897-79-3, pp. 88-93 (in English)
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- ŠTEVKOVÁ, A. - KOHNOVÁ, S. - JENEIOVÁ, K. - SABO, M.: Seasonality Analysis of the Pooling of Winter Low Flows on the Territory of Slovakia. In: 25th Conference of the Danubian Countries on the Hydrological Forecasting and Hydrological Bases of Water Management, Conference Proceedings, Budapest, Hungary, 16.-17.6.2011, ISBN 978-963-511-152-7 (in English)
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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 for 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

Optional subjects

Management of Operation of Water Structures
Software Applications in Hydraulics

Recommended subjects

Excursion

1.2 Postgraduate courses

Methods of Laboratory Research of Hydrodynamics Processes
Hydroenergetic Systems
Hydraulic Modeling of Hydrodynamic Phenomena
Fluid Mechanics
Special Chapters of Hydraulic Structures

2. Theses

2.1 Bachelor theses

There were 13 works.

2.2 Graduate theses

ČEDERLOVÁ, L.: A Small Hydropower Plant at the Hniezdne Site – Technical Part of the Design
Supervisor: DUŠIČKA, P.

EHN, M.: A Small Hydropower Plant at the Hniezdne Site – Diversion Variant
Supervisor: DUŠIČKA, P.

GÁBOR, P.: Variant Design of the Trenčianske Biskupice Small Hydropower Plant
Supervisor: CABADAJ, R.

HOTOVÝ, V.: Whitewater Channel at the Trenčianske Biskupice Weir
Supervisor: RUMANN, J.

HRADISKÁ, T.: Possibilities of Flood Protection on the Ondava River
Supervisor: KVĚTON, R.

KELČÍK, S.: Possibilities of Regulating the Operation of the Sereď Hydropower Plant
Supervisor: ŠULEK, P.

KELLO, M.: Design of a Fish-Pass Structure and a Sluice Structure for Small Boats on the Hron River at the Kamenín SHPP Site
Supervisor: CABADAJ, R.

KLUČINEC, J.: Design of the Švošov Small Hydropower Plant
Supervisor: RUMANN, J.

KRAJČÍ, M.: Design of a Weir Structure on the Hron River at the Kamenín SHPP Site
Supervisor: CABADAJ, R.

KUBALA, M.: Design of a Small Hydropower Plant on the Hron River at the Banská Bystrica Site
Supervisor: ŠULEK, P.

KUBÁNI, A.: Design of a Small Hydropower Plant on the Hron River at the Jalná Site
Supervisor: ŠULEK, P.

LOPUCH, J.: A Study of Construction Possibilities for Small Hydropower Plants in the Village of Spišské Bystré
Supervisor: RUMANN, J.

MÉSZÁROŠ, T.: Structures of Recreational and Sport Navigation and Cycling in the Váh Region at the Sereď – Selice Stage
Supervisor: MOŽIEŠIK, Ľ.

PETRÁŠ, J.: Design of a Small Hydropower Plant on the Hron River
Supervisor: RUMANN, J.

PINDJAKOVÁ, T.: The Effect of a Flood Wave in a Surface Channel on a Groundwater Regime
Supervisor: BAROKOVÁ, D.

TVRDOŇ, M.: Design of the Kamenín Small Hydropower Plant
Supervisor: RUMANN, J.

3. Research

3.1 Research projects

Transformation of Flow Waves in Stages without Direct Hydraulic Bonds of Water Management-Energy Systems (2011-2014, DUŠIČKA, P.), APVV-0680-10,

Flood Protection of the Urban Areas of Slovakia (2010-2011, ŠOLTÉSZ, A.), VEGA 1/0894/10,

Physical Research on the Intake Structures of Small Hydropower Plants (2010-2011, DUŠIČKA, P.), VEGA 1/0281/10,

Research on the Use of Heuristic Optimization Methods in the Process of Generating Water Management / Energy Plans for the Regulation of Hydropower Plants (2011-2014, ŠULEK, P.), VEGA1/0578/11

3.2 International cooperation

Cooperating institutions

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

Technical University of Brno, Faculty of Civil Engineering, Institute of Water Structures, Czech Republic

Visit of staff members to foreign institutions / Participation in meetings

DUŠIČKA, P., ŠOLTÉSZ, A., MOŽIEŠIK, Ľ.: Czech Technical University, Prague, Faculty of Civil Engineering, Department of Hydraulic Engineering, Czech Republic (January, June 2011), (state exam – diploma defence)

DUŠIČKA, P., ŠOLTÉSZ, A., MOŽIEŠIK, Ľ.: Technical University of Brno, Faculty of Civil Engineering, Institute of Water Structures, Czech Republic (February, June 2011), (state exam – diploma defence)

ŠOLTÉSZ, A., BAROKOVÁ, D., CABADAJ, R., RUMANN, J., ORFÁNUS, M., CIPOVOVÁ, K., VALACHOVIČ, I.: Water Management and Hydraulic Engineering 2011, Gdansk, Poland (September 2011), (participation in conference)

Membership in international professional organizations

ŠOLTÉSZ, A.: 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

4. Publications

Books

DUŠIČKA, P., HUTŇAN, M., JELEMENSKÝ, Ľ., KOLLÁTH, Ľ., PACKA, J., ŠÁLY, V., ŠULEK, P.: Renewable Energy Sources. Biomass - Sun - Water. Pezinok, Renesans, s.r.o., 2011, 304 pp., ISBN 978-80-89402-37-3 (in Slovak)

Parts of books

BAROKOVÁ, D., ŠOLTÉSZ, A.: Drainage and Infiltration Resistance of Rivers – Elements of the Interaction

Between a Surface and Groundwater. In: Current Events in Hydraulic Engineering. Gdańsk, Wydawnictwo Politechniki Gdańskiej, 2011, pp. 5-11 (in English), ISBN 978-83-7348-375-0

CABADAJ, R.: Navigation Structures on Small Water Structures. In: Current Events in Hydraulic Engineering. Gdańsk, Wydawnictwo Politechniki Gdańskiej, 2011, pp. 68-73 (in English), ISBN 978-83-7348-375-0

CIPOVOVÁ, K., KVĚTON, R.: Application of Flood Mapping Methods in Modelling Failure Waves. In: Current Events in Hydraulic Engineering. Gdańsk, Wydawnictwo Politechniki Gdańskiej, 2011, pp. 93-103 (in English), ISBN 978-83-7348-375-0

KVĚTON, R., ŠULEK, P., ORFÁNUS, M., MIŠÍK, M., KUČERA, M.: Directive for Modelling Dam Breaks from a Hydraulic Structure and Two-Dimensional Numerical Models. In: Current Events in Hydraulic Engineering. Gdańsk, Wydawnictwo Politechniki Gdańskiej, 2011, pp. 173-179 (in English), ISBN 978-83-7348-375-0

RUMANN, J., ORFÁNUS, M.: Assessment of the Effect of a Floating Barrage on the Flow in the Intake Structure at Dobrohošť. In: Current Events in Hydraulic Engineering. Gdańsk, Wydawnictwo Politechniki Gdańskiej, 2011, pp. 206-212 (in English), ISBN 978-83-7348-375-0

ŠULEK, P., CIPOVOVÁ, K.: Heuristic Optimization Methods for Scheduling the Generation of Hydro Plants. In: Current Events in Hydraulic Engineering. Gdańsk, Wydawnictwo Politechniki Gdańskiej, 2011, pp. 266-276 (in English), ISBN 978-83-7348-375-0

Journals

BAROKOVÁ, D., ŠOLTÉSZ, A.: Effect of a Hydrological Situation on a Groundwater Level Regime. In: Acta hydrologica Slovaca. ISSN 1335-6291. Vol.12, Special Volume (2011), pp. 3-12 (in Slovak)

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Conferences

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- CIPOVOVÁ, K. - KVĚTON, R.: Evaluation of Effects of Demolition Caused by a Failure Wave at the Liptovská Mara Water Structure. In: Proceedings of International Conference on Influence of Anthropogenic Activities of the Water Regime of a Lowland Territory – 8th International Conference. Physics of Soil Water – 18th Slovak-Czech-Polish Scientific Seminar. Michalovce, Vinianske Lake, 17.-19.5.2011. Bratislava, ÚH SAV, 2011. ISBN 978-80-89139-23-1, pp. 43-51 (in Slovak)
- CIPOVOVÁ, K.: Failure Wave of the Liptovská Mara Water Structure. Evaluation of the Effects of Demolition. In: Proceedings of the 13th Juniorstav 2011 Scientific PhD.-Student Conference. Book of Abstracts, VUT Brno – Faculty of Civil Engineering, Brno, 2011. ISBN 978-80-214-4232-0 (in Slovak)
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- ORFÁNUS, M.: Calculating a Dam Break Using a Two-Dimensional Mathematical Model. In: Proceedings of the 13th Juniorstav 2011 Scientific PhD.-Student Conference. Book of Abstracts, VUT v Brno – Faculty of Civil Engineering, Brno, 2011. ISBN 978-80-214-4232-0 (in Slovak)
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- PÁLINKÁŠOVÁ, Z.: Analysis of the Level Drainage Systems in the Eastern Slovak Lowlands. In: Proceedings of International Conference on Influence of Anthropogenic Activities of the Water Regime of a Lowland Territory – 8th International Conference. Physics of Soil Water – 18th Slovak-Czech-Polish Scientific Seminar. Michalovce, Vinianske Lake, 17.-19.5.2011. Bratislava, ÚH SAV, 2011. ISBN 978-80-89139-23-1, pp. 343-350 (in Slovak)
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- PRŠO, A.: Utilization of Hydroenergy Potential in the Slovak Republic. In: Proceedings of the 13th Juniorstav 2011 Scientific PhD.-Student Conference. Book of Abstracts, VUT Brno – Faculty of Civil Engineering, Brno, 2011. ISBN 978-80-214-4232-0 (in Slovak)
- RUMANN, J.: Measurements of the Intake Structure of the Dobrohošť Small Hydropower Plant. In: Water Management and Hydraulic Engineering. Book of Abstracts. 12th International Symposium. Gdańsk, Poland, 5.-8.9.2011. Gdańsk: Politechnika Gdańska, 2011. ISBN 978-83-7348-377-4. p. 117 (in English)
- RUMANN, J., ORFÁNUS, M., VALACHOVIČ, I.: Multidimensional Mathematical Modelling of the Flow at the Dobrohošť Water Structure. In: Proceedings of International Conference on Influence of Anthropogenic Activities of the Water Regime of a Lowland Territory – 8th International Conference. Physics of Soil Water – 18th Slovak-Czech-Polish Scientific Seminar. Michalovce, Vinianske Lake, 17.-19.5.2011. Bratislava, ÚH SAV, 2011. ISBN 978-80-89139-23-1, pp. 423-428 (in Slovak)
- ŠEBESTOVÁ, Z., RUMANN, J.: Ecological Aspects of the Operation of Pump Storage Power Plants. In: Proceedings of International Conference on Influence of Anthropogenic Activities of the Water Regime of a Lowland Territory – 8th International Conference. Physics of Soil Water – 18th Slovak-Czech-Polish Scientific Seminar. Michalovce, Vinianske Lake, 17.-19.5.2011. Bratislava, ÚH SAV, 2011. ISBN 978-80-89139-23-1, pp. 449-452 (in Slovak)
- ŠEBESTOVÁ, Z.: Pump Water Power Plants and Their Importance in Providing Support Services for the Slovak Electric Power System. In: Proceedings of the 13th Juniorstav 2011 Scientific PhD.-Student Conference. Book of Abstracts, VUT Brno – Faculty of Civil Engineering, Brno, 2011. ISBN 978-80-214-4232-0 (in Slovak)

DEPARTMENT OF BUILDING CONSTRUCTION

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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
KPS Project
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
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)

Obligatory elective subjects

Building Construction 2
Thermal Protection of Buildings
Aerodynamics and Hydrodynamics of Buildings

Solar Technology and Illumination of Buildings
Architecture-Constructional Design

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
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
Building Construction 5
Thermal Engineering, Acoustics and Illumination
Renewal and Modernization of Buildings

1.2 Postgraduate courses

Building Construction - selected passages
Building Climatology
Building and Urban Acoustics
Simulations of Buildings
Renewal and Preservation of Monuments
Fire-Safety Engineering
Aerodynamics and Hydrodynamics of Buildings
Building and Energy
Thermal Engineering of Buildings

2. Theses

2.1 Bachelor theses

There were 315 works.

2.2 Graduate theses

MURČOVÁ, S.: Pastoral Centrum, Trnava
Supervisor: DLHÝ, D.

FABIAN, J.: Hotel
Supervisor: DRŽKA, M.

HATVANI, M.: Parking House
Supervisor: DRŽKA, M.

JURENKA, Š.: Passive Row Houses
Supervisor: GIECIOVÁ, M.

KRAJČOVIČOVÁ, A.: Roman Catholic Church
Supervisor: HRAŠKA, J.

SLEZÁKOVÁ, J.: Business Center
Supervisor: HRAŠKA, J.

POLÁK, M.: Private Grammar School
Supervisor: JAKEŠ, E.

VYDRA, D.: Art Gallery
Supervisor: JAKEŠ, E.

PLANIETA, M.: Family Farm – Riding Premises Podbiel,
Orava
Supervisor: MIKOLAI, I.

LUKAČOVIČOVÁ, V.: Bank Office Building
Supervisor: Miklósová, T.

BAHNOVÁ, Z.: Low-Energy Residential House
Supervisor: MENĎAN, R.

LOHNICKÝ, P.: Service Department
Supervisor: OLÁH, J.

MATIŠTÍK, M.: Wine-Making Plant
Supervisor: PALKO, M.

PASTUCHA, P.: Office Building
Supervisor: PALKO, M.

MÉRY, M.: Mountain Hotel
Supervisor: ŽILINSKÝ, J.

BARTOŠ, P.: Market with Services
Supervisor: ŽILINSKÝ, J.

KOBZA, J.: Mountain Hotel
Supervisor: VAVROVIČ, B.

VIŇANSKÁ, A.: Restoration of a Historical Monument -
Adaptation to Accommodation for Seniors
Supervisor: VARGOVÁ, A.

ONDRUŠKOVÁ, T.: Local Authority
Supervisor: VARGOVÁ, A.

2.3 Doctoral theses

ČEKON, M.: Thermodynamic Properties of Low-
Emissivity Coatings of Building Surfaces
Supervisor: HRAŠKA, J.

INGELI, R.: Modeling the Thermal Conductivity of
Lightweight Reinforced Composites
Supervisor: CHMÚRNY, I.

MORAVČÍKOVÁ, K.: Experimental and Theoretical
Thermal Analysis of a Transparent Naturally Ventilated
Double Skin Facade
Supervisor: PUŠKÁR, A.

PALKOVÁ, A.: Hygrothermal Problems of Wooden
Windows Set in a Vertical Position
Supervisor: PUŠKÁR, A.

3. Research

3.1 Research projects

Simulation of Buildings in the Climatic Conditions of the
Slovak Republic (HRAŠKA, J.) (VEGA 1/0647/09)

Natural Physical Interspaces of Double-Skin Facades
with a Geometrically Undefined Cross-Section of the Air
Flow and Its Motion Line (BIELEK, M.) (VEGA 1/0316/09)

Influence of Background Noise Levels and the Sound
Insulation of Partition Walls on Speech Intelligibility and
Changes in the Intensity of the Vocal Output of a Teacher
in Classrooms: Measuring Methods, Suggested
Parameters for Evaluations, Analyses and Criteria
(TOMAŠOVIČ, P.) (VEGA 1/0208/09)

State program - Theoretical and Experimental Evaluation
of Pilot Projects Implemented: Pilot Project for the
Reconstruction of Schools in Low-Energy Buildings and a
Pilot Project for the Construction of a Low-Energy
Residential Building. (PUŠKÁR, A.)

Symbiosis of Interaction of Renewable Energy Sources
and System Link Building - Climate - Energy in the
Ecology of Low-Energy, Green and Sustainable
Architecture. (BIELEK, M.) (APVV-0624-10)

Research on Indoor Light Environments Based on
Chronobiology and Circadian Photometry. (HRAŠKA, J.)
(APVV-0150-10)

Integrating and Harmonizing Sound Insulation Aspects in
Sustainable Urban Housing Constructions - IHSIASUHC
COST TU0901 (MC Member: VARGOVÁ, A.)

3.2 International cooperation

Cooperating institutions

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

Chungnam National University, Daejeon, Korea

Visit of staff members to foreign institutions / Participation in meetings

OLÁH, J.: TU TOKYO, 4.2. – 13.2. 2011

OLÁH, J.: ČVUT Prague, Faculty of Civil Engineering
21.9. – 29.9. 2011

OLÁH, J.: Waterproof Membranes 2011, International Conference, Germany 15.11. -17.11. 2011

VARGOVÁ, A.: Meeting in Lisboa, COST TU 0901, May 2011

VARGOVÁ, A.: Meeting in Zurich, COST TU 0901, November 2011

Membership in international professional organizations

RABENSEIFER, R., HRAŠKA, J.: IBPSA - International Building Performance Simulation Association

CHMÚRNY, I.: Representative of the Slovak Republic in ISO TC 163 Thermal Insulation

CHMÚRNY, I.: Representative of the Slovak Republic in CEN TC 89 Thermal Performance of Building Components

RABENSEIFER, R.: IBPSA - International Building Performance Simulation Association

RYCHTÁRIKOVÁ, M.: I-INCE Technical Study Group 9 "Metrics for Environmental Noise Assessment and Control"

RYCHTÁRIKOVÁ, M.: EU Technical Committee for Building and Room Acoustics

4. Publications

Books

LULKOVIČOVÁ, O., FÜRI, B., CHMÚRNY, I., PERÁČKOVÁ, J., SUCHÁNEK, P., TAKÁCS, J., ŽILINSKÝ, J., LAŠÁK, D., INSTITORIS, V., ŠALVATA, R., TKÁČIK, S., TRUHLÍK, L., ZIKÁN, Z.: Progressive Systems in the Construction and Space Heating of Family Houses. 1st ed. Bratislava: Antar, s.r.o., 2011. 152 pp. ISBN 978-80-970739-0-9 (in Slovak)

MIKULÁŠ, M., OLÁH, J., MIKULÁŠOVÁ, D.: Principles of Building Construction Drawings. 4th revised and supplemented edition. Bratislava: Jaga group, 2011. 212 pp. ISBN 978-80-8076-088-5 (in Slovak)

Journals

CHMÚRNY, I.: Assessment of the Thermal Qualities of Construction Details for a Hygienic Criterion. In: Stavebné materiály. ISSN 1336-7617. Vol. 7, special 2011 (2011), pp. 10-12 (in Slovak)

CHMÚRNY, I.: Energy Performance of a Building Expressed by Means of Primary Energy. In: TZB Haustechnik. ISSN 1210-356X. Vol.19, No. 5 (2011), pp. 14-16 (in Slovak)

CHMÚRNY, I.: Effect of a Divider on the Thermotechnical Properties of a Window. In: OKNOviny. ISSN 1337-8791. No. 1 (2011), p. 2 (in Slovak)

DRŽKA, M., GREGUŠOVÁ, S.: Assessment of the Causes of Defects to Wooden Windows. In: Almanach znalca. ISSN 1336-3174. Vol.10, Nos. 2-3 (2011), pp. 35-41 (in Slovak)

JAMNICKÝ, M.: CAD and Photography for Measuring Existing Buildings. In: Almanach znalca. ISSN 1336-3174. Vol. 10, Nos. 2-3 (2011), pp. 56-59 (in Slovak)

LEUCK, R., PUŠKÁR, A.: Search for the Optimum Thickness of the Sealing Joints in Facades. In: HLH.

ISSN 0017-9906. Bd.62, No. 4 (2011), pp. 75-78 (in YUR)

NÁDASKÁ, Z., JAMNICKÝ, M.: Architectural - Town-Planning Solution for the Regional Centre of Technical Training in Kočovce. In: Informácie. Vol. 11, No. 1 (2011), p. 2 (in Slovak)

OLÁH, J.: Australia and Roofs. In: Střechy, fasády, izolace. ISSN 1212-0111. Vol. 18, Nos. 7-8 (2011), pp. 8-13 (in Slovak)

OLÁH, J.: Meeting of Roofers During a Gala Dinner on a Ship. In: Střechy, fasády, izolace. ISSN 1212-0111. Vol. 18, No. 9 (2011), pp. 38-39 (in Slovak)

OLÁH, J., ŠIDA, M., ŠUTLIAK, S.: Roof Structures and Coverings. In: Dom a byt. ISSN 1335-6615. Vol. 17, Nos. 7-8 (2011), pp. 4-8 (in Slovak)

OLÁH, J.: Roofs 2011 Symposium in Bratislava. In: Střechy, fasády, izolace. ISSN 1212-0111. Vol. 18, No. 9 (2011), pp. 14-15 (in Slovak)

PERNIŠOVÁ, A.: Failure Analysis of Plasters. In: Stavebné hmoty. ISSN 1336-6041. Vol. 7, Nos. 4-5 (2011), pp. 6-7 (in Slovak)

PERNIŠOVÁ, A.: Garden Structures. In: Dom a byt. ISSN 1335-6615. Vol. 17, No. 10 (2011), pp. 114-116 (in Slovak)

PERNIŠOVÁ, A.: Glazing and Its Sound Insulation Properties. In: Stavebné hmoty. ISSN 1336-6041. Vol. 7, Nos. 4-5 (2011), pp. 14-15 (in Slovak)

PERNIŠOVÁ, A.: Mounted Claddings in an Interior. In: Stavebné hmoty. ISSN 1336-6041. Vol. 7, No. 3 (2011), pp. 16-17 (in Slovak)

PUŠKÁR, A.: Connection Between External Cladding and Window and Door Structures. In: Eurostav. ISSN 1335-1249. Vol. 17, Nos. 1-2 (2011), pp. 38-41 (in Slovak)

PUŠKÁR, A.: The Reconstruction of the External Cladding of the Faculty of Civil Engineering of the Slovak University of Technology in Bratislava. In: Eurostav. ISSN 1335-1249. Vol. 17, No. 3 (2011), pp. 54-56 (in Slovak)

RYCHTÁRIKOVÁ, M., NIJS, L.: Calculating the Optimum Reverberation Time and Absorption Coefficient for Good Speech Intelligibility in Classroom Design Using U50. In: Acta Acustica United with Acustica. ISSN 1610-1928. Vol. 97, No. 1 (2011), pp. 93-102 (in English)

TOMAŠOVIČ, P., DLHÝ, D.: External Wall Materials from a Sound Insulation Point of View. In: Eurostav. ISSN 1335-1249. Vol.17, No. 5 (2011), pp. 30-33 (in Slovak)

TOMAŠOVIČ, P.: Lifts in Building Layouts in Terms of Decreasing the Loudness of Their Operation. In: Eurostav. ISSN 1335-1249. Vol. 17, No. 3 (2011), pp. 30-33 (in Slovak)

TOMAŠOVIČ, P., DLHÝ, D.: Sound-Absorptive Materials, Constructions and Their Application in Practice. In: Stavebné materiály. ISSN 1336-7617. Vol. 7, No. 2 (2011), pp. 36-38 (in Slovak)

Conferences

BIELEK, B., BIELEK, M., HÍREŠ, J.: Development of Techniques in the Architecture of the Information Age. In: Defects and Renewal of Envelope Constructions of Buildings: Proceedings of conference with international attendance. Podbanské, SR, 13.-15.4.2011. Košice:

- Technical University of Košice, 2011. ISBN 978-80-553-0651-3. pp. 29-34 (in Slovak)
- BIELEK, M., BIELEK, B.: Specifics of the Architectural Aerodynamics of Buildings - Modifications in the Interaction of Internal and External Pressure Changes. In: Dynamics of Civil Engineering and Transport Structures and Wind Engineering. DYN-WIND '2011: Proceedings of 5th international conference. Jasná pod Chopkom, SR, 30.5.-2.6.2011. Žilina: University of Žilina, 2011. ISBN 978-80-554-0354-0. pp. 3-6 (in English)
- CHMELÍK, V., RYCHTÁRIKOVÁ, M., TOMAŠOVIČ, P.: Noise Reduction in Large Halls Without Additional Absorption. In: Material - Acoustics - Place 2011: Proceedings of 6th International Conference. Zvolen, SR, 14.-14.9.2011. Zvolen: Technical University in Zvolen, 2011. ISBN 978-80-228-2258-9. pp. 107-110 (in Slovak)
- CHMÚRNÝ, I.: Energy Performance of a Low-Energy Dwelling in Tvrdošín. In: Heating 2011: 19th International Conference. Ľubovnianske kúpele, Slovak Republic, 28.2.-4.3.2011. Bratislava: Slovak Society for Environmental Technology ZSVTS, 2011. ISBN 978-80-89216-38-3. pp. 67-70 (in Slovak)
- ČEKON, M.: Twin-Boxes: Measurement Methodology of Building Components in Real Climate Conditions. In: Juniorstav 2011: Proceedings of 13th professional Conference of Postgraduate Students. Brno, VUT, 4.2.2011. Brno: Brno University of Technology - Faculty of Civil Engineering, 2011. ISBN 978-80-214-4232-0. unpaginated (in Slovak)
- DLHÝ, D., ZAJAC, J.: Interaction of the Air Volume Flow and Sound Insulation in Cracking. In: Buildings and Environment 2011: Proceedings of international conference. Bratislava - University Library 20.10.2011. Bratislava: STU, 2011. ISBN 978-80-227-3582-7. pp. 31-34 (in English)
- DRŽKA, M.: Preservation of Wooden Constructions in Buildings. In: Drevostavby : 4th scientific conference with international attendance. Terchová, SR, 2.-3.6.2011. Žilina: University of Žilina, 2011. ISBN 978-80-970171-9-4. pp. 83-86 (in Slovak)
- GROFČÍK, E., BIELEK, B., BIELEK, M.: Modernization of an A-1 Light Facade System for Variant Solutions of a Double-Skin Transparent Facade. In: Buildings and Environment 2011: Proceedings of international conference. Bratislava - University Library 20.10.2011. Bratislava: STU, 2011. ISBN 978-80-227-3582-7. pp. 35-39 (in Slovak)
- HÍREŠ, J.: Green Architecture and the Development of Green Buildings According to Worldwide Statistics. In: Urbanistic, Architectural and Technical Aspects of Rural Renewal X.: Renewal of the Spiritual, Cultural and Economic Potential of the Countryside. Proceedings of conference with international attendance. Bratislava, SR, 25.5.2011. Bratislava: STU in Bratislava, 2011. ISBN 978-80-227-3536-0. pp. 214-218 (in Slovak)
- JANÁK, M., BUDAY, P.: Comparison of the Methods for Calculating Heating Energy Needs of a Building with Different Time Steps. In: Thermal Protection of Buildings 2011. Current Thermal Technical Requirements and Trends: 16th international conference. High Tatras - Štrbské Pleso, 5.-6.5.2011. BB Print, s.r.o., 2011. ISBN 978-80-970595-4-5. pp. 81-84 (in Slovak)
- JURÁŠ, P.: Impact of Outdoor Climatic Conditions on Building Facades. In: Proceedings of Rural Buildings 2011: Architecture - Construction - Technology - Safety. Nitra, SR, 8.-9.9.2011. Nitra: SUA in Nitra, 2011. ISBN 978-80-552-0644-8. pp. 40-43 (in Slovak)
- LIPIAK, J.: Thermal Specification Technical Data with Respect to a Ceramic Block's Water Vapor Diffusion. In: Proceedings of Rural Buildings 2011: Architecture - Construction - Technology - Safety. Nitra, SR, 8.-9.9.2011. Nitra: SUA in Nitra, 2011. ISBN 978-80-552-0644-8. pp. 76-79 (in Slovak)
- LOBOTKA, P.: Aerodynamic Problems in Relation to Residential Buildings. In: Proceedings of Rural Buildings 2011: Architecture - Construction - Technology - Safety. Nitra, SR, 8.-9.9.2011. Nitra: SUA in Nitra, 2011. ISBN 978-80-552-0644-8. pp. 80-83 (in Slovak)
- MAJSNIAR, V., BIELEK, B.: Controlled Ventilation Systems Applicable to Present Reconstructions of Modern Architectural Buildings. In: Buildings and Environment 2011: Proceedings of international conference. Bratislava - University Library 20.10.2011. Bratislava: STU, 2011. ISBN 978-80-227-3582-7. pp. 93-97 (in Slovak)
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- MIKOLAI, I., CHEMEZOVÁ, M.: Comparison of Types and Requirements for Various Fire Escape Routes in Selected Countries. In: Fire Protection 2011: Proceedings of 22th international conference. Ostrava, VŠB-TU, 7.-8.9.2011. Ostrava: VŠB-Technical University of Ostrava, 2011. ISBN 978-80-7385-102-6. pp. 197-200 (in Slovak)
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- MINAROVIČOVÁ, K., RABENSEIFER, R.: Comments on the Slovak Building Code. In: Buildings and Environment 2011: Proceedings of international conference. Bratislava - University Library 20.10.2011. Bratislava: STU, 2011. ISBN 978-80-227-3582-7. pp. 105-108 (in Slovak)
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- RABENSEIFER, R.: Environmental Assessment and Product Declaration for Buildings. In: Buildings and Environment 2011: Proceedings of international conference. Bratislava - University Library 20.10.2011. Bratislava: STU, 2011. ISBN 978-80-227-3582-7. pp. 183-186 (in English)
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- TOMAŠOVIČ, P., ZAŤKO, P.: Comments on Proposed STN 73 0532 Revision. Proposals and Remarks. In: Noise and Vibration in Practice: Proceedings of 16th international acoustic conference. Kočovce, Slovakia, 30-31.5. 2011. Bratislava: Publisher STU, 2011. ISBN 978-80-227-3512-4. pp. 107-110 (in Slovak)
- TOMAŠOVIČ, P.: Double Transparent Claddings - Research on Sound Insulation and the Transmission of Sound. In: Material - Acoustics - Place 2011: Proceedings of the 6th international conference. Zvolen, SR, 14.-14.9.2011. Zvolen: TU in Zvolen, 2011. ISBN 978-80-228-2258-9. pp. 193-200 (in Slovak)
- VARGOVÁ, A., RYCHTÁRIKOVÁ, M., MARTENS, N., VENS, A., VERMEIR, G.: Investigation of Influencing Room Acoustical Factors Affecting to the Sound Transmission. In: Forum Acusticum 2011: 6th European Congress on Acoustics. Proceedings. Aalborg, Denmark, 27.6.-1.7.2011. European Acoustics Association, 2011. ISBN 978-84-694-1520-7. unpaginated (in English)
- ZAJAC, J., GAŠPAROVIČOVÁ, V.: The Need for Acoustical Studies. In: Material - Acoustics - Place 2011: Proceedings of 6th International Conference. Zvolen, SR, 14.-14.9.2011. Zvolen: TU in Zvolen, 2011. ISBN 978-80-228-2258-9. pp. 207-214 (in Slovak)
- ŽILINSKÝ, J.: Energy Performance of Buildings. In: Proceedings of Rural Buildings 2011: Architecture - Construction - Technology - Safety. Nitra, SR, 8.-9.9.2011. Nitra: SPU in Nitra, 2011. ISBN 978-80-552-0644-8. pp. 153-156 (in Slovak)

Patents and standards

- HERMANSKÁ, B., TOMAŠOVIČ, P.: STN EN ISI 10140-1 Acoustics. Laboratory Measurement of Insulation of Building Elements. Part 1: Application Rules for Specific Products (ISO 10140-1: 2010): Bratislava: SUTN, 2011, 34 pp (in Slovak)
- HERMANSKÁ, B., TOMAŠOVIČ, P.: STN EN ISI 10140-3 Acoustics. Laboratory Measurement of Insulation of Building Elements. Part 3: Measurement of Impact Sound Insulation (ISO 10140-3: 2010): Bratislava: SUTN, 2011, 16 pp (in Slovak)
- HERMANSKÁ, B., TOMAŠOVIČ, P.: STN EN ISI 10140-4 Acoustics. Laboratory Measurement of Insulation of Buildings Elements. Part 4: Measurement and Requirements: (ISO 10140-4: 2010): Bratislava: SUTN, 2011, 16 pp (in Slovak)
- HERMANSKÁ, B., TOMAŠOVIČ, P.: STN EN ISI 10140-5 Acoustics. Laboratory Measurement of Insulation of Building Elements. Part 5: Requirements for Facilities and Equipment (ISO 10140-5: 2010): Bratislava: SUTN, 2011, 41 pp (in Slovak)
- HERMANSKÁ, B., TOMAŠOVIČ, P.: STN EN ISO 10140-2 Acoustics. Laboratory Measurement of Insulation of Building Elements. Part 2: Measurement of Airborne Sound Insulation (ISO 10140-2: 2010): Bratislava: SUTN, 2011, 18 pp. (in Slovak)
- OLBŘÍMEK, J.: STN EN 1995-1-2/NA (73 1701) Eurocode 5. Design of Timber Structures. Part 1-2: General Rules. Structural Fire Design. National Annex: Bratislava: SUTN, 2011, 4 pp (in Slovak)

DEPARTMENT OF STEEL AND TIMBER STRUCTURES

Head of Department

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1. Education

1.1 Graduate study

Obligatory subjects

Metal Load-Bearing Elements
Steel Load-Bearing Systems
Metal and Timber Load-Bearing Elements
Steel and Timber Load-Bearing Systems
Structural Metal Design
Steel, Timber and Glass in Architecture
Steel Structures and Bridges
Special Problems of Steel Structures
Metal Bridges
Metal and Timber Structures in Civil Engineering
High-Rise and Long-Span Steel Structures
Stability and Plasticity of Steel and Timber Structures
Experimental Verification
Construction Project
Preparation of the First Degree Thesis
Steel Structures and Bridges

Optional Subjects

High-Rise and Long-Span Steel Structures
Composite Structures
Stability and Plasticity of Steel and Timber Structures
Metal and Timber Structures and Bridges
Repair of Metal and Timber Structures
Metal and Timber Structures
Metal and Timber Structures II
Steel, Timber and Glass in Architecture
Steel and Timber Load-Bearing Systems
Steel Structures of Water Works

1.2 Postgraduate courses

Metal Structures of Buildings
Metal Bridges
Timber Structures and Bridges
Thin-walled Structures
Stability and Plasticity of Metal Structures
Composite Structures
Diagnostics and Refurbishment of Metal Structures
Diagnostics and Refurbishment of Timber Structures
Steel Structures with Long Spans

2. Theses

2.1 Bachelor theses

KROČKA, A.: Structural Systems of Bridges
Supervisor: BALÁŽ, I.

JURČOVIČ, R.: Structural Systems of Bridges over the Biggest Chinese Rivers
Supervisor: BALÁŽ, I.

FÁBRY, M.: New Trends in Bridge Engineering in the Field of Composite Bridges
Supervisor: ÁROCH, R.

KRIVÝ, M.: Resistance of Compressed Elements Made of Metal and Glass. Straight and Curved Elements.
Supervisor: BALÁŽ, I.

EIBENOVÁ, L.: High-Rise Buildings and Constructions
Supervisor: BALÁŽ, I.

KÓSA, J.: Development of Bridge Structures in China
Supervisor: BALÁŽ, I.

2.2 Graduate theses

HOLKO, M.: Bridge for Cyclists over the River Morava
Supervisor: ŽIVNER, T.

MICHALÍK, J.: Experimental Verification of Wood's Mechanical Features and Design of the Load-Bearing Structure of the Sport Hall in Horná Súča.
Supervisor: SANDANUS, J.

GÍRETHOVÁ, M.: A. A. Kadyrov Football Stadium in Grozny
Supervisor: BRODNIANSKY, J.

AMBRÓZ, B.: Gallery of Modern Art
Supervisor: SLIVANSKÝ, M.

GRANČIČOVÁ, I.: Hangar in Prague
Supervisor: BRODNIANSKY, J.

KOSTELNÍČÁK, M.: Hockey Hall in Hamuliakovo
Supervisor: SLIVANSKÝ, M.

RAFAJ, M.: Mountain Hotel
Supervisor: SÓGEL, K.

MORAVČÍKOVÁ, K.: Hotel in Hainburg
Supervisor: SÓGEL, K.

KOCH, M.: Bridge 205 on Highway D1 in the Jablonov – Studenec Section, km 1.650, 2. phase
Supervisor: ŽIVNER, T.

NITTMANNOVÁ, L.: Bridge 221, Building Structure 120 over Highway R3, Tvrdošín – Nižná nad Oravou, km 1.54
Supervisor: ŽIVNER, T.

KRUPEC, P.: Design of the Road Bridge over the River Ipeľ in the Village of Chľaba
Supervisor: ÁROCH, R.

HANZLÍČEK, I.: Design of Steel Footbridges for the Effect of Dynamic Loads
Supervisor: ÁROCH, R.

LADICSOVÁ, E.: The Load-Bearing Structure of a Tennis Hall in Lučenec
Supervisor: SANDANUS, J.

ILANOVSKÝ, V.: The Load-Bearing Structure of the Velodrome in Lamač
Supervisor: SANDANUS, J.

HARINGOVÁ, D.: The Staré Grunty Shopping Center in Bratislava
Supervisor: MAGURA, M.

JUHOS, T.: Sightseeing Tower Made of Timber and Steel
Supervisor: DRAŠKOVIČ, F.

KOVASICH, M.: The Effect of Structural Details on the Resistance of Beams
Supervisor: ŽIVNER, T.

LAVRINČÍK, M.: The Atrium Roof at the Faculty of Philosophy, Comenius University
Supervisor: BRODNIANSKY, J.

2.3 Doctoral theses

CSÖLLEOVÁ, ZS.: The Theoretical Analysis of Tensegrity Prisms
Supervisor: BRODNIANSKY, J.

3. Research

3.1 Research projects

Strength, Stability and Ductility of Thin-Walled Beam and Plate Elements in Metal Bridges and Other Applications (BALÁŽ), VEGA 1/0652/09

Interactive Loss of the Stability of Thin-Walled Structural Members (BALÁŽ), VEGA 2/0101/09

Innovative and Traditional Structural Systems – Design and Diagnostics Regarding Current Ecological, Architectural, Engineering and Economic Requirements with an Emphasis on an Analysis of the Influence of Accidental Effects (BRODNIANSKY), VEGA 1/0256/10

Composite Beam Elements Made of Timber, Concrete and High-Strength Materials. Action, Features, Applicability, Refurbishment, Joints, Rheology, Ecology. (DRAŠKOVIČ), VEGA 1/1032/11

3.2 International cooperation

Cooperating institutions

Brno University of Technology, Czech Republic

Czech Technical University in Prague, Czech Republic

Technical University of Ostrava, Czech Republic

Vienna University of Technology, Austria

Budapest University of Technology and Economics, Hungary

Graz University of Technology, Austria

Visits of staff members to foreign institutions / Participation in meetings

ÁROCH, R.: Final Exams, Brno University of Technology, Czech Republic, Feb. 2, 2011

KOWALSKI, L., DALLEMULE, M., NYÁRSIK, P., BLESÁK, L., PROKSA, D.: Juniorstav Conference, Brno, Czech Republic, Feb. 3 – 4, 2011

ÁROCH, R.: Workshop, Seismic Design of Buildings, Lisbon, Portugal, Feb. 9 – 14, 2011

BALÁŽ, I., DRAŠKOVIČ, F., PÁSZTOROVÁ, M., SANDANUS, J., SLIVANSKÝ, M., SÓGEL, K.: Meeting of Departments, Ostrava, Czech Republic, Feb. 10 – 11, 2011

BALÁŽ, I.: ENC Meeting, Brussels, Belgium, April 12 – 13, 2011

BALÁŽ, I.: CEN TC 250/SC3 Meeting, Vienna, Austria, April 14 – 16, 2011

SANDANUS, J., SLIVANSKÝ, M.: International Seminar, Volyně, Czech Republic, April 19 – 21, 2011

BALÁŽ, I.: TWG 8.3, SC3 Meeting, Paris, France, May 5 – 8, 2011

BALÁŽ, I.: Meeting in the Department of Steel Structures, Faculty of Civil Engineering, Czech Technical University in Prague, May 5, 2011

BALÁŽ, I.: SC9 Meeting, Naples, Italy, June 15 – 19, 2011

BRODNIANSKY, J.: Final Exams, Brno University of Technology, Czech Republic, June 15, 2011

BRODNIANSKY, J.: Thesis Defence, Brno University of Technology, Czech Republic, August 23, 2011

BALÁŽ, I.: Meeting for the Eurosteel Conference, Budapest, Hungary, August 30 – Sept. 4, 2011

BRODNIANSKY, J., SLIVANSKÝ, M.: IASS 2011 Conference, London, UK, Sept. 19 – 23, 2011

SANDANUS, J., SÓGEL, K.: Seminar 9. GRAHFT 2011, Graz, Austria, Sept. 29, 2011

KLAS, T., MAGURA, M.: Conference, Brno, Czech Republic, Oct. 3 – 5, 2011

BALÁŽ, I.: SC3 and EG EN 1993-1-1 Meeting, Berlin, Germany, Oct. 6 – 9, 2011

BALÁŽ, I.: TWG 8.3 ECCS EG EN 1993-1-5 Meeting, Ithaca, NY, USA, Oct. 9 – 17, 2011

BALÁŽ, I.: International PhD competition, Pécs, Hungary, Oct. 23 – 26, 2011

ÁROCH, R., NITTMANNOVÁ, L.: Meeting at Maurer und Söhne Company, Munich, Germany, Oct. 26, 2011

BALÁŽ, I.: TWG 8.3 ECCS EG EN 1993-1-5 Meeting, Stuttgart, Germany, Nov. 10 – 13, 2011

BALÁŽ, I.: Meeting at the Department of Steel Structures, Brno University, Czech Republic, Nov. 30, 2011

BALÁŽ, I., BRODNIANSKY, J., MAGURA, M.: Conference, Hustopeče, Czech Republic, Dec. 1, 2011

BRODNIANSKY, J.: Thesis Defence, Prague, Czech Republic, Dec. 9, 2011

Membership in international professional organizations

ÁROCH R.: ECCS (European Convention for Constructional Steelwork), TC 7 Thin-Walled Structures

ÁROCH R.: ECCS (European Convention for Constructional Steelwork), TC 10 Structural Connections

BALÁŽ, I.: Member of Eurocode National Correspondents Working Group

BALÁŽ, I.: Member of CEN TC 250 SC3 Subcommittee SC3 Design of Steel Structures

BALÁŽ, I.: Member of CEN TC 250 SC9 Subcommittee SC9 Design of Aluminium Structures

BALÁŽ, I.: Member of SC3 working group for EN 1993-1-1 Design of Buildings

BALÁŽ, I.: Member of SC3 working group for EN 1993-1-3 Design of Cold-Formed Members and Sheeting

BALÁŽ, I.: Member of SC3 working group for EN 1993-1-5 Design of Plated Structural Elements

BALÁŽ, I.: Member of SC3 working group for EN 1993-2 Design of Steel Bridges

BALÁŽ, I.: Member of SC9 working group for EN 1999-1-1 Design of Aluminium Structures

BALÁŽ, I.: Member of TC 7, TWG 7.5, ECCS (European Convention for Constructional Steelwork), Technical Committee 7: Thin-Walled, Cold Formed Sheet Steel in Building. TC 7.5: Practical Improvement of Design Procedures: European Recommendations for the Application of Metal Sheeting Acting as a Diaphragm

BALÁŽ, I.: Member of IABSE (International Association for Bridge and Structural Engineers)

BALÁŽ, I.,: Member of ASCE (American Society of Civil Engineering) since 1997

BRODNIANSKY, J.: IASS (International Association for Shell and Spatial Structures)

MAGURA, M.: IASS (International Association for Shell and Spatial Structures)

SLIVANSKÝ, M.: IASS (International Association for Shell and Spatial Structures)

4. Publications

Books

SANDANUS, Jaroslav: Composite Wood Sections with Interlocking Yielding. Slovak University of Technology in Bratislava, Faculty of Civil Engineering, 2011, 70 pp. Edition of Scientific Papers, book no. 108, ISBN 978-80-227-3532-2 (in Slovak)

SLIVANSKÝ, Miloš: Experimental and Theoretical Verification of Resistance of Glass Beams. Slovak University of Technology in Bratislava, Faculty of Civil Engineering, 2011, 213 pp. Edition of Scientific Papers, Book no. 106, ISBN 978-80-227-3523-0 (in Slovak)

Journals

BALÁŽ, Ivan: The European Experience with the Use of Eurocodes. In: Eurostav. ISSN 1335-1249. Vol.17, Nos. 7-8 (2011), pp. 48-49 (in Slovak)

BLESÁK, Lukáš - SANDANUS, Jaroslav: Analysis and Design of a "Wood-Wood" Joint by the EC and IEC and Their Comparison. In: Transfer. ISSN 1337-9747, Vol. 3, No. 1 (2011), pp. 14-15 (in Slovak)

BRODNIANSKY, Ján - MAGURA, Martin: Analysis of Gas Pipelines in Complex Geological Conditions. In: Transfer. ISSN 1337-9747, Vol. 3, No. 1 (2011), p. 10 (in Slovak)

BRODNIANSKY, Ján: Trends in Design and Materials for Buildings. In: Eurostav. ISSN 1335-1249, Vol.17, No. 4 (2011), pp. 19-20 (in Slovak)

MAGURA, Martin - BRODNIANSKY, Ján - KOWALSKI, Lukáš: Providing for Operational Reliability and Safety of

Transportation Gas Pipeline and Cylindrical Shell of a Silo. In: Kontrukce. ISSN 1213-8762, Vol. 10, No. 1 (2011), pp. 2-4 (in Slovak)

SANDANUS, Jaroslav - PROKSA, Dávid: Effect of a Slack Module in Composite Timber-Concrete Structures. In: Materiály pro stavbu. ISSN 1213-0311. Vol.17, No.1 (2011), pp. 22-24 (in Slovak)

BRODNIANSKY, Ján - MAGURA, Martin: The Analysis of Pipeline Systems in Difficult Geological Conditions. In: Transfer. ISSN 1337-9747, Vol. 3, No. 1 (2011), p. 10 (in Slovak)

SANDANUS, Jaroslav - AUGUSTIN, Manfred: Cross Laminated Timber – Ecologic and Economical Solution (also) of Multi-Storey Buildings. In: Stavebné materiály. ISSN 1336-7617, Vol. 7, No. 7 (2011), pp. 28-32 (in Slovak)

KOVÁČ, Michal: Buckling Resistance of Metal Members and Frames. New Trends in the Applications of Eurocodes. In: Structural Engineering International. ISSN 1016-8664, Vol. 21, No. 3 (2011), p. 373 (in English)

MAGURA, Martin - BRODNIANSKY, Ján - KOWALSKI, Lukáš: The Provision of the Operational Reliability of Transit Gas Pipelines and a Cylinder Silo. In: Kontrukce. ISSN 1213-8762, Vol. 10, No. 1 (2011), pp. 2-4 (in Slovak)

SANDANUS, Jaroslav - PROKSA, Dávid: The Effect of a Yielding Modulus in Composite Timber-Concrete Structures. In: Materiály pro stavbu. ISSN 1213-0311. Vol.17, No. 1 (2011), pp. 22-24 (in Slovak)

Conferences

AGÓCS, Zoltán - BEZÁK, Anton - VANKO, Marcel: Design and Realization of the Reconstruction of the O. Nepela Winter Stadium in Bratislava. In: Preparation, Design and Execution in Structural Engineering. International scientific conference - CONECO 2011. Bratislava 31.3.2011. Slovak University of Technology, Faculty of Civil Engineering, 2011. ISBN 978-80-277-3469-1. CD (in Slovak)

BALÁŽ, Ivan - KOLEKOVÁ, Yvonna: Deformations of a Structure Considering Its Interaction with the Subsoil. In: New Trends in Statics and Dynamics of Buildings. 9th International Conference. Bratislava, Slovak Republic, 20.-21.10.2011. Slovak University of Technology in Bratislava, 2011. ISBN 978-80-227-3572-8, pp. 53-54 (in English)

BALÁŽ, Ivan - KOLEKOVÁ, Yvonna: Deformations of a Structure Considering Its Interaction with the Subsoil. In: New Trends in Statics and Dynamics of Buildings : 9th International Conference. Bratislava, Slovak Republic, 20.-21.10.2011. Slovak University of Technology in Bratislava, 2011. ISBN 978-80-227-3572-8, pp. 55-56 (in English)

BALÁŽ, Ivan - KOLEKOVÁ, Yvonna: In Plane Stability of a Steel Two-Hinged Arch. In: Eurosteel 2011: 6th European Conference on Steel and Composite Structures. Budapest, Hungary, 31.8.-2.9.2011. ISBN 978-92-9147-103-4, pp. 1869-1874 (in English)

BALÁŽ, Ivan - KOLEKOVÁ, Yvonna: The Verification of Stability on a Plane of Steel Arches. In: Preparation, Design and Execution in Structural Engineering. International Scientific Conference - CONECO 2011. Bratislava 31.3.2011. Slovak University of Technology,

Faculty of Civil Engineering, 2011. ISBN 978-80-277-3469-1. CD (in Slovak)

BLESÁK, Lukáš: The Impact of Local Strengthening of Wood and Joints on the Behavior of Timber Structures. In: Juniorstav 2011. Proceedings of the 13th Scientific PhD Conference. Brno University of Technology, Faculty of Civil Engineering, 4.2.2011. ISBN 978-80-214-4232-0. Unpaginated (in Slovak)

DALLEMULE, Marian: Linear and Non-Linear Stability Analysis of Arch Structures. In: Juniorstav 2011. Proceedings of the 13th Scientific PhD Conference. Brno University of Technology, Faculty of Civil Engineering, 4.2.2011. ISBN 978-80-214-4232-0. Unpaginated (in Slovak)

DALLEMULE, Marian: Stability of Arch Structures. In: Preparation, Design and Execution in Structural Engineering. International Scientific Conference - CONECO 2011. Bratislava 31.3.2011. Slovak University of Technology, Faculty of Civil Engineering, 2011. ISBN 978-80-277-3469-1. CD (in Slovak)

JULÍNEK, Ivan - LUŽICA, František - SANDANUS, Jaroslav - SLIVANSKÝ, Miloš - SÓGEL, Kristián: Analysis of Timber Beams and Experimental Verification by the Manufacturer. In: Drevostavby. 4th Scientific Conference with international participation. Terchová, Slovak Republic, 2.-3.6.2011. University of Žilina, 2011. ISBN 978-80-970171-9-4, pp. 45-50 (in Slovak)

JULÍNEK, Ivan - LUŽICA, František - SANDANUS, Jaroslav - SLIVANSKÝ, Miloš - SÓGEL, Kristián: Experimental Verification of a Truss Girder. In: Dřevostavby 2011. Proceedings of professional conference with international participation. Volyně, Czech Republic, 20. - 21. 4.2011. College and Technical High School in Volyně, 2011. ISBN 978-80-86837-33-8. pp. 35-44 (in Slovak)

KOWALSKI, Lukáš: Impact of Orthogonal Stiffeners on the Stability of a Cylindrical Shell by Axial Compression. In: Preparation, Design and Execution in Structural Engineering. International Scientific Conference CONECO 2011, Bratislava 31.3.2011. Slovak University of Technology, Faculty of Civil Engineering, 2011. ISBN 978-80-277-3469-1. CD (in Slovak)

KOWALSKI, Lukáš: Impact of Orthogonal Stiffeners on the Stability of a Cylindrical Shell by Axial Compression. In: Juniorstav 2011. Proceedings of the 13th Scientific PhD Conference. Brno University of Technology, Faculty of Civil Engineering, 4.2.2011. ISBN 978-80-214-4232-0. Unpaginated (in Slovak)

MAGURA, Martin: Effect of Soil on the Stress Level of Pipes. In: Preparation, Design and Execution in Structural

Engineering. International Scientific Conference CONECO 2011, Bratislava 31.3.2011. Slovak University of Technology, Faculty of Civil Engineering, 2011. ISBN 978-80-277-3469-1. CD (in Slovak)

NYÁRSIK, Peter: Fire Protection of Load-Bearing Structures. In: Juniorstav 2011. Proceedings of the 13th Scientific PhD Conference. Brno University of Technology, Faculty of Civil Engineering, 4.2.2011. ISBN 978-80-214-4232-0. Unpaginated (in Slovak)

SANDANUS, Jaroslav - SÓGEL, Kristián: Verification and Maintenance of the Real State of Wooden Load-Bearing Structures. In: Preparation, Design and Execution in Structural Engineering. International Scientific Conference CONECO 2011, Bratislava 31.3.2011, Slovak University of Technology, Faculty of Civil Engineering, 2011. ISBN 978-80-277-3469-1. CD (in Slovak)

SANDANUS, Jaroslav - SLIVANSKÝ, Miloš: Reinforcement of Timber Lattice Structures - Theory and Practice. In: Drevostavby. 4th Scientific Conference with international participation, Terchová, Slovak Republic, 2.-3.6.2011, University of Žilina, 2011, ISBN 978-80-970171-9-4, pp. 39-44 (in Slovak)

TRNKA, Peter: Hybrid Glass Beams. In: Preparation, Design and Execution in Structural Engineering. International Scientific Conference CONECO 2011, Bratislava 31.3.2011. Slovak University of Technology, Faculty of Civil Engineering, 2011. ISBN 978-80-277-3469-1. CD (in Slovak)

BRODNIANSKY, Ján - SLIVANSKÝ, Miloš: Experimental Verification of the Resistance of Glass Beams. In: Taller, Longer, Lighter: Meeting Growing Demand with Limited Resources. IABSE-IASS 2011 London Symposium Report, 2011. ISBN 978-0-7079-7122-3. Unpaginated (in English)

BRODNIANSKY, Ján - MAGURA, Martin: Selected Examples of Terrain and Laboratory Experiments of the Department of Steel and Timber Structures. Slovak University of Technology, Faculty of Civil Engineering 2009 - 2011. In: Hustopeče 2011, Proceedings of 49th Nationwide Conference of Steel Structures. Hustopeče, Czech Republic, 1.12.2011, Brno. Czech Union of Scientific and Technological Societies. 2011. ISBN 978-80-02-02332-6. - pp. 12-15 (in Slovak)

Reviews published in journals

BALÁŽ, Ivan: Review: Stahlbau Kalender 2011 Verbindungen: Kuhlmann, U., Ernst & Sohn, A Wiley Company. In: Eurostav. ISSN 1335-1249. Vol.17, No.7-8 (2011), p. 47 (in Slovak)

DEPARTMENT OF MAPPING AND LAND CONSOLIDATION

Head of Department
Ing. Róbert Fencík, PhD.

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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 1
Field Practice in the Cadastre of Real Estate and Cadastral Mapping
Land Consolidation 2
Mathematical Cartography
Specialised Field Practice

Obligatory elective subjects

Environmental Modelling and Evaluations of Landscapes
Cartometry and Data Analysis of the Cadastre of Real Estate
Spatial Modelling in GIS

Optional subjects

Applications of Information Technologies in Cadastre of Real Estate and Land Consolidation

1.2 Postgraduate courses

Cartography
Cadastre of Real Estate and Land Consolidation

2. Theses

2.1 Bachelor theses

There were 9 works.

2.2 Graduate theses

BARÁNEK, O.: The Issue of the Double Substance of ISC
Supervisor: HUDECOVÁ, Ľ.

GRAJZINGER, M.: Flood Protection in a Land Consolidation Project
Supervisor: GEISSE, R.

HORT, Š.: Web Portal for Flood Protection
Supervisor: FENCÍK, R.

KAPRONCZAI OVÁ, Z.: Visualization of the Relief on Topographic Maps
Supervisor: FENCÍK, R.

KOZÁČIK, A.: The Effect of the Shape of an Area on the Accuracy of the Measurement of a Parcel
Supervisor: VAJSÁBLOVÁ, M.

NYÁRSIKOVÁ, T.: Modelling of Measures Against Wind Erosion in a Land Consolidation Project
Supervisor: GEISSE, R.

RYBECKÁ, Z.: Analysis of the Vertical Accuracy of a Digital Elevation Model
Supervisor: FENCÍK, R.

SLEBODNÍK, P.: Modelling of the Communication Measurements in a Land Consolidation Project
Supervisor: GEISSE, R.

SZATMÁRI, D.: Cylindrical Projection of a Universal Transverse Mercator
Supervisor: VAJSÁBLOVÁ, M.

ŠTEFUNDA, P.: Methodology of the Cartographic Visualization of Flood Maps
Supervisor: FENCÍK, R.

ŠVANTNER, P.: Elements of Complexity in the Modelling of Landscapes
Supervisor: VAJSÁBLOVÁ, M.

VASIL', M.: ZB GIS Update from Large-Scale Mapping
Supervisor: HUDECOVÁ, Ľ.

3. Research

3.1 Research projects

Flood protection of the urban areas of Slovakia (2010-2011, ŠOLTÉSZ, A., FENCÍK, R.), VEGA 1/0894/10,

3.2 International cooperation

Cooperating institutions

Department of Geoinformation and Cartography, Vienna University of Technology, Vienna, Austria

Department of Geoinformatics, Palacký University Olomouc, Olomouc, Czech Republic

Department of Mathematics, University of West Bohemia, Pilsen, Czech Republic

4. Publications

Journals

FENCÍK, R. – KAPRONCZAI OVÁ, Z.: Visualization of the Relief on Topographic Maps. In: Kartografické listy No. 19, Bratislava: Cartographic Society and Geographic Institute of the Slovak Academy of Sciences, 2011, pp. 55-60, ISSN 1336-5274, ISBN 978-80-89060-18-4 (in Slovak)

FERANEC, J. – ČIŽMÁR, J. – KONTRA, P.: Developments in the Field of Cartography and Geoinformatics in Slovakia During the Last 20 Years. In: Geodetický a kartografický obzor, Vol. 57 (99), No. 8,

Prague (Czech Republic): Vesmír, 2011, pp. 173-179, ISSN 0016-7096 (in Slovak)

HUDECOVÁ, Ľ. – ŠPAČEK, Š.: To Be or Not to Be a Court Expert in the Field of Geodesy and Cartography. In: Slovenský geodet a kartograf, Vol. 16, No. 2, Bratislava: Chamber of Surveyors and Cartographers, 2011, pp.49-56, ISSN 1335-4019 (in Slovak)

HUDECOVÁ, Ľ.: Cadastral Vector Maps. In: Geodetický a kartografický obzor, Vol. 57 (99), No.10, Prague (Czech Republic): Vesmír, 2011, pp. 243-248, ISSN 0016-7096 (in Slovak)

RUŽIČKOVÁ, M.: Proposed 3D Cadastral Solution. In: Slovenský geodet a kartograf, Vol. 16, No. 1, Bratislava: Chamber of Surveyors and Cartographers, 2011, pp. 12-16, ISSN 1335-4019 (in Slovak)

Conferences

ČIŽMÁR, J. – FENCÍK, R. – ŠTEFUNDA, P.: Cartographic Visualization of the Contents of Flood Maps. In: Proceedings of 19th Cartographic Conference, Bratislava: Cartographic Society of the Slovak Republic, 2011, pp. 57-65 (in Slovak)

DANEK, L. – DANEKOVÁ, J.: Benefits of GIS and Ontology in the Domain of Flood Management. In: Proceedings of 13th Specialized Doctoral Study Conference, Technical University of Brno, Brno (Czech Republic), 2011, p. 7 (in Slovak)

DANEK, L. – DANEKOVÁ, J.: Use of GIS Applications and Hydrological Models in Flood Issues. In: Proceedings of 6th International Scientific Conference, Nitra: Slovak University of Agriculture in Nitra, 2011, p. 1 (in Slovak)

DAŇOVÁ, K. – FENCÍK, R. – RYBECKÁ, Z.: Vertical Accuracy of Digital Elevation Models of Mountainous Urban Areas, In: Proceedings of Conference on

Management of River Basins and Flood Risks, Bratislava: Water Research Institute, 2011, p. 10 (in Slovak)

FENCÍK, R. - DANEK, L. – DANEKOVÁ, J.: The Use of GIS Applications and Hydrodynamic Modelling in the Production of Flood Maps. In: Proceedings of GIS Ostrava 2011, Ostrava (Czech Republic): VŠB-Technical University of Ostrava, 2011, p. 12 (in Slovak)

HRNČÁROVÁ, P. – HUDECOVÁ, Ľ. – FENCÍK, R.: Quality and Possibilities of Digital Elevation Models in a Land Consolidation Project. In: Proceedings of 19th Slovak Geodetic Days, Bratislava: Chamber of Surveyors and Cartographers, 2011, p. 14 (in Slovak)

HRNČÁROVÁ, P.: The Comparison of Two Digital Elevation Models Used in a Land Consolidation Project. In: Proceedings of 13th Specialized Doctoral Study Conference, Technical University of Brno, Brno (Czech Republic), 2011, p. 6 (in Slovak)

HUDECOVÁ, Ľ.: Why Is There is a Lack of Court Experts in the Field of Geodesy and Cartography? In: Proceedings of Conference on Expertise in the Field of Geodesy and Cartography, Bratislava: Slovak Society of Surveyors and Cartographers, 2011, pp. 49-56 (in Slovak)

NAVRATIL, G. – SCHOLZ, J. – DANEK, L. – KARIMIPOUR, F.: Data for Spatial Planning - A Comparison of Three Cities. In: Proceedings of 16th International Conference on Urban Planning, Regional Development and the Information Society: REAL CORP 2011, Schwechat-Rannersdorf (Austria): CORP, 2011, pp. 145-153

RUŽIČKOVÁ, M.: Proposed 3D Cadastral Solution. In: Proceedings of 13th Specialized Doctoral Study Conference, Technical University of Brno, Brno (Czech Republic), 2011, p. 7 (in Slovak)

DEPARTMENT OF MATHEMATICS AND DESCRIPTIVE GEOMETRY

Head of Department
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1. 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 Mathematical 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
Architectural Mathematics
Numerical and Stochastic Methods
Informatics and Statistics

Recommended subjects

Computer Graphics
Fuzzy Management

1.2. Postgraduate courses

Linear Models of Time Series
Nonlinear Models of Time Series
Mathematical Methods in Fluid Flow, Diffusion and Heat Transfer
Numerical Methods in Fluid Flow, Diffusion and Heat Transfer
Mathematical Basis of the Finite Element Method I
Mathematical Basis of the Finite Element Method II
Stochastic Processes I
Probability and Statistical Estimation
Multidimensional Statistics
Statistical Methods in Geodesy
Mathematics
Decision Theory
Aggregation Operators
Proposed Experiment in Optimisation
Time Series Analysis in Civil Engineering
Dynamic and Stochastic Optimisation
Discrete Mathematics
Graph Theory

2. Theses

2.1. Bachelor theses

There were 15 works.

2.2. Graduate theses

LACKOVIČ, L.: Statistical Interpolation Methods in Geoinformatics,
Supervisor: BACIGÁL, T.

PINTEŠ, M.: Comparative Power of Selected Tests for Linearity,
Supervisor: KOMORNÍKOVÁ, M.

KULLA, T.: Kernel Estimation in a Nonparametric Regression,
Supervisor: KALICKÁ, J.

SMÍŠEK, M.: Mathematical and Computational Methods in Embryogenesis Image Processing,
Supervisor: MIKULA, K.

TRNKA, P.: Effective Code Implementation for the Solution of a Level Set Equation and Its Applications in Image Processing,
Supervisor: HANDLOVIČOVÁ, A.

URBÁN, J.: Finding an Ideal Camera Path in Virtual Colonoscopy,
Supervisor: MIKULA, K.

BOHUNČÁK, M.: Numerical Solution of Advection Equations Using the DUNE Software Tool,
Supervisor: FROLKOVIČ, P.

JURENKOVÁ, S.: Numerical Solution of Fluid Flows Using Finite Volume Methods,
Supervisor: FROLKOVIČ, P.

ŠPIR, R.: Solution of Geodetic Boundary Value Problems Using the Boundary Element Method,
Supervisor: ČUNDERLÍK, R.

TUNEGA, M.: Surface Evolution Algorithms in Software for the Footwear Industry,
Supervisor: MIKULA, K.

ŠVANTNER, P.: Elements of Complexity in Landscape Modelling,
Supervisor: VAJSÁBLOVÁ, M.

SZATMÁRI, D.: Mercator Transversal Cylindrical Projection,
Supervisor: VAJSÁBLOVÁ, M.

KOZÁČIK, A.: Effect of a Shape on the Reliability of an Area Value,
Supervisor: VAJSÁBLOVÁ, M.

2.3. Doctoral theses

VAVRÍKOVÁ, L.: Transitive Preference Structures and Multicriteria Decision Making,
Supervisor: MESIAR, R.

3. Research

3.1. Research projects

Effective Numerical Methods for the Solution of Geometric Partial Differential Equations (2010-2012, FROLKOVIČ, P.), VEGA 1/0733/10

Aggregation Information: Models and Their Applications (2010-2012, Mesiar, R.), VEGA 1/0080/10
The Development of Efficient and Reliable Numerical Methods for Engineering Applications (2009-2011, MIKULA K.), VEGA 1/0269/09

Completion of Partial Information Under Uncertainty (2009-2011, BEGANOVA, J., STUPŇANOVÁ A.), VEGA 1/0198/09

Extremal Graphs of a Given Degree and Diameter, or Girth, with a High Level of Symmetry (2010-2012, ŠIAGIOVÁ, J.), VEGA 1/0280/10

Stochastic Processes (2009-2012, KOMORNÍKOVÁ, M.), LPP-0111-09

Efficient Numerical Methods and Parallel Computing in Geodesy (2011-2014, ČUNDERLÍK, R.), VEGA 1/1063/11

Multiregimes and Multidimensional Time Series: Models and Applications (2011-2014, KOMORNÍKOVÁ, M.), VEGA 1/0143/11

3.2. International Cooperation

Cooperating institutions

University of Linz, Austria

University of Novi Sad, Serbia

University of Haifa, Israel

Communication University of China, Beijing, China

Beijing Institute of Technology, China

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 Sannio, Benevento, Italy

University of Ljubljana, Slovenia

University of Pamplona, Spain

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 / Participation in meetings

BACIGÁL, T. : Workshop, VUT MU Brno, Czech Republic, 17.-18.02.2011

BYSTRICKÝ, R.: Research, Cooperation and Seminar in the Field of Election Systems and Preferential Theory, PRESAD (PREferences, Social choice And Decision aid) Research Group
University of Valladolid, Spain, 09/2011

ČUNDERLÍK: Research Collaboration on the Mean Dynamic Topography Project, School of Surveying, Otago University, Dunedin, New Zealand, 07-14.07.2011

FROLKOVIČ, P.: Seminar, UNI Ghent, Belgium, 12/2011; Cooperation on Numerical Solution of Groundwater Flow, University in Frankfurt, Germany, 2011; Presentation on Seminar – School of Computational Engineering and Sciences, Austin, Texas, USA, 18.3.2011

HANDLOVIČOVÁ, A.: Seminar, University Paris – Sud 11, Orsay, France, 02/2011; RIMS, Kyoto, Japan, 12.-14.07.2011

JÁGR, V.: Intership, JKU Linz, Austria, 11/2011

KALINA, M.: ODAM, UPOL Olomouc, Czech Republic 26.-28.01.2011; AGOP, University of Sannio Benevento, Italy, 11.-15.05.2011

KNOR, M.: Wiener index in Iterated line graphs + various other aspects of Graph Theory, UNI Ljubljana, Slovenia, 06-11/2011

KOMORNÍKOVÁ, M.: Workshop, VUT MU Brno, Czech Republic, 17.-18.02.2011;

MESIAR, R.: Non-additive Integrals, JKU Linz, Austria, 11/2011; Cooperation on AGOP, University of Sannio Benevento, Italy, 11.-15.05.2011; EUROFUSE Workshop, Museo do Douro, Portugal, 21.-23.09.2011; Communication University of China, Beijing, China, 07.-09.09.2011; ODAM, UPOL Olomouc, Czech Republic 26.-28.01.2011; ÖMG-TAGUNG CSACS 2011, Krems, Austria, 25.-28.09. 2011

MIKULA, K.: Seminar, UNI Ghent, Belgium, 12/2011; Cooperation on Numerical Solution of Hyperbolic Problems, University in Frankfurt, Germany, 2011; Presentation on Seminar – School of Computational Engineering and Sciences, Austin, Texas, USA, 18.03.2011

NÁNÁSIOVÁ, O.: International Center for Mathematical Modeling in Physics, Engineering, Economics, and Cognitive Science Linnaeus University, Växjö-Kalmar, Sweden, 20.-24.09.2011

PEKÁROVÁ, M.: Intership, JKU Linz, Austria, 11/2011

ŠIRÁŇ, J.: Workshop, UNI Auckland, New Zealand 16.–17.02.2011; British Combinatorial Conference, University of Exeter, Exeter, United Kingdom 03.- 08.07.2011; Workshop on Group Actions on Combinatorial Structures, University of China, Beijing China, 21.–27.08.2011; Workshop on Symmetry in Graphs, Maps and Polytopes, Toronto, Canada, 24.– 28.10.2011;

VAVRÍKOVÁ, L.: Transitive Preference Structures, MFF UK, Prague, Czech Republic, 2011

ŽDÍMALOVÁ, M.: Cooperation on the Degree-Diameter Problem in Graph Theory, UPC, Universitat Polytechnica de Catalunya in Barcelona, Spain, 16.-22.1.2011

Membership in international professional organizations

JENČA, G.: International Quantum Structure Association (IQSA)

KOMORNÍKOVÁ, M.: SEFI Mathematics Working Group

MESIAR, R.: ERC (European Research Council), 2009-2013

MIKULA, K.: ERC (European Research Council), 2009-2013

MINÁROVÁ, M.: European Committee FP7 Marie Curie Fellowship

MESIAR, R.: Grant Agency EuroGIGA

MESIAR, R.: EUSFLAT (European Society for Fuzzy Logic and Technology)

MESIAR, R.: Honorary Member of VANU

MESIAR, R.: IFSA Fellow

NÁNÁSIOVÁ, O.: International Quantum Structure Association (IQSA)

4. Publications

Books

FAŠKOVÁ, Z.: Numerical Methods for Solving Geodetic Boundary Value Problems, Bratislava: STU Bratislava SvF, 2011, 55, 9 pp., (Edícia vedeckých prác; Zošit č.94), ISBN 978-80-227-3453-0 (in Slovak)

HAVRANOVÁ, Z.: Lukasevich's Filters and S-additive Measures, Bratislava: STU Bratislava SvF, 2011, 111 pp., (Edícia vedeckých prác; Zošit č.107), ISBN 978-80-227-3524-7 (in Slovak)

KRIVÁ, Z.: Numerical Schemes in Image Processing, Bratislava: STU Bratislava SvF, 2011, 81 pp., (Edícia vedeckých prác; Zošit č.97), ISBN 978-80-227-3452-3 (in Slovak)

MÉSZÁROSOVÁ, K.: Fractals in Landscapes, Bratislava: STU Bratislava SvF, 2011, 167, 37 pp., (Edícia vedeckých prác; Zošit č.98), ISBN 978-80-227-3451-6 (in Slovak)

ŠEVČOVIČ, D., STEHLÍKOVÁ, B., MIKULA, K.: Analytical and Numerical Methods for Pricing Financial Derivatives, New York: Nova Science Publishers, Inc., 2011, 330 pp., ISBN 978-1-61728-780-0 (in English)

ŽDÍMALOVÁ, M.: Large Vertex-Transitive and Cayley Graphs and Digraphs of a Given Degree and Diameter, Bratislava: STU Bratislava SvF, 2011, 98 pp., (Edícia vedeckých prác; Zošit č.95), ISBN 978-80-227-3449-3 (in Slovak)

Parts of books

BUSTINCE, H., PATERNAIN, D., DE BAETS, B., CALVO, T., FODOR, J., MESIAR, R., MONTERO, J., PRADERA, A.: Two Methods for Image Compression/Reconstruction Using OWA Operators, In: Recent Developments in the Ordered Weighted Averaging Operators: Theory and Practice, Springer, 2011, ISBN 978-3-642-17909-9, pp. 229-253 (in English)

MESIAR, R., KOMORNÍKOVÁ, M.: Probability Measures on Interval-Valued Fuzzy Events, In: Acta Universitatis Matthiae Belii: Series Mathematics, Vol. 19, Banská Bystrica: Univerzita Mateja Bela v Banskej Bystrici, 2011, ISBN 978-80-557-0283-4, pp. 31-36 (in English)

Textbooks

VAJSÁBLOVÁ, M.: Projection Methods, Bratislava: STU Bratislava, 2011, 198 pp., ISBN 978-80-227-3574-2 (in Slovak)

Journals

AGAH, H., OUYANG, Y., MESIAR, R., PAP, E., ŠTRBOJA, M.: Holder and Minkowski Type Inequalities for Pseudo-Integral, In: Applied Mathematics and Computation, ISSN 0096-3003, Vol. 217, No. 21, 2011, pp. 8630-8639 (in English)

BACIGÁL, T., JÁGR, V., MESIAR, R.: Non-Exchangeable Random Variables, Archimax Copulas and Their Fitting to Real Data, In: Kybernetika, ISSN 0023-5954, Vol. 47, No. 4, 2011, pp. 519-531 (in English)

BALAŽOVJECH, M., MIKULA, K.: A Higher Order Scheme for a Tangentially Stabilized Plane Curve Shortening Flow with a Driving Force. In: SIAM Journal on Scientific Computing, ISSN 1064-8275, Vol. 33, No. 5, 2011, pp. 2277-2294 (in English)

DE BAETS, B., DE MEYER, H., MESIAR, R.: Piecewise Linear Aggregation Functions based on Triangulation, In: Information Sciences, ISSN 0020-0255, Vol. 181, Issue 3, 2011, pp. 466-478 (in English)

ĎURAČIOVÁ, R., LIESKOVSKÝ, T., KROČKOVÁ, K., SABO, M.: Multicriteria Decision Making Using Fuzzy Sets in a GIS Environment and Its Application in Archeological Predictions, In: Geodetický a kartografický obzor, ISSN 0016-7096, Vol. 57 (99), No. 8, 2011, pp. 205-215 (in Slovak)

DURANTE, F., JAWORSKI, P., MESIAR, R.: Invariant Dependence Structures and Archimedean Copulas, In: Statistics & Probability Letters, ISSN 0167-7152, Vol. 81, No.12, 2011, pp. 1995-2003 (in English)

EL ZEKEY, M., NOVÁK, V., MESIAR, R.: On good EQ-algebras. In: Fuzzy Sets and Systems, ISSN 0165-0114, Vol. 178, Issue 1, 2011, pp. 1-23 (in English)

EYMARD, R., HANDLOVIČOVÁ, A., MIKULA, K.: Study of a Finite Volume Scheme for the Regularized Mean Curvature Flow Level Set Equation, In: IMA Journal of Numerical Analysis, ISSN 0272-4979, Vol. 31, No. 3, 2011, pp. 813-846 (in English)

GRABISCH, M., MARICHAL, J. L., MESIAR, R., PAP, E.: Aggregation Functions: Construction Methods, Conjunctive, Disjunctive and Mixed Classes, In:

Information Sciences, ISSN 0020-0255, Vol. 181, Issue 1, 2011, pp. 23-43 (in English)

GRABISCH, M., MARICHAL, J. L., MESIAR, R., PAP, E.: Aggregation Functions: Means, In: Information Sciences, ISSN 0020-0255, Vol. 181, Issue 1, 2011, pp. 1-22 (in English)

GRANNELL, M. J., KNOR, M.: A Construction for Biembeddings of Latin Squares, In: Electronic Journal of Combinatorics, ISSN 1077-8926, Vol. 18, No. 1, 2011, unpaginated (in English)

GRANNELL, M. J., KNOR, M.: Biembeddings of Latin Squares Obtained from a Voltage Construction, In: Australasian Journal of Combinatorics, ISSN 1034-4942, Vol. 51, 2011, pp. 259-270 (in English)

HALČINOVÁ, L., HUTNÍK, O., MESIAR, R.: On Some Classes of Distance Distribution Function, Valued Submeasures, In: Nonlinear Analysis: Theory, Methods and Applications, ISSN 0362-546X, Vol. 74, No. 5, 2011, pp. 1545-1554 (in English)

JAJCAY, R., ŠIRÁŇ, J.: Small Vertex-Transitive Graphs of a Given Degree and Diameter, In: Ars Mathematica Contemporanea, ISSN 1855-3966, Vol. 4, No. 2, 2011, pp. 375-384 (in English)

JENČA, G.: Coexistence in Interval Effect Algebras, In: Proceedings of the American Mathematical Society, ISSN 1088-6826, Vol.139, No. 1, 2011, pp. 331-344 (in English)

JURIO, A., PAGOLA, M., MESIAR, R., BELIAKOV, G., BUSTINCE, H.: Image Magnification Using Interval Information, In: IEEE Transactions on Image Processing, ISSN 1057-7149, Vol. 20, No.11, 2011, pp. 3112-3123 (in English)

JWAID, T., DE BAETS, B., KALICKÁ, J., MESIAR, R.: Conic Aggregation Functions, In: Fuzzy Sets and Systems, ISSN 0165-0114, Vol. 167, Issue 1, 2011, pp. 3-20 (in English)

KALINA, M., OLEJČEK, V., PASEKA, J., RIEČANOVÁ, Z.: Sharply Dominating MV-Effect Algebras, In: International Journal of Theoretical Physics, ISSN 0020-7748, Vol. 50, 2011, pp. 1152-1159 (in English)

KALINA, M.: Two Remarks to Bifullness of Centers of Archimedean Atomic Lattice Effect Algebras, In: Acta Polytechnica, ISSN 1210-2709, Vol. 51, No. 4, 2011, pp. 26-31 (in English)

KLEMENT, E. P., MANZI, M., MESIAR, R.: Ultramodular Aggregation Functions, In: Information Sciences, ISSN 0020-0255, Vol. 181, Issue 19, 2011, pp. 4101-4111 (in English)

KNOR, M., XU, G., ZHOU, S.: A Study of 3-Arc Graphs, In: Discrete Applied Mathematics, ISSN 0166-218X, Vol. 159, No. 5, 2011, pp. 344-353 (in English)

KOLLÁR, J.: WW2 CS Ciphers: Introduction to Series, In: Crypto, World, ISSN 1801-2140, Vol. 13, No. 1, 2011, p. 2 (in Slovak)

KOLLÁR, J.: WW2 CS Ciphers Part 1: TTS, In: Crypto, World, ISSN 1801-2140, Vol. 13, No. 1, 2011, pp. 3-11 (in Slovak)

- KOLLÁR, J.: WW2 CS Ciphers Part 2: "Rímska dva", In: *Crypto,World*, ISSN 1801-2140, Vol. 13, No. 2, 2011, pp. 2-11 (in Slovak)
- KOLLÁR, J.: WW2 CS Ciphers Part 3: "Rímska osem", In: *Crypto,World*, ISSN 1801-2140, Vol. 13, No. 3, 2011, pp. 2-12 (in Slovak)
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MESIAR, R.: Copulas and Their Applications in Multicriteria Decision Support (abstract), In: ODAM 2011: International Conference, Olomoucian Days of Applied Mathematics, Book of Abstracts, Olomouc, Czech Republic, 26.-28.1.2011, 2011, ISBN 978-80-244-2684-6, p. 42 (in English)

MESIAR, R.: Fuzzy Integrals as a Tool for Multicriteria Decision Support, In: Eurofuse 2011: Workshop on Fuzzy Methods for Knowledge-Based Systems, Regua, Portugal, 21.-23.9.2011, Berlin: Springer Verlag, 2011, ISBN 978-3-642-24000-3, pp. 9-15 (in English)

MESIAR, R., KOMORNÍKOVÁ, M.: Local and Global Classification of Aggregation Functions (abstract), In: Decision Theory: Qualitative and Quantitative Approaches: Abstracts of 32nd Linz Seminar on Fuzzy Set Theory, Austria, Linz, 1.-5.2.2011, 2011, pp. 99-103 (in English)

MESIAR, R., LI, J., PAP, E.: Pseudo-Concave Integrals, In: Nonlinear Mathematics for Uncertainty and Its Applications: NL-MUA 2011 Conference, Beijing, China, 7.-9.9.2011, Berlin: Springer Verlag, 2011, ISBN 978-3-642-22832-2, pp. 43-49 (in English)

MIKULA, K.: A New Inflow-Implicit/Outflow-Explicit Finite Volume Method for Solving Variable Velocity Advection Equations (abstract), In: SIAM Conference on Mathematics & Computational Issues in the Geosciences: Long Beach, CA, USA, 21.-24.3.2011, 2011 (www.siam.org/meetings/g11), p. 112 (in English)

MIKULA, K.: Curve Evolution Models - Numerical Solution and Applications (abstract), In: Mathematical

and Numerical Analysis for Interface Motion Arising in Nonlinear Phenomena: Kyoto, Japan, 12.-17.7.2011, Kyoto: Kyoto University, 2011, p. 19 (in English)

MIKULA, K., KÚTIK, P.: Finite Volume Schemes for Solving Nonlinear Partial Differential Equations in Financial Mathematics, In: Finite Volumes for Complex Applications VI, Problems & Perspective, Vol. 1: 6th International Symposium, Prague, Czech Republic, 6.-10.6.2011, Berlin: Springer Verlag, 2011, ISBN 978-3-642-20670-2, pp. 643-653 (in English)

MIKULA, K., OHLBERGER, M.: Inflow-Implicit/Outflow-Explicit Scheme for Solving Advection Equations, In: Finite Volumes for Complex Applications VI, Problems & Perspective, Vol. 1: 6th International Symposium, Prague, Czech Republic, 6.-10.6.2011, Berlin: Springer Verlag, 2011, ISBN 978-3-642-20670-2, pp. 683-693 (in English)

MIKULA, K., SMÍŠEK, M., REMEŠÍKOVÁ, M., BELLAICHE, Y., BOSVELD, F., GRANER, F.: New Robust Algorithm for Tracking Cells in Videos of Drosophila Morphogenesis Based on Finding an Ideal Path in Segmented Spatio-Temporal Cellular Structures, In: 33rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society: Boston, MA, USA, 30.8.-3.9.2011, 2011, ISBN 978-1-4244-4122-8, pp. 6609-6612 (in English)

MIKULA, K.: Nonlinear Diffusion Filtering of Data on the Earth's Surface (abstract), In: 25th IUGG General Assembly: Earth on the Edge: Science for a Sustainable Planet, Melbourne, Australia, 28.6.-7.7.2011, 2011, unpaginated (in English)

MIKULA, K.: Numerical Modelling of Forest Fire Propagation (abstract), In: Efficient Mesh Adaptation Methods for Evolution Problems: Theory and Applications: Workshop, Vienna, 14.-17.12.2011, 2011, p. 12 (in English)

MIKULA, K.: 3D Curve Evolution Algorithm with Tangential Redistribution for a Fully Automatic Finding of an Ideal Camera Path in Virtual Colonoscopy, In: ÖMG-TAGUNG CSACS 2011: Joint Mathematical Conference of the Austrian Mathematical Society at the Donau-Universität Krems together with the Catalan, Czech, Slovak and Slovenian Mathematical Societies, Abstract book, Krems, Austria, 25.-28.9.2011, Vienna: Österreichische Mathematische Gesellschaft, 2011, p. 70 (in English)

MINÁROVÁ, M.: Biomechanical Investigation on Human Spine Mathematical Modeling and Computations, In: ÖMG-TAGUNG CSACS 2011: Joint Mathematical Conference of the Austrian Mathematical Society at the Donau-Universität Krems together with the Catalan, Czech, Slovak and Slovenian Mathematical Societies, Abstract book, Krems, Austria, 25.-28.9.2011, Vienna: Österreichische Mathematische Gesellschaft, 2011, p. 101 (in English)

NÁNÁSIOVÁ, O., PASTUCHOVÁ, E., VÁCLAVÍKOVÁ, Š., SABO, M.: Classification of Association Coefficients and Its Application in Cluster Analysis, In: ODAM 2011: The International Conference, Olomoucian Days of Applied Mathematics, Book of Abstracts, Olomouc, Czech Republic, 26.-28.1.2011, 2011, ISBN 978-80-244-2684-6, p. 47 (in English)

- NÁNÁSIOVÁ, O.: Modeling of Non-Compatible Random Events via Multidimensional States, In: ÖMG-TAGUNG CSACS 2011: Joint Mathematical Conference of the Austrian Mathematical Society at the Donau-Universität Krems together with the Catalan, Czech, Slovak and Slovenian Mathematical Societies, Abstract book, Krems, Austria, 25.-28.9.2011, Vienna: Österreichische Mathematische Gesellschaft, 2011, p. 85 (in English)
- PATERNAIN, D., BUSTINCE, H., MESIAR, R., BELIAKOV, G., JURIO, A., MOLINA, C. L.: A Construction Method of Interval-Valued Fuzzy Sets for Image Processing, In: 2011 IEEE Symposium on Advances in Type - 2 Fuzzy Logic Systems : Symposium Series on Computational Intelligence, Paris, France, 11.-15.4.2011, 2011, ISBN 978-1-61284-076-5, pp. 16-22 (in English)
- PATERNAIN, D., PAGOLA, M., FERNANDEZ, J., MESIAR, R., BELIAKOV, G., BUSTINCE, H.: Brain MRI Thresholding using Incomparability and Overlap Functions, In: ISDA 2011: 11th International Conference on Intelligent Systems Design and Applications, Cordoba, Spain, 22.-24.11.2011, 2011, ISBN 978-1-4577-1675-1, pp. 808-812 (in English)
- PATERNAIN, D., MOLINA, C. L., BUSTINCE, H., MESIAR, R., BELIAKOV, G.: Image Reduction Using Fuzzy Quantifiers, In: Eurofuse 2011: Workshop on Fuzzy Methods for Knowledge-Based Systems, Regua, Portugal, 21.-23.9.2011, Berlin: Springer Verlag, 2011, ISBN 978-3-642-24000-3, pp. 351-362 (in English)
- PATERNAIN, D., PAGOLA, M., MESIAR, R., BEDREGAL, B. C., BUSTINCE, H.: Interval Valued Overlap Functions, Application to Image Processing (abstract), In: ISCAMI 2011: Book of Abstracts, Malenovice, Czech Republic, 6.-8.5.2011, Ostrava: University of Ostrava, 2011, p. 37 (in English)
- PEKÁROVÁ, M., BACIGÁL, T.: Distorted Univariate Conditioning Stable Copulas, In: AGOP 2011: Proceedings of 6th International Summer School on Aggregation Operators, Benevento, Italy, 11.-15.7.2011, Benevento: University of Sannio, 2011, ISBN 978-1-4477-7019-0, pp. 35-43 (in English)
- PETRIČKOVÁ, A., LENČUCHOVÁ, J.: Modeling of Dependence Structure of the Regime-Switching Models Residuals using Autocopulas, In: AGOP 2011: Proceedings of 6th International Summer School on Aggregation Operators, Benevento, Italy, 11.-15.7.2011, Benevento: University of Sannio, 2011, ISBN 978-1-4477-7019-0, pp. 45-50 (in English)
- PETRIČKOVÁ, A.: Modelling of the ARMA Models Residuals using Autocopulas, In: ÖMG-TAGUNG CSACS 2011: Joint Mathematical Conference of the Austrian Mathematical Society at the Donau-Universität Krems together with the Catalan, Czech, Slovak and Slovenian Mathematical Societies, Abstract book, Krems, Austria, 25.-28.9.2011, Vienna: Österreichische Mathematische Gesellschaft, 2011, p. 89 (in English)
- REMEŠÍKOVÁ, M.: Cell Tracking in 3D+Time Image Sequences, In: ÖMG-TAGUNG CSACS 2011: Joint Mathematical Conference of the Austrian Mathematical Society at the Donau-Universität Krems together with the Catalan, Czech, Slovak and Slovenian Mathematical Societies, Abstract book, Krems, Austria, 25.-28.9.2011, Vienna: Österreichische Mathematische Gesellschaft, 2011, p. 71 (in English)
- REMEŠÍKOVÁ, M., MIKULA, K., SMÍŠEK, M., PEYRIÉRAS, N.: 4D Numerical Schemes for Cell Image Segmentation and Tracking, In: Finite Volumes for Complex Applications VI, Problems & Perspective, Vol. 1: 6th International Symposium, Prague, Czech Republic, 6.-10.6.2011, Berlin: Springer Verlag, 2011, ISBN 978-3-642-20670-2, pp. 693-703 (in English)
- RICCI, R. G., MESIAR, R.: Aggregation with Multi-Attributes: A New Perspective, In: AGOP 2011: Proceedings of 6th International Summer School on Aggregation Operators, Benevento, Italy, 11.-15.7.2011, Benevento: University of Sannio, 2011, ISBN 978-1-4477-7019-0, pp. 151-156 (in English)
- RÜCKSCHLOSSOVÁ, T.: Generalized Bonferroni Mean Operators in Multi-Criteria Aggregation, In: ÖMG-TAGUNG CSACS 2011: Joint Mathematical Conference of the Austrian Mathematical Society at the Donau-Universität Krems together with the Catalan, Czech, Slovak and Slovenian Mathematical Societies, Abstract book, Krems, Austria, 25.-28.9.2011, Vienna: Österreichische Mathematische Gesellschaft, 2011, p. 90 (in English)
- SABO, M.: Clustering by Two Methods Simultaneously, In: ÖMG-TAGUNG CSACS 2011: Joint Mathematical Conference of the Austrian Mathematical Society at the Donau-Universität Krems together with the Catalan, Czech, Slovak and Slovenian Mathematical Societies, Abstract book, Krems, Austria, 25.-28.9.2011, Vienna: Österreichische Mathematische Gesellschaft, 2011, p. 90 (in English)
- SABO, M., NÁNÁSIOVÁ, O., PASTUCHOVÁ, E., VÁCLAVÍKOVÁ, Š.: Comparing Similarities in Cluster Analysis (abstract), In: ISCAMI 2011: Book of abstracts, Malenovice, Czech Republic, 6.-8.5.2011, Ostrava: University of Ostrava, 2011, p. 60 (in English)
- STUPŇANOVÁ, A., KOLESÁROVÁ, A.: Associative n-Dimensional Aggregation Functions, In: AGOP 2011: Proceedings of 6th International Summer School on Aggregation Operators, Benevento, Italy, 11.-15.7.2011, Benevento: University of Sannio, 2011, ISBN 978-1-4477-7019-0, pp. 139-143 (in English)
- SZÖKEOVÁ, D.: SETAR Models in the Streamflow Modeling, In: ÖMG-TAGUNG CSACS 2011: Joint Mathematical Conference of the Austrian Mathematical Society at the Donau-Universität Krems together with the Catalan, Czech, Slovak and Slovenian Mathematical Societies, Abstract book, Krems, Austria, 25.-28.9.2011, Vienna: Österreichische Mathematische Gesellschaft, 2011, p. 90-91 (in English)
- ŠIAGIOVÁ, J.: Cayley Graphs in the Degree-Diameter Problem (abstract), In: IWONT 2011: 4th International Workshop on Optimal Network Topologies, Brussels, Belgium, 11.-15.7.2011, Brussels: Université Libre de Bruxelles, 2011, p. 35 (in English)

DEPARTMENT OF PHYSICS

Head of Department

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1. Education

1.1 Graduate study

Obligatory subjects

Physics I

Physics II

Physics III

Physics (English)

Optional subjects

Engineering Thermodynamics

1.2 Postgraduate courses

Physical Principles of Measurements

Special Aspects of Physics

Modelling Transport Phenomena

Physical Fields, Waves

Heat and Moisture Transport in Building Materials

3. Research

3.1 Research projects

Determination of the Physical Characteristics of Infiltration and Contaminant Transport with Adsorption in Porous Media, APVV-0743-10

Study of the Material Properties of Historical and Modern Building Materials in Light of Their Compatibility, VEGA 1/0591/10

3.2 International cooperation

Cooperating institutions

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

Silesian University of Technology, Gliwice, Poland

Faculty of Civil Engineering, Technical University, Brno, Czech Republic

Institute of Theoretical and Applied Mechanics of the ASCR, Prague, Czech Republic

Cracow University of Technology, Poland

Military University of Technology, Warsaw, Poland

Katholieke Universiteit Leuven, Belgium

University of Liberec, Czech Republic

Visit of staff members to foreign institutions / Participation in meetings

BANÍK, I., VESELSKÝ, J.: Brno University of Technology, Czech Republic, (scientific and residential laboratories, 17.-18.2.2011)

PAVLEDOVÁ, G.: Institute of Theoretical and Applied Mechanics of the ASCR, Prague, Czech Republic (visiting Prof. RNDr. Pavel Demo, CSc. to get acquainted with research activities and to plan next cooperation, September 2011)

HOLÚBEK, M., PAVLEDOVÁ, G., BANÍK, I., VESELSKÝ, J.: Brno University of Technology, Czech Republic (visiting Prof. Ing. Luboš Pazdera, Thermophysics 2011, November 2011)

Membership in international professional organizations

BANÍK, I., LUKOVIČOVÁ, J.: European Physical Society

LUKOVIČOVÁ, J.: European Society for the Study of Science and Theology

LUKOVIČOVÁ, J.: International Council for Research and Innovation in Building and Construction–W 40

4. Publications

Journals

BANIK, I.: Recombination Processes, Meyer-Neldel Rule and Non-Exponential Decay in Disordered Semiconductors. In: Journal of Optoelectronics and Advanced Materials. - ISSN 1454-4164. - Vol. 13, No. 11-12 (2011), pp. 1364-1376

BANIK, I.: An Explanation of the Inverse Meyer-Neldel Rule in Disordered Semiconductors, Journal of Ovonic Research, Vol.7, No.1, Jan.-Feb. 2011, pp.15-20

Conferences

BANÍK, I., LUKOVIČOVÁ, J., PAVLEDOVÁ, G.: Crystallization Processes in Disordered Materials and the Meyer-Neldel Rule. In: Thermophysics 2011: Conference proceedings. 16th International meeting of Thermophysical Society. Valtice, CR, 2.-4.11.2011. - Brno: Brno University of Technology, 2011. - ISBN 978-80-214-4345-7. - pp. 22-31 (in Slovak),

BANÍK, I., VESELSKÝ, J.: Physics at the Faculty of Civil Engineering, STU and Some Ideas about Non-Traditional Experiments. In: Matematicko-fyzikální vědy ve výuce geodézie a kartografie: Sborník referátů. Brno, ČR, 17.-18.2.2011. - Brno: ECON, 2011. - ISBN 978-80-86433-53-0. - pp. 79-97 (in Slovak)

BANÍK, I., PAVLEDOVÁ, G.: Physics Tasks in Pictures. In: 24th Didmattech 2011: Problems in Teacher

Education. - Cracow: Instytut Techniki UP, 2011. - ISBN 978-83-7271-679-8. - pp. 256-264

CHRISTOV, I., PAVLENDOVÁ, G., VESELSKÝ, J.: Dilatometer Used for Measurements in Testing Building Materials. In: Thermophysics 2011: Conference proceedings.16th International meeting of Thermophysical Society. Valtice, CR, 2.-4.11.2011. - Brno: Brno University of Technology, 2011. - ISBN 978-80-214-4345-7. - pp. 180-184 (in Slovak)

HOLÚBEK, M., MIHALKA, P., MATIAŠOVSKÝ, P.: Determination of the Liquid Water Diffusivity of Lime-Cement Perlite Plaster during Cyclic Wetting and Drying Regimes. In: Thermophysics 2011: Conference proceedings.16th International meeting of Thermophysical Society. Valtice, CR, 2.-4.11.2011. - Brno: Brno University of Technology, 2011. - ISBN 978-80-214-4345-7. - pp. 200-205 (in Slovak)

HOLÚBEK, M., PÁLSZEGI, T.: Effective Permittivity Modelling of Lime Cement Perlite Plaster. In: Thermophysics 2011: Conference proceedings.16th

International meeting of Thermophysical Society. Valtice, CR, 2.-4.11.2011. - Brno: Brno University of Technology, 2011. - ISBN 978-80-214-4345-7. - pp.174-179 (in Slovak)

VESELSKÝ, J., SZABÓ, D., KORONTHÁLYOVÁ, O., MATIAŠOVSKÝ, P.: Hysteresis Effects of Moisture Storage of Calcium Silicate Insulation Boards. In: Thermophysics 2011: Conference proceedings.16th International meeting of Thermophysical Society. Valtice, CR, 2.- 4.11.2011. - Brno: Brno University of Technology, 2011. - ISBN 978-80-214-4345-7. - pp.146-151 (in Slovak)

PAVLENDOVÁ, G., ŠUJANOVÁ, J.: Gained and Lost Competencies of the Students in the ICT Supported Education in Selected Faculties of the Slovak University of Technology in Bratislava. In: ICL 2011 (elektronický zdroj): 14th International Conference on Interactive Collaborative Learning and 11th International Virtual University Conference. Piešťany, Slovakia, September 21-23.2011. - Piscataway: IEEE, 2011. - ISBN 978-1-4577-1746-8. - pp. 611-614 (in Slovak)

DEPARTMENT OF STRUCTURAL MECHANICS

Head of Department

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1. Education

1.1 Graduate study

Obligatory subjects

Building Analysis
Interaction of Structures and Foundations
Non-Linear Mechanics
Plane 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

1.2 Postgraduate courses

Selected Problems of Applied Mechanics
Selected problems of Structural Mechanics
Selected problems of Nonlinear Mechanics

2. Theses

2.1 Bachelor theses

There were 18 works.

2.2 Graduate theses

ŠTIGLIC, M.: Analysis of Plate Grids Above a Rectangular Ground Plan
Supervisor: TVRDÁ, K.

BARAN, M.: Analysis of the Seismic Resistance of a

High-Rise Building in Its Interaction with the Subsoil.
Supervisor: KRÁLIK, J.

MÁLEKOVÁ, V.: An Analysis of the Foundation Slabs of a High-Rise Building.
Supervisor: JENDŽELOVSKÝ, N.

SLIMÁK, M.: Equivalent Frame Method for Pushover Analysis of a Masonry Building – Parametric Study
Supervisor: SOKOL, M.

GUNČAGA, S.: Static-Dynamic Analysis of an Administrative Building.
Supervisor: IVÁNKOVÁ, O.

DROBNÝ, D.: Complex Static and Dynamic Analysis of a High-Rise Building
Supervisor: IVÁNKOVÁ, O.

HALADEJ, M.: Modeling of a Water Tower
Supervisor: JENDŽELOVSKÝ, N.

KRCHŇÁK, M.: Nonlinear Analysis of Reinforced Concrete Cross Sections - Calculation Program
Supervisor: SOKOL, M.

PLESNÍK, P.: Simulation of System Identification on a Simple Structure
Supervisor: SOKOL, M.

OLEŠŇAN, A.: Analysis of a Sludge Digestion Tank in Interaction with an Elastic Foundation
Supervisor: MISTRÍKOVÁ, Z.

FAŠUNG, M.: Static Analysis of Tower Buildings
Supervisor: JENDŽELOVSKÝ, N.

VÁLKY, R.: Static-Dynamic Analysis of a Multifunctional Center
Supervisor: IVÁNKOVÁ, O.

JURČO, S.: The Effect of a Wind Load on Buildings with Irregular Ground Plans
Supervisor: JENDŽELOVSKÝ, N.

PURDEK, I.: 30-Floor Building Consisting of Two Ground Plan Segments and the Design of a Support System, Considering the Impact of Their Interaction
Supervisor: SOKOL, M.

2.3 Doctoral theses

NAGYOVÁ, M.: Stability and Vibration of Beams with Imperfections
Supervisor: RAVINGER, J.

ROZSÁR, P.: Safety and Reliability of Reinforced Concrete Structures under an Extreme Load
Supervisor: KRÁLIK, J.

3. Research

3.1 Research projects

Structural Health Monitoring Using Dynamic Tests and Smart Systems for a Dynamic Structural Response Control (2008 - 2010, SOKOL, M.), VEGA 1/1119/11,

Optimal Design of Structures Having Unilateral Bonds with Respect to the Non-Linear Behaviour of Materials and Their Reliability and Serviceability Aspects (2009-2011, DICKÝ, J.), VEGA 1/0692/09,

Stability and Vibration of Inhomogeneous Rod Systems with Initial Imperfections (2011-2012, NAGYOVÁ, M.), Grant for young researchers 7811,

Impulse Device for Determining Dynamic Soil Parameters (2011-2012, KONEČNÁ, L.), Grant for young researchers 7819,

3.2 International cooperation

Cooperating institutions

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 Prüfzentrum, 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

Visit of staff members to foreign institutions / Participation in meetings

HUBOVÁ, O.: Erasmus Teaching Program, Czech Technical University in Prague, September 12- 15, 2011, Lectures at the CTU in Prague,

HUBOVÁ, O., KRÁLIK, J.: Engineering Mechanics 2011, Svatka, Czech Republic, May 9-12, 2011

HUBOVÁ, O.: CzechSTAV 2011, Hradec Králové, Czech Republic, October 24-28, 2011

HUKEL, D., KRÁLIK, J.: Modeling in Mechanics 2011, Ostrava, Czech Republic, February 2-3, 2011

HUKEL, D., KONEČNÁ, L., LANG, T.: Juniorstav 2011, Brno, Czech Republic, February 4, 2011

KONEČNÁ, L., NAGYOVÁ, M.: 5th international student's conference: Study and Achieve, Moscow, November 27-December 1, 2011

KOLEKOVÁ, Y.: 6th European Conference on Steel and Composite Structures: Eurosteel 2011. Budapest, Hungary, August 31 – September 2, 2011

KRÁLIK, J.: Reliability of Structures 2011, Prague, Czech Republic, May 19, 2011

KRÁLIK, J.: EUROODYN 2011. Leuven, Belgium, July 4 - 6, 2011

KRÁLIK, J., IVÁNKOVÁ, O.: Dynamics of Rigid and Deformable Bodies 2011, Ústí nad Labem, Czech Republic, October 5-7, 2011

NAGYOVÁ, M., TVRDÁ, K.: 11th International Scientific Conference VSU' 2011, Sofia, Bulgaria, June 2-3, 2011

Membership in international professional organizations

KOLEKOVÁ, Y.: Member of ÖGE Bridges and Building Structures, TU Vienna

RAVINGER, J.: Member of International "Coupled Instabilities in Metal Structures" Committee

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

SOKOL, M.: Member of CEN/TC 250/ SC 8

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 the European Society for Biomechanics

SUMEC, J.: Vice-Chairman of the Czech-Slovak Committee for Biomechanics

4. Publications

Books

HUBOVÁ, O. - MISTRÍKOVÁ, Z. - KOLEKOVÁ, Y.: Statics of Building Structures (1st ed.). STU Publishing House 2011, 295 pp. ISBN 978-80-227-3433-2 (in Slovak)

PSOTNÝ, M.: Geometric Imperfections in the Nonlinear Solution of Member Systems. STU Publishing House 2011. (Ed. of scientific work, Issue No. 102), 74 pp. ISBN 978-80-227-3475-2 (in Slovak)

DICKÝ, J. - MISTRÍKOVÁ, Z. – SUMEC, J.: Elasticity and Plasticity in Building Construction 1 (2nd ed.). STU Publishing House 2010, 298 pp. ISBN 978-80-227-3385-4 (in Slovak)

Parts of books

IVÁNKOVÁ, O.: Proper Choice of the Structural System of High-Rise Buildings Considering the Subsoil and Seismic Load. In: Selected Problems of Body Dynamics: Dynamics of Rigid and Deformable Bodies 2011. Ústí nad Labem, University of J.E. Purkyně, 2011. ISBN 978-80-7414-272-7. pp. 131-136 (in Slovak)

SOKOL, M.: Seismic Effects on Masonry Constructions Made of Ceramic Tile. In: Monograph of Žilinský, J. Porotherm 2011. STU Publishing House 2011, ISBN 978-80-227-3573-5. pp. 94 – 109

IVÁNKOVÁ, O. - JAVOREK, T.: Resistance of Reinforced Concrete Prefabricated Structures. In: Selected Problems of Body Dynamics : Dynamics of Rigid and Deformable Bodies 2011. Ústí nad Labem : University of J.E.Purkyně, 2011. ISBN 978-80-7414-272-7. pp. 137-142 (in Slovak)

KRÁLÍK, J.: Experimental and Numerical Analysis of the Negative Effects of Vibrations on Humans. In: Selected Problems of Body Dynamics: Dynamics of Rigid and Deformable Bodies 2011. Ústí nad Labem: University of J.E.Purkyně, 2011. ISBN 978-80-7414-272-7. pp. 143-153

KRÁLÍK, J. - KRÁLÍK Jr., J.: Probabilistic Dynamic Analysis of the Interaction Between a Foundation Plate and Compressor Machine. In: Selected Problems of Body Dynamics : Dynamics of Rigid and Deformable Bodies 2011. Ústí nad Labem : University of J.E.Purkyně, 2011. ISBN 978-80-7414-272-7. pp. 154-162

DICKÝ, J.: Lessons Learned in the Implementation of the Two-Tier Study Programs at STU Bratislava. In: Inquiries into European Higher Education in Civil Engineering: 9th EUCEET Volume. Edited by I. Manoliu. Bucharest, CONSPRESS 2010.326 pp. ISBN 978-973-100-123-4; ISBN 978-973-100-126-5. pp. 59-69

TVRDÁ, K.: Optimal Design of a Beam on an Elastic Foundation. In: Beams and Frames on Elastic Substrates 3.: Frydryšek, K., Nikodým, M., VŠB – TU Ostrava, 2010. 611 pp. ISBN 978-80-248-2257-0. pp. C225-C244 (edition on CD)

Textbooks

PSOTNÝ, M. - VÉGHOVÁ, I.: Structural Mechanics. Examples : Instructions for Exercises (1st ed.). STU Publishing House 2011.133 pp. ISBN 978-80-227-3560-5 (in Slovak)

SOKOL, M. - TVRDÁ, K.: Dynamics of Building Structures. - (1sted.). STU Publishing House 2011. 212 pp. ISBN 978-80-227-3587-2 (in Slovak)

Journals

HRUŠTINEC, Ľ. - KUZMA, J. - SUMEC, J.: Numerical Analysis of Contact Stresses under Rectangular (Square and Strip) Shallow Foundations. In: Annuals of Construction Engineering. Issue11 (2011). ISSN 1505-8425. pp. 63-68

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DEPARTMENT OF MATERIAL ENGINEERING

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1. Education

1.1 Graduate study

Obligatory subjects

Concrete Technology
Testing
Technology of Repairs
Building Materials
Building Chemistry

Obligatory elective subjects

Technological Project
Concrete Technology II
Ceramics
Prefabricated Constructions
Microstructure of Building Materials
Binders

1.2 Postgraduate courses

Building Materials
Concrete Technology
Selected Topics in Chemistry

2. Theses

2.1 Graduate theses

BARIAKOVÁ, A.: Effect of Superplasticizers on Rheological Properties of Cement Composites
Supervisor: UNČÍK, S.

BRUNDZÁK, M.: Properties of Cement Composites Based on Recycled Aggregate
Supervisor: LEDEREROVÁ, M.

ČECH, M.: Effect of the Moisture Content on Selected Properties of Autoclave Aerated Concrete
Supervisor: STRUHÁROVÁ, A.

JANEK, M.: Analysis of the Effect of DMPA Admixture on Physical Properties of Fired Clay Brick Body
Supervisor: ŠVEDA, M.

JANÍK, B.: Effect of Chemical Admixture KS-4 on Properties of Fired Clay Brick Body
Supervisor: ŠVEDA, M.

ŠALKOVÁ, K.: Effect of Superplasticizers on Properties of Cement Composites
Supervisor: UNČÍK, S.

2.2 Doctoral theses

PALACKOVÁ, A.: Criteria for Composite Materials with Required Thermophysical Properties
Supervisor: BAJZA, A.

3. Research

3.1 Research projects

Application of Admixtures Based on Zeolites and Bentonites for Modifying the Pore Structure of Roofing Tile (2011-2013; ŠVEDA) VEGA 1/0517/11,

Correlation Relations Between Properties of Autoclaved Aerated Concrete and Its Use in the Process of Quality Management in Construction (2011-2013, UNČÍK) VEGA 1/0472/11.

3.2 International cooperation

Cooperating institutions

Faculty of Civil Engineering, Brno University of Technology, Czech Republic

Klokner Institute, Czech Technical University in Prague, Czech Republic

Faculty of Civil Engineering, VŠB Technical University of Ostrava, Czech Republic

Visit of staff members to foreign institutions / Participation in meetings

LEDEREROVÁ, M., KERESTÚR, M., ŠVEDA, M.: RECYCLING 2011, 16th Conference, Brno, University of Technology, Czech Republic, 17.-18. 3. 2011.

STRUHÁROVÁ, A.: 15th Conference on the Environment and Processing Minerals. VŠB-TU, Ostrava, Czech Republic, 8.-10. 6. 2011.

UNČÍK, S.: 5th International Conference on Autoclaved Aerated Concrete, Securing a Sustainable Future, Bydgoszcz, Poland, 14.-17.9.2011.

BAJZA, A.: Non-Traditional Cement & Concrete, International Conference, Brno, Czech republic, 23.-30. 6. 2011.

BAJZA, A.: 2nd WTA-International PhD. Symposium, Brno, University of Technology, Czech republic, 6.-7. 10. 2011.

4. Publications

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KMECOVÁ, V., UNČÍK, S., BARIAKOVÁ, A., ŠALKOVÁ, K.: New Superplasticizer for High Performance Concrete. In: Beton. Technologie - Konstrukce – Sanace, 2011, Vol. 11, No. 6. ISSN 1213-3116, pp. 33-35 (in Slovak)

STRUHÁROVÁ, A., HLAVINKOVÁ, M.: Effect of Hydrophobic Admixtures on the Moisture Content in Masonry from Autoclaved Aerated Concrete. In: Building Materials: Scientific and Technical Journal about Building

Materials for Civil Engineering, 2011, Vol. 7, Nos. 4-5, ISSN 1336-6041, pp. 9-11 (in Slovak)

ŠVEDA, M.: Chemical Additive VUPPOR 2.

In: Keramický zpravodaj, 2011, Vol. 27, No. 3. ISSN 1210-2520, pp. 11-15 (in Slovak)

ŠVEDA, M.: The Quality Checking of Brick Products by Correlative Relationships. In: Keramický zpravodaj, 2011, Vol. 27, No. 5. ISSN 1210-2520, pp. 5-11 (in Slovak)

ŠVEDA, M., KOMORA, L.: Waste from the Production of Organic Acids Can Improve the Properties of Brick Products. In: Waste Forum, 2011, No. 3. ISSN 1804-0195, pp. 179-184 (in Slovak)

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KERESTÚR, M., ŠVEDA, M.: Zeolite Wastes and Their Use in Brickmaking. In: Organization, Technology and Management in Construction. Proceedings of 10th International Conference. Šibenik, Croatia 7.-10.9.2011. Croatian Association for Construction Management, Zagreb, Croatia, 2011. Conference proceedings on CD-ROM. ISBN 978-953-7686-02-4 (in English)

KMECOVÁ, V., UNČÍK, S., BARIAKOVÁ, A., ŠALKOVÁ, K.: Influence of Superplasticizer Berament HT 5221 on Properties of Cement Mortars. Proceedings of 17th International Conference. Košická Belá, SR, 15.-17.6.2011. Košice: The Technical University of Košice, SR, 2011, Conference proceedings on CD-ROM. ISBN 978-80-553-0685-8, pp. 8-13 (in Slovak)

LEDEREROVÁ, M.: Effect of Recycled Concrete Material on Selected Properties of Concrete. In: RECYCLING 2011: Possibilities and Future of Waste Recycling from Buildings as a Source of Valuable Raw Materials. Proceedings of 16th Conference, Brno, ČR, 17.-18. 3. 2011. Brno University of Technology, 2011. ISBN 978-80-214-4253-5, pp. 56-60 (in Slovak)

LEDEREROVÁ, M.: Effects and Use of Recycled Materials in Construction. In: Construmat 2011: Proceedings of 17th International Conference. Košická Belá, SR, 15.-17.6.2011. Košice: The Technical University of Košice, SR, 2011, Conference proceedings on CD-ROM. ISBN 978-80-553-0685-8, pp. 14-20 (in Slovak)

LEDEREROVÁ, M.: Impact of Recycled Concrete on Selected Properties of Concrete. In: Proceedings of 15th Conference on the Environment and Processing Minerals, Part I. VŠB-TU, Ostrava, CR, 8.-10.6.2011. VŠB - Technical University of Ostrava, CR, 2011. ISBN 978-80-248-2387-4, pp. 261-265 (in English)

LEDEREROVÁ, M.: Recycling and Reuse of Construction Materials. In: Reuse of Materials for Construction Purposes: Proceedings of Conference with international participation. Nový Smokovec, SR, 27.-29. 4. 2011. Košice: Dom techniky, 2011. ISBN 978-80-232-0311-0, pp. 83-87 (in Slovak)

LEDEREROVÁ, M.: Use of Some Wastes as Substitutes for Natural Materials in Construction. In: Organization, Technology and Management in Construction. Proceedings of 10th International Conference. Šibenik, Croatia 7.-10.9.2011. Croatian Association for

Construction Management, Zagreb, Croatia, 2011. Conference proceedings on CD-ROM. ISBN 978-953-7686-02-4 (in English)

PAVLÍK, V.: Degradation of Concrete by Acid Solutions. In: Rural Buildings 2011, Architecture-Constructions-Technology-Safety. Proceedings of Conference. Nitra, SR, 8.-9.9.2011. Nitra: Slovak University of Agriculture in Nitra, 2011. ISBN 978-80-552-0644-8, pp. 112-117 (in English)

PAVLÍK, V., DUBÍK, M.: Lime-Pozzolan Mortars Based on Waste Materials. In: Construmat 2011: Proceedings of 17th International Conference. Košická Belá, SR, 15.-17.6.2011. Košice: The Technical University of Košice, SR, 2011, Conference proceedings on CD-ROM. ISBN 978-80-553-0685-8, pp. 21-28 (in Slovak)

PAVLÍK, V.: Lime-Pozzolan Binders from Coal Fly Ash, Wood Ash and Brick Dust. In: Proceedings of 15th Conference on the Environment and Mineral Processing, Part I. VŠB-TU, Ostrava, CR, 8.-10. 6. 2011. VŠB - Technical University of Ostrava, CR, 2011. ISBN 978-80-248-2387-4, pp. 47-53 (in English)

STRUHÁROVÁ, A.: Chemical Grouting Method and Its Effectiveness for Protection of Aerated Autoclaved Concrete Brickwork against Water and Moisture. In: Proceedings of 15th Conference on the Environment and Processing Minerals, Part II. VŠB-TU, Ostrava, CR, 8.-10. 6. 2011. VŠB - Technical University of Ostrava, CR, 2011. ISBN 978-80-248-2387-4, pp. 257-259 (in English)

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ŠVEDA, M., JANEK, M.: Affecting the Properties of a Brick Body with Chemical Additives. In: Construmat 2011: Proceedings of 17th International Conference. Košická Belá, SR, 15.-17.6.2011. Košice: The Technical University of Košice, SR, 2011, Conference proceedings on CD-ROM. ISBN 978-80-553-0685-8, pp. 45-53 (in Slovak)

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ŠVEDA, M.: VUPPOR 2 and Its Properties. In: Construmat 2011. Proceedings of 17th International Conference. Košická Belá, SR, 15.-17.6.2011. Košice: The Technical University of Košice, SR, 2011, Conference proceedings on CD-ROM. ISBN 978-80-553-0685-8, 61-66 (in Slovak)

ŠVEDA, M.: The Use of Correlation Relationships Between Properties of Brick Body. In: Testing and Quality in Civil Engineering 2011: Proceedings of Conference, Brno, CR, 4.-5.10.2011. Brno University of Technology, 2011. ISBN 978-80-214-3438-9, pp. 419-430 (in English)

ŠVEDA, M., KERESTÚR, M.: Zeolite Wastes and Their Use in the Manufacture of Brick Products. In: RECYCLING 2011: Possibilities and Future of Building Waste Recycling as a Source of Valuable Raw Materials. Proceedings of 16th Conference/ Collection of Lectures, Brno, CR, 17.-18.3.2011. Brno University of Technology, 2011. ISBN 978-80-214-4253-5, pp. 61-67 (in Slovak)

UNČÍK, S., STRUHÁROVÁ, A., HLAVINKOVÁ, M., SABOVÁ, A.: Effect of Bulk Density and Moisture Content on the Thermo-Technical Properties of Aerated Autoclaved Concrete. In: Organization, Technology and

Management in Construction. Proceedings of 10th International Conference. Šibenik, Croatia 7.-10.9.2011. Croatian Association for Construction Management, Zagreb, Croatia, 2011. Conference proceedings on CD-ROM. ISBN 978-953-7686-02-4 (in English)

UNČÍK, S., STRUHÁROVÁ, A., HLAVINKOVÁ, M., SABOVÁ, A.: Measuring the Thermo-Technical Parameters of Autoclaved Aerated Concrete by Dynamic Method. In: Proceedings of 5th international conference on Autoclaved Aerated Concrete, Securing a Sustainable Future, Bydgoszcz, Poland 14.-17.9.2011. Bydgoszcz: University of Technology and Life Sciences Press, 2011. ISBN 978-83-89334-26-4, pp. 391-396 (in English)

UNČÍK, S.: Protection of Concrete Against Organic Acids. In: Rural Buildings 2011, Architecture-Constructions-Technology-Safety. Proceedings of Conference. Nitra, SR, 8.-9.9.2011. Nitra: Slovak University of Agriculture in Nitra, 2011. ISBN 978-80-552-0644-8 (in English)

UNČÍK, S., BAJZA, A., ROUSEKOVÁ, I.: Protection of Concrete Structures Against Aggressive Acid Media. In: Repair of Concrete Structures: Proceedings of 7th Seminar. Smolenice, SR, 7.-8.12.2011. Bratislava: STU of Bratislava, 2011, pp. 65-70. ISBN 978-80-8076-095-3 (in Slovak)

DEPARTMENT OF BUILDING TECHNOLOGY

Head of Department

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1. Education

1.1 Graduate study

Obligatory subjects

Construction Site Facility (RS)
Costs and Prices in the Building Industry (PSA)
Environmental Protection and Creation (RS)
Pre-Construction Design (TS)
Professional Practice (RS)
Protection and Restoration of Archit. Heritage (PSA-A/U)
Technological Project II (RS)
Technology of Construction Processes 1 (PSA)
Technology of Construction Processes 1 (PSA)
Technology of Construction Processes 1 (TMS)
Technology of Construction Processes 1 (TMS)
Technology of Construction Processes 3 (TMS)
Technology of Construction Processes 3 (TMS)
Technology of Finishing Processes (RS)
Thesis (RS)

Obligatory elective subjects

Bachelor's Thesis (TMS)
Bachelor's Thesis Seminar (TMS)
Business Ethics (RS)
Construction Engineering in Practice (TMS)
Construction Engineering in Practice (VHVS)
Construction of Buildings (PSA)
Construction of Buildings (PSA)
Construction of Buildings (TMS)
Construction Site Facility (ERS)
Costs and Prices (VHVS)
Costs and Prices in the Building Industry (TMS)
Costs and Prices in the Building Industry (TS)
Forensic Activity (TS)
Maintenance of Buildings (TS)
Manager in the Construction Industry) (TMS)
Modelling of Construction Processes (TS)
Non-Destructive Testing (TS)
Optimising Construction Processes (RS)
Pathology of Buildings (TS)
Professional Field Trip (TMS)
Professional Field Trip (TS)
Professional Practice (TMS)
Protection of the Environment (TMS)
Protection of the Environment (TMS)
Quality Management in the Construction Industry (TS)
Quality Management System (TPB)
Safety and Protection of Health in the Construction Process (TMS)
Technological Project I (TS)
Technology for Historical Buildings (RS)
Technology of Building Renovation I (TS)
Technology of Building Renovation II (RS)
Technology of Building Service Renovations (TS)
Technology of Construction Processes 2 (PSA)
Technology of Finishing Processes (TS)
Technology of Historical Buildings (ERS)

Technology Problems in Forensic Engineering (RS)

Optional subjects

Historical Construction Technologies (PSA-A/U)

In English (Civil Engineering)

Building Technology (CE)
Construction and Maintenance Management (CE)
Building Economy (CE)
Quality Management in CE (CE)

1.2 Postgraduate Courses

Technology of Construction
Postgraduate Study Project I-VI
Pedagogic Activity I-V
Publication Activity I-II

2. Theses

2.1 Bachelor theses

There were 102 works.

2.2 Graduate theses

ADAMČÍK, J.: Multifunctional Building on Hraničná Street in Bratislava. Supervisor: JURÍČEK, I.

BAČA, M.: Conservation of the Korlátka Castle - Preparation for Implementation. Supervisor: MAKÝŠ, O.

BALOGH, L.: RESIDENCE: Letná – Háľková. Supervisor: SOMOROVÁ, V.

BARČÁK, D.: Hotel CHOPIN on Galvani Street in Bratislava. Supervisor: JURÍČEK, I.

BAŠA, M.: Slávičie Valley: Multifunctional House on Svetlá Street in Bratislava. Supervisor: JANKOVICHOVÁ, E.

BELÁŇ, F.: "HRACHOVÁ": Multifunctional Complex, Building E, Bratislava. Supervisor: JURÍČEK, I.

BETÁK, J.: Business Office and Residential Building, Petržalka Multifunctional Centre – Aupark 3rd Step on Einstein Street in Bratislava. Supervisor: HULÍNOVÁ, Z.

ČEMEZ, M.: "BONAPARTE": Multifunctional House on Račianska Street in Bratislava. Supervisor: JURÍČEK, I.

DEMKOVÁ, I.: FAMILY CENTER in Rimavská Sobota. Supervisor: SOMOROVÁ, V.

DOVIČIČ, R.: Multifunctional House on Botanická Street in Trnava. Supervisor: HULÍNOVÁ, Z.

DUCHOŇOVÁ, M.: Multifunctional House on Leškova Street in Bratislava. Supervisor: MAKÝŠ, P.

- ĎUMBALA, M.: Superstructure of Residential House on Kvačalova Street No. 49-53, Dula Square No. 2 in Bratislava. Supervisor: HULÍNOVÁ, Z.
- DVOŘÁK, M.: Multifunctional House on Dunaj Street in Bratislava. Supervisor: JURÍČEK, I.
- FILÍPKOVÁ, L.: Koliba No. 2, Low-Energy Residential Complex in Bratislava. Supervisor: MAKÝŠ, P.
- GÁDOŠI, M.: Multifunctional Building in Trnava. Supervisor: GAŠPARÍK, J.
- GÁL, Z.: Trade Center II in Bratislava. Supervisor: MAKÝŠ, P.
- GALA, J.: Hall. Supervisor: BOŽÍK, M.
- GULA, M.: Devín Yard – Building SO 06 in
- HALAČ, L.: Vičince Residential Complex – 1st Period. Supervisor: ANTOŠOVÁ, N.
- HAVRILA, J.: Ružinov Centre – Multifunctional Building and Garage House, Ružinov, Bratislava. Supervisor: MAKÝŠ, P.
- HLAVÁN, R.: Complex Renewal of Manor House in Malacky. Supervisor: MAKÝŠ, O.
- HLAVATÝ, P.: Nuclear Power Station – Barbotage Turret 3 and 4. Supervisor: HULÍNOVÁ, Z.
- HLUCHÁ, K.: Selected Parts of a Construction-Technology Design. Administrative Centre, Röntgenova Street, Bratislava. Supervisor: JURÍČEK, I.
- HODÁL, P.: Selected Parts of a Construction-Technology Design. Faculty of Informatics and Information Technologies, Bratislava. Supervisor: MAKÝŠ, P.
- GÁDOŠI, M.: Multifunctional Building in Trnava. Supervisor: GAŠPARÍK, J.
- GÁL, Z.: Trade Center II in Bratislava. Supervisor: MAKÝŠ, P.
- GALA, J.: Hall. Supervisor: BOŽÍK, M.
- GULA, M.: Devín Yard – Building SO 06 in Devínska Nová Ves. Supervisor: GAŠPARÍK, J.
- GURZHIEV, A.: Administrative and Operations Building. Supervisor: BIZUB, J.
- HALČIŠÁK, P.: Construction of Residential House B6 on Structure of Existing Underground Garage. Supervisor: ANTOŠOVÁ, N.
- HATÁR, P.: Residential Complex on Bôrik in Žilina. Supervisor: SZALAYOVÁ, S.
- HORVÁTHOVÁ, D.: TESCO in Zlaté Moravce. Supervisor: PROKOPČÁKOVÁ, K.
- HRABOVSKÝ, J.: Multifunctional Building on Pajštún Street in Bratislava. Supervisor: SZALAYOVÁ, S.
- HRUŠOVSKÝ, M.: Multifunctional Building on Trnavská Road. Supervisor: ANTOŠOVÁ, N.
- CHRISTOU, CH.: Residential Complex in Bratislava. Supervisor: ANTOŠOVÁ, N.
- IVANKO, M.: Residential Complex in Nitra. Supervisor: ANTOŠOVÁ, N.
- JANKOLOVÁ, T.: Multifunctional House on Dohnány Street in Trnava. Supervisor: CHAMULOVÁ, B.
- KACHLÍK, M.: Residential House on Einstein Street in Bratislava. Supervisor: PROKOPČÁKOVÁ, K.
- KAŇA, T.: Nová Mýtna Multifunctional Centre in Bratislava. Supervisor: PROKOPČÁKOVÁ, K.
- KATI, R.: TRIPOLIS: Residential Houses. Supervisor: BIZUB, J.
- KIRKA, L.: AUPARK: Multifunctional Building in Piešťany. Supervisor: SOMOROVÁ, V.
- KIŠUCKÁ, Ľ.: Medical Pavilion in Nitra. Supervisor: GAŠPARÍK, J.
- KLINOVSKÝ, M.: Residential House. Supervisor: BOŽÍK, M.
- KOKAVEC, M.: Residential Houses (3x) – Malý Raj Area of Veľký Šúr at Slovenský Grob. Supervisor: CHAMULOVÁ, B.
- KOLEK, L.: Multifunctional Building in Tatranská Lomnica. Supervisor: SZALAYOVÁ, S.
- KOLLÁRIK, M.: Nová Mýtna Multifunctional Centre in Bratislava. Supervisor: PROKOPČÁKOVÁ, K.
- KORMANÍK, M.: Medical Centre. Supervisor: BÚCIOVÁ, M.
- KOSTOLÁNI, R.: MicroStep Administrative and Development Centre in Bratislava Nové Mesto. Supervisor: BÚCIOVÁ, M.
- KOVÁČ, M.: Conservation of Fortified Monastery in Bzovik - Preparation for Implementation. Supervisor: MAKÝŠ, O.
- KRÁLIKOVÁ, A.: Multifunctional House. Supervisor: BOŽÍK, M.
- KRIŽEK, J.: New Construction of Residential House in a Yard on Dunaj Street in Bratislava. Supervisor: ANTOŠOVÁ, N.
- KUPČULIAK, T.: Property in Turčianske Teplice. Supervisor: SZALAYOVÁ, S.
- LESO, N.: Administrative – Developmental Centre in Bratislava. Supervisor: ANTOŠOVÁ, N.
- LUSOVÁ, I.: Alexis Residential House in Trnava. Supervisor: MAKÝŠ, P.
- MACUROVÁ, M.: Perla Ružinov - Multifunctional Building in Bratislava. Supervisor: PROKOPČÁKOVÁ, K.
- MAJDIÁK, B.: Store and Service Building of Honda Motorcycles with the Administration in Dunajská Streda. Supervisor: JANKOVICHOVÁ, E.

MARTINÁK, T.: Reconstruction of Mansion in Dubnica n/Váhom. Supervisor: BIZUB, J.

MINÁRECH, M.: Karpatia Residential House in Bratislava, Dúbravka Part - the Cross. Supervisor: JANKOVICHOVÁ, E.

MÓRI, M.: Panon Office Building on Panón Way in Bratislava. Supervisor: CHAMULOVÁ, B.

MRMUS, J.: Leonardo Residence, Multifunctional Residential House. Supervisor: JANKOVICHOVÁ, E.

MURGAŠ, F.: "Hroznový Sad 2nd ": Residential Complex in Bratislava – Rača. Supervisor: GAŠPARÍK, J.

MURKO, M.: Residential House in Bratislava – Petržalka. Supervisor: BÚCIOVÁ, M.

PAPP, V.: TESCO in Trenčín. Supervisor: GAŠPARÍK, J.

PÍŠ, T.: Residential Complex on Za plavárňou Street in Žilina. Supervisor: SZALAYOVÁ, S.

POLÁČEK, P.: Multifunctional House on Staroháj Street in Trnava. Supervisor: CHAMULOVÁ, B.

RAČKOVÁ, P.: Extension to a Hospital in Partizánske. Supervisor: HULÍNOVÁ, Z.

RAJNIAKOVÁ, O.: Trinity Multifunctional Complex in Bratislava. Supervisor: MAKÝŠ, P.

RAUSA, P.: Administrative and Operational Building LPS SR. Supervisor: HULÍNOVÁ, Z.

SKÝPALA, M.: Petržalka City Multifunctional House in Bratislava. Supervisor: BÚCIOVÁ, M.

SVORADA, T.: Hotel in Púchov. Supervisor: BÚCIOVÁ, M.

SZARKA, T.: WEST Residential Houses. Supervisor: HULÍNOVÁ, Z.

ŠABÍK, M.: Residential House. Supervisor: BOŽÍK, M.

ŠIMEK, A.: REDING TOWER II in Bratislava. Supervisor: MAKÝŠ, P.

ŠIMO, A.: STOP SHOP Business Centre in Liptovský Mikuláš. Supervisor: BIZUB, J.

TRNIK, M.: BELVEDER Multifunctional House in Banská Bystrica. Supervisor: PROKOPČÁKOVÁ, K.

VALLOVÁ, D.: "Tri lipy" Multifunctional House in Trenčianske Mitice. Supervisor: GAŠPARÍK, J.

VALOVIČOVÁ, M.: Clementisove sady – Gala Residential Complex in Galanta. Supervisor: SOMOROVÁ, V.

VAŠÁK, M.: Doprastav Office Building in Senec. Supervisor: PROKOPČÁKOVÁ, K.

VÁŽNY, S.: Business Centre. Supervisor: BOŽÍK, M.

VLK, L.: GALA Residence in Galanta. Supervisor: MAKÝŠ, P.

VYŠVADEROVÁ, Z.: Višňový sad Multifunctional Complex in Bratislava. Supervisor: MAKÝŠ, P.

VYTRÍSALOVÁ, K.: Reconstruction of AQUA Centre. Supervisor: BOŽÍK, M.

ŽÁK, V.: HOTEL ALIBABA. Supervisor: SOMOROVÁ, V.

3. Research

3.1 Research projects

The Use of Traditional Technologies in Restoring Wooden Buildings, Project No. MK-OSSD-1736/2010/1.3 (MAKÝŠ, O.)

Repair and Maintenance of the Archaeological Museum Structures Havránok – NCM (MAKÝŠ, O.), PH 50

Application of the Method of Successive Interventions in the Rehabilitation of the Salinisation of the Holy Ladislav Church in Nitra (MAKÝŠ, O.), PD39

3.2 International cooperation

Cooperating institutions

CNAM, The National Institute of Science, Technology and Management, Paris, France

Czech Technical University (ČVUT), Faculty of Civil 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

ICOMOS (International Council on Monuments and Sites) – Slovak branch, Bratislava, Slovakia

National Institute for the Preservation of Cultural Heritage, Prague, Czech Republic

Purdue University, Division of Construction Engineering and Management, School of Civil Engineering, West Lafayette, IN, USA

Southampton Institute, Built Environment Division, Southampton, England, UK

Sparkasse Hainburg, Private Foundation, Hainburg, Austria

STOP - Society for the Technology of the Protection of Monuments, Prague, Czech Republic

Technical University (VUT), Faculty of Civil Engineering, Department of Building Technology, Brno, Czech Republic

University of Brighton, Faculty of Engineering and Environmental Studies, Brighton, England, UK

Visit of staff members to foreign institutions / Participation in meetings

GAŠPARÍK, J.: International Conference on New Trends in Construction, Antalya, Turkey, 2011

GAŠPARÍK, J. and 21 MEMBERS OF DEPARTMENT: International Conference on Organization, Technology and Management in Construction, Sabena, Croatia, 2011

Membership in international professional organizations

GAŠPARÍK, J.: Slovak Society for Quality, Žilina, Slovakia

GAŠPARÍK, J.: International Association on Automation and Robotics in Construction (IAARC), Board, Eindhoven, The Netherlands

GAŠPARÍK, J.: Scientific Committee - International Symposium on Automation and Robotics in Construction (ISARC), Seoul, S. Korea, 2011

4. Publications

Books

ANTOŠOVÁ, N.: Technology of the Protection and Maintenance of Thermal Insulation Composite Systems. Brno: Tribun EU, Ltd., 2011, 63 pp., ISBN 978-80-263-0051-9.

BIZUB, J.: Technology of Plaster Realization. Brno: Tribun EU, Ltd., 2011, 93 pp., ISBN 978-80-263-0052-6.

BÚCIOVÁ, M.: Selected Parts of Construction Planning Process I. Brno: Tribun EU, Ltd., 2011, 74 pp., ISBN 978-80-263-0044-1.

GAŠPARÍK, J.: Environmental Management System. Brno: Tribun EU, Ltd., 2011, 117 pp., ISBN 978-80-263-0048-9.

HULÍNOVÁ, Z.: Analysis of the Construction Process in Terms of Modeling. Bratislava: STU BA, 2011, 93 pp., ISBN 978-80-227-3474-5.

JANKOVICHOVÁ, E.: The Impact of Globalization on the Management of Construction Companies. Bratislava: STU BA, 2011, 139 pp., ISBN 978-80-227-3477-6.

MAKÝŠ, O.: Technology of Monument Renewal IV. Pezinok: Renesans, Ltd., 2010, 63 pp. ISBN 978-80-89402-32-8.

Parts of books

ANTOŠOVÁ, N.: "Green Facades" - Insulation Failures. In: Prefab - the Fate of the House in Your Hands. Pezinok : DYNAMIC SK, Ltd., 2011, pp. 79-84, ISBN 978-80-970678-3-0.

Textbooks

GAŠPARÍK, J. – GAŠPARÍK, M.: Quality Management System: Patterns of Documents and Records in Accordance with BS EN ISO 9001:2009. Brno: Tribun EU, Ltd., 2011, 70 pp., ISBN 978-80-7399-271-2.

MAKÝŠ, O.: Selected Topics from Technology of Monument Renewal IV. Pezinok : Renesans, Ltd., 2010, 26 pp., ISBN 978-80-89402-33-5.

SOMOROVÁ, V.: Civil Engineering in Practice. Bratislava: STU BA, 2011, 76 pp., ISBN 978-80-227-3589-6.

Journals

ANTOŠOVÁ, N.: Analysis of the Biocorrosion of "ETICS" - Causes and Suggestions for Solutions. In: Property and Housing, Vol. 6, No. 1, 2011, pp. 89-104, ISSN 1336-944X.

ANTOŠOVÁ, N.: Buffer Zones in Slovakia and Related Legislation. In: Almanac of an Authorized Expert, Vol. 10, No. 2-3, 2011, pp. 24-30, ISSN 1336-3174.

BRIATKA, P.: Cement - Hydraulic Binder. In: Building Materials, Vol. 7, No. 6, 2011, pp. 38-42, ISSN 1336-7617.

BRIATKA, P. - MAKÝŠ, P.: Desorption and Use of Saturated Lightweight Aggregate in Internal Curing. In: Slovak Journal of Civil Engineering, Vol. 19, No. 3, 2011, pp. 31-38, ISSN 1210-3896.

BRIATKA, P. - STERNOVÁ, Z.: Claddings Based on Porous Concrete 3 - Options for Mechanical Anchoring ETICS to OPP. In: Materials for Construction, Vol. 17, No. 7, 2011, pp. 18-22, ISSN 1213-0311.

ELLINGEROVÁ, H.: Planning and Management of Construction Budgetary Costs. In: OTMC Organization, Technology & Management in Construction, Vol. 3, No. 2, 2011, pp. 296-301, ISSN 1847-5450.

GAŠPARÍK, J.: Quality Management in the University Educational Process. In: International Journal on New Trends in Education and Their Implications - IJONTE. Vol. 2, No. 3, 2011, pp. 36-44, ISSN 1309-6249.

JANKOVICHOVÁ, E.: Construction Sector in Globalization Conditions. In: Almanac of an Authorized Expert, Vol.10, No. 1, 2011, pp. 21-26, ISSN 1336-3174.

JANKOVICHOVÁ, E.: A Proposal for Construction Company Management in Globalization Conditions. In: Almanac of an Authorized Expert, Vol.10, Nos. 2-3, 2011, pp. 60-63, ISSN 1336-3174.

BRIATKA, P.: Separate Construction of Dilatations and Joints? In: Materials for Construction, Vol. 17, No. 4, 2011, pp. 30-35, ISSN 1213-0311.

BRIATKA, P. - STERNOVÁ, Z.: Security and Stability of the ETICS on Porous Concrete Claddings. In: Facility Management, Vol. 5, No. 3, 2011, pp. 40-44, ISSN 1337-6233.

BRIATKA, P. – MAKÝŠ, P.: Can Porous Aggregate be Effectively Used for the Internal Curing of Concrete? In: Concrete. Technology - Construction – Rehabilitation, Vol. 11, No. 4, 2011, pp. 66-72, ISSN 1213-3116.

BRIATKA, P. - HOREČNÝ, R. - STERNOVÁ, Z.: What Threatens Claddings Based on Aerated Concrete? In: Facility Management, Vol. 5, No. 1, 2011, pp. 28-30, ISSN 1337-6233.

- BRIATKA, P. - MAKÝŠ, P.: Are Lightweight Aggregates Suitable for Internal Treatment of Concrete? In: Building Materials, Vol. 7, No. 5, 2011, pp. 50-53, ISSN 1336-7617.
- BRIATKA, P.: Transport Possibilities for Fresh Concrete. In: Building Materials, Vol. 7, No. 3, 2011, pp. 32-35, ISSN 1336-7617.
- BRIATKA, P. - STERNOVÁ, Z.: Claddings Based on Porous Concrete 1 - Housing Stock and Typical Problems. In: Materials for Construction, Vol. 17, No. 5, 2011, pp. 16-21, ISSN 1213-0311.
- BRIATKA, P. - STERNOVÁ, Z.: Claddings Based on Porous Concrete 2 - Different Viewpoints on the Current Situation. In: Materials for Construction, Vol. 17, No. 6, 2011, pp. 18-22, ISSN 1213-0311.
- BRIATKA, P. - STERNOVÁ, Z.: Defective Claddings Based on Aerated Concrete. In: Building Materials, Vol. 7, No. 2, 2011, pp. 52-54, ISSN 1336-7617.
- BRIATKA, P.: Industrial Floors - Errors and Remediation. In: Materials for Construction, Vol. 17, No. 3 2011, pp. 40-46, ISSN 1213-0311.
- BRIATKA, P.: Introduction to Concrete Curing 1 - In the Summer Season. In: Materials for Construction, Vol. 17, No. 1, 2011, pp. 16-20, ISSN 1213-0311.
- BRIATKA, P.: Introduction to Concrete Curing 2 - In the Winter Season. In: Materials for Construction, Vol. 17, No. 2, 2011, pp. 18-21, ISSN 1213-0311.
- BRIATKA, P.: Providing for Foundation Work. In: Building Materials, Vol. 7, No. 1, 2011, pp. 22-25, ISSN 1336-7617.
- BRIATKA, P. - STERNOVÁ, Z.: Thermal Insulation and Cladding Defects Based on Porous Concrete. In: Facility Management, Vol. 5, No. 2, 2011, pp. 24-27, ISSN 1337-6233.
- MAKÝŠ, O. - MAŠKULKA, J. - INSTITORIS, V.: Stair Repairs. In: Do it Yourself, Vol. 14, No. 5, 2011, pp. 48-51, ISSN 1335-4604.
- SOMOROVÁ, V.: Education as a Precondition for Improving the Quality of Facility Management Services. In: Euro FM Insight, Vol. 17, 2011, pp. 13-14, ISSN 1993-1980.
- SOMOROVÁ, V.: European Standard Facility Management 15221-5. In: Eurostav, Vol. 17, No. 10, 2011, pp. 58-60, ISSN 1335-1249.
- SOMOROVÁ, V.: Green Buildings and Facility Management. In: TZB Haustechnik, Vol. 19, No. 3, 2011, pp. 16-17, ISSN 1210-356X.
- SOMOROVÁ, V.: Maintenance of a Residential Building in the Context of Facility Management. In: Facility Management, Vol. 5, No. 2, 2011, pp. 48-49, ISSN 1337-6233.
- SOMOROVÁ, V.: Management of Space as a Part of Facility Management. In: Facility Manager, Vol. 4, No. 2, 2011, pp. 24-26.
- SOMOROVÁ, V.: Taxonomy in Facility Management - fourth part of EN 15221. In: Eurostav, Vol. 17, No. 3, 2011, pp. 66-67, ISSN 1335-1249.
- SZALAYOVÁ, S.: Asbestos - Dangerous Mistake from the Past. In: Roof, Facade Insulation, Vol. 18, No. 9, 2011, pp. 26-27, ISSN 1212-0111.
- SZALAYOVÁ, S. - VARGOVÁ, Z.: Energy-Saving Building. In: Nice Housing, Vol. 13, No. 4, 2011, pp. 84-85, ISSN 1335-4523.
- SZALAYOVÁ, S. - VARGOVÁ, Z.: Heating Bill. In: Nice Housing, Vol. 13, No. 4, 2011, pp. 82-83, ISSN 1335-4523.
- SZALAYOVÁ, S. - VARGOVÁ, Z.: Network Control. In: Nice Housing, Vol. 13, No. 5, 2011, pp. 88-90, ISSN 1335-4523.
- SZALAYOVÁ, S. - VARGOVÁ, Z.: Unwelcome Visitors. In: Nice Housing, Vol. 13, No. 5, 2011, pp. 94-96, ISSN 1335-4523.

Conferences

ANTOŠOVÁ, N.: Management of the Decontamination of ETICS. In: Proceedings of 10th International Conference, OTMC. Zagreb : Croatian Association for Construction Management, Croatia, Šibenik, September 2011, ISBN 978-953-7686-02-4.

ANTOŠOVÁ, N.: Management of the Decontamination of ETICS (Abstract). In: Book of Abstracts for 10th International Conference, OTMC. Zagreb: Croatian Association for Construction Management, Croatia, Šibenik, September 2011, p. 3, ISBN 978-953-7686-01-7.

ANTOŠOVÁ, N.: Q-2011 Construction, Financing and Toll Motorways. Promoting the Fluency and Efficiency of the Construction Process Using Daily Construction Records. In: Proceedings of 13th International Conference, Žilina, May 2011, pp. 150-155, ISBN 978-80-554-0357-1.

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Threatens Claddings? In: Theory and Design of Civil Engineering. Quality and Durability of Residential Buildings: 18th Conference, Side Event. Bratislava: BB PRINT, 2011, pp. 34-38, ISBN 978-80-970595-1-4.

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RAČEV, R.: Evaluating Aspects of the Geometric Parameters of Finished Internal Gypsum Plasters (Abstract). In: Proceedings of 13th Professional Conference Juniorstav 2011. Brno: VUT Brno, February 2011, p. 107, ISBN 978-80-214-4232-0.

RAČEV, R.: Risks While Planning the Work Process of a Cement Screed. In: Proceedings of 10th International Conference, OTMC. Zagreb: Croatian Association for Construction Management, Croatia, Šibenik, September 2011, ISBN 978-953-7686-02-4.

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SOMOROVÁ, V.: Application of Facility Management in Green Buildings (Abstract). In: Book of Abstracts of 10th International Conference, OTMC. Zagreb: Croatian Association for Construction Management, Croatia, Šibenik, September 2011, p. 95, ISBN 978-953-7686-01-7.

SOMOROVÁ, V.: Measurement of Space in Buildings Rented by prEN 15221-6 Facility Management. In: Proceedings of 9th Conference with International Participation, Facility Management 2011. Bratislava: SSTP, October 2011, pp. 5-8, ISBN 978-80-89216-41-3.

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STRIGÁČOVÁ, L.: Perceptions of Intelligent Buildings in Terms of Future Users. In: Proceedings of 10th International Conference, OTMC. Zagreb: Croatian Association for Construction Management, Croatia, Šibenik, September 2011, ISBN 978-953-7686-02-4.

STRIGÁČOVÁ, L.: Technical Report of Fire Fighting Equipment as a Part of FM. In: Proceedings of 9th Conference with International Participation, Facility Management 2011. Bratislava: SSTP, October 2011, pp. 63-66, ISBN 978-80-89216-41-3.

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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 Infrastructure 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 Water Supply and Water Treatment Chapters
Selected Sewerage and Waste Water Treatment Chapters
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

1.2 Postgraduate courses

Hydrochemistry and Hydrobiology
Water Pollution Control
Sanitary Engineering Structures
Water Supply Systems
Water Treatment for Drinking and Industrial Use
Balneology
Horizontal and Vertical Intake Structures
Waste Water Collection
Rehabilitation of Old Waste Disposal Sites

Protection and Utilization of Water Resources
Waste Water Treatment
Solid Waste Treatment

2. Theses

2.1 Bachelor theses

There were 25 works.

2.2 Graduate theses

ANTAL, L.: Water Supply – Design of a Water Distribution System, Supervisor: BARLOKOVÁ, D.

BERTA, P.: Hydraulic Assessment of the Sewer Network in the Town of Komárno, Supervisor: SOKÁČ, M.

BREZA, M.: Proposed Recycling Center, Supervisor: ŠKULTÉTYOVÁ, I.

GARDLÍKOVÁ, I.: Rehabilitation Plan for a Public Water Supply, Supervisor: TÓTHOVÁ, K.

MATEJ, D.: Study of the Waste Water System at Lietavská Svinná-Babkov, Supervisor: STANKO, Š.

MATUŠČIN, M.: Proposed Sectorisation of a Water Supply Network, Supervisor: KRIŠ, J.

POLÁČEK, J.: Decentralized Waste Water Disposal in Areas with Individual Residential Buildings, Supervisor: MAHRÍKOVÁ, I.

2.3 Doctoral theses

BERTA, P.: Extension of Pollution in Surface Waters
Supervisor: SOKÁČ, M.

BRONIŠOVÁ, M.: Assessment of Sewage Networks, Background for Renewal Plans of Sewages
Supervisor: RUSNÁK, D.

GALBOVÁ, K.: Water Regime of Communal Landfill
Supervisor: ŠKULTÉTYOVÁ, I.

GALÍK, M.: Analysis of Assessment of Water Distribution Systems
Supervisor: KRIŠ, J.

HANKOVÁ, M.: Reconstruction of Water Systems
Supervisor: KRIŠ, J.

HOLUBEC, M.: Mathematical Modeling of Pipe Line Systems
Supervisor: KRIŠ, J.

HURBAN, L.: Using of Statistics in Risk Assessment Analysis of Water Networks
Supervisor: BOŽIKOVÁ, J.

CHABÁL, L.: Optimization of Design of Pumping Stations
Supervisor: RUSNÁK, D.

MOLNÁR, K.: Impact of pressure Zonation of Water Networks on Elimination of Water Losses

Supervisor: BOŽIKOVÁ, J.

MOLNÁR, T.: Optimization and Modernization of Technological Processes in Water Treatment
Supervisor: BARLOKOVÁ, D.

NÉMEŠ, P.: Material Impact and Regime of Flowing on Water Losses in Water Networks
Supervisor: BOŽIKOVÁ, J.

PIKOROVÁ, T.: Decentralized Waste Water Treatment by Using of Membrane Technology

3. Research

3.1 Research projects

Quantification of the Simulated Effect of Input Data and Model Parameters on the Accuracy of the Outputs of Dispersion Models for Surface Water (SOKÁČ, M.), APVV-0274-10

Sewerage of Urban Areas (RUSNÁK, D.), KEGA 3/7452/09

Utilization of New Filtration Materials in Water Treatment (BARLOKOVÁ, D.), APVV 0379-07

Master Training Network in Technologies of Water Resources Management – Netwater (KRIŠ, J.), Tempus Project No. 15311-TEMPUS-IT-TEMPUS-JPCR

Towards Sustainable Water Resources Management in Central Asia - Swan (KRIŠ, J.), Tempus Project No. 158982-TEMPUS-ES-TEMPUS-JPCR

Research Center of Excellence of Integrated Flood Protection of an Area (KRIŠ, J.), CEIPO Project

Competitive and Safe Waste Management Systems (ŠKULTÉTYOVÁ, I.), VEGA 1/0559/10

3.2 International cooperation

Cooperating institutions

Technical University, Prague, Czech Republic

Technical University, Brno, Czech Republic

Technical University, Vienna, Austria

Universität für Bodenkultur, Vienna, Austria

Danish Hydraulic Institute, Horsholm, Denmark, and Prague, Czech Republic

National Water Research Institute, Burlington, Canada

Instytut Inżynierii Sanitarnej i Ochrony Środowiska, Politechnika Czestochowska, Czestochowa, Poland

Hokkaido University, Sapporo, Japan

University of Pavia, Pavia, Italy

University of Hong Kong, China

Tambov State Technical University, Russia

Vladimir State University, Russia

Ural Federal University, Russia

Bauman Moscow State Technical University, Russia

Visit of staff members to foreign institutions / Participation in meetings

BARLOKOVA, D., ILAVSKÝ, J.: Ural Federal University, Russia, lectures for Tempus Project 159311 - TEMPUS-1-2009-IT-JPCR "Network for Master Training in Technologies of Water Resources Management (February 2011)

BARLOKOVA, D., ILAVSKÝ, J.: Bauman Moscow State Technical University, Russia, lectures for Tempus Project 159311 - TEMPUS-1-2009-IT-JPCR "Network for Master Training in Technologies of Water Resources Management (February 2011)

MAHRÍKOVÁ, I., STANKO, Š.: Tambow State Technical University, Russia, lectures for Tempus Project 159311 - TEMPUS-1-2009-IT-JPCR "Network for Master Training in Technologies of Water Resources Management (February 2011)

MAHRÍKOVÁ, I., STANKO, Š.: Vladimir State University, Russia, lectures for Tempus Project 159311 - TEMPUS-1-2009-IT-JPCR "Network for Master Training in Technologies of Water Resources Management (March 2011)

KRIŠ, J., MAHRÍKOVÁ, I.: Tambow State Technical University, Russia, Coordination Meeting and Masters Graduation Ceremony for Tempus Project 159311 - TEMPUS-1-2009-IT-JPCR "Network for Master Training in Technologies of Water Resources Management (November 2011)

KRIŠ, J., RUSNÁK, D.: Bishkek State Technical University, Kyrgyzstan, Coordination Meeting for Tempus JPCR No: 158982 – TEMPUS_ES- TEMPUS –JPCR, "Towards Sustainable Water Resources Management in Central Asia - SWAN" (November 2011)

MAHRÍKOVÁ, I.: The University of Hong Kong, Hong Kong, China, Seminar on Waste Water from Small Urban Areas-Impact of Environment and Ecological Aspects of Sludge Disposal (December 2011)

Membership in international professional organizations

BARLOKOVÁ, D.: Member of Czechoslovak Association of Water Experts

ILAVSKÝ, J.: Member of Czechoslovak Association of Water Experts

KRIŠ, J.: Member of International Water Association London, official member of national board committee

MAHRÍKOVÁ, I.: Member of International Water Association London, official member of national board committee

4. Publications

Books and Textbooks

BARLOKOVÁ, D.: Removal of Iron and Manganese from Water by Natural Materials. Bratislava : STU Bratislava SvF, 2011, 107 pp. - ISBN 978-80-227-3468-4. (in Slovak)

STANKO, Š.: Using Software Tools for the Design and Appraisal of Sewage Networks. Bratislava : STU Bratislava SvF, 2011, 166 pp. - ISBN 978-80-227-3476-9. (in Slovak)

ŠKULTÉTYOVÁ, I.: Using an LCA Module for the Decision Making - Process of Integrated Solid Waste Management. STU Bratislava SvF, 2011, 181 pp. - ISBN 978-80-227-3467-7. (in Slovak)

VOLODINA, G.B., GARELIK, CH., LYSENKO, I.O., MAHRÍKOVÁ, I., OKRUT, S.V., POPOV, N.S., ŠKULTÉTYOVÁ, I., STANKO, Š.: Water Ecology and the Impact of Human Activities on the Quality of Water Resources. Tambov, Russia : Izd-vo IP Česnokova A.V., 2011. 204 pp. - ISBN 978-5-903435-82-1 (in Russian, in English)

Journals

BOŽÍKOVÁ, J., - ŠKULTÉTYOVÁ, I.,- KRIŠ, J., STANKO, Š., RUSNÁK, D.: Consumption of a Water Supply. In: Acta Hydrologica Slovaca, Vol.12, Special Issue, 2011, ISSN 1335-6291, pp. 90-95

DUBOVÁ, V., ILAVSKÝ, J., BARLOKOVÁ, D.: Evaluation of Annual Corrosion Tests for Aggressive Water. In: Slovak Journal of Civil Engineering, Vol. 19, No. 4, 2011, ISSN 1210-3896, pp. 24-27

GHAWI, A. G., KRIŠ, J.: Improvement in the Performance of Secondary Clarifiers Using a Computational Fluid Dynamics Mode. In: Slovak Journal of Civil Engineering, Vol. 19, No. 4, 2011, ISSN 1210-3896, pp. 1-11.

KRIŠ, J., ŠKULTÉTYOVÁ, I., STANKO, Š., BOŽÍKOVÁ, J., RUSNÁK, D.: Border Water Found - Ground Water Resources. In: Acta Hydrologica Slovaca, Vol.12, Special Issue, 2011, ISSN 1335-6291, pp. 82-89

KRIŠ, J., GALÍK, M.: Drinking Water Treatment. In: Urob si sám. Vol.14, 2011, No. 5, ISSN 1335-4604. pp. 40-42.

KRIŠ, J., GALÍK, M.: Method of Treating Pool Water. In: Urob si sám. Vol.14, 2011, No. 5, ISSN 1335-4604. pp. 44-46.

MAHRÍKOVÁ, I.: Ecological Aspects of Sludge Disposal in Slovakia. In: Journal of Food and Environmental Safety of Suceava University, Food Engineering, Vol. X, Issue 3, 2011, ISSN 2068-6609, pp. 53-59

MAHRÍKOVÁ, I., KRIŠ, J., ŠKULTÉTYOVÁ, I.: Improving Sludge Treatment. In: IWA Journal Yearbook 2011, London, International Water Association, 2011, ISBN 13-9781780400181, pp. 40-41

RUSNÁK, D., STANKO, Š., BOŽÍKOVÁ, J., ŠKULTÉTYOVÁ, I., KRIŠ, J.: Recommendation for Assessment of the Efficiency of Marginal Rainfall in Slovak Conditions. In: Acta Hydrologica Slovaca, Vol.12, Special Issue, 2011, ISSN 1335-6291, pp.105-111

STANKO, Š.: SeWaCAD Sewer System. In: Ovidius University Annals, Constantza, Vol.13, Issue. 13, 2011, ISSN 1584-5990 pp. 21-29

STANKO, Š.: Effect of Flat Area Condition on Type of Sewage Design. In: Journal of Food and Environmental Safety of Suceava University, Food Engineering, Vol. X, Issue 3, 2011, ISSN 2068-6609, pp. 72-77

STANKO, Š. RUSNÁK, D., ŠKULTÉTYOVÁ, I. BOŽÍKOVÁ, J., KRIŠ, J.: Climate Change and Its Impact on the Creation of Surface Runoff. In: Acta Hydrologica

Slovaca, Vol.12, Special Issue, 2011, ISSN 1335-6291, pp. 112-118

ŠKULTÉTYOVÁ, I.: Effect of Waste Disposal on the Environment. In: Journal of Food and Environmental Safety of Suceava University, Food Engineering, Vol. X, Issue 3, 2011, ISSN 2068-6609, pp. 53-59

ŠKULTÉTYOVÁ, I., STANKO, Š., KRIŠ, J., BOŽÍKOVÁ, J., RUSNÁK, D.: Risk of Contamination of Solid Waste Landfills. In: Acta

Conferences

BOŽÍKOVÁ, J., KRIŠ, J.: The Use of Special Types of Water in Slovakia. In: Proceedings of International Symposium, Instalacje basenowe, Zakopane, Poland, 2011. Gliwice : Politechnika Slaska, 2011, ISBN 978-83-925064-7-8, pp. 39-52

BOŽÍKOVÁ, J.: Slovak Spa. In: Proceedings of International Conference on Water Systems in Towns Affected by Substantial Anthropogenic Changes, Špindleruv Mlýn, Czech Republic,1-3 June 2011, ISBN 978-80-01-04819-1, pp. 22-27

BRONIŠOVÁ, M., RUSNÁK, D.: Public Sewerage System in Slovakia. In: Proceedings of 11th International Symposium on Water Management and Hydraulic Engineering, Gdansk, Poland, 5-9 September 2011. In: Technical Progress in Sanitary Engineering. Wydawnictwo Politechniki Gdańskiej, 2011. ISBN 978-83-7348-374-3, pp. 5-17

DUBOVÁ, V., ILAVSKÝ, J., - BARLOKOVÁ, D.: Corrosion Tests at the Pernek Water Resource. In: Proceedings of 11th International Symposium on Water Management and Hydraulic Engineering, Gdansk, Poland, 5-9 September 2011. In: Technical Progress in Sanitary Engineering. Wydawnictwo Politechniki Gdańskiej, 2011, ISBN 978-83-7348-374-3, pp. 27-33

DUBOVÁ, V., TÓTHOVÁ, K.: Analysis of Defects in Water Networks. In: Proceedings of International Conference on Water Systems in Towns Affected by Substantial Anthropogenic Changes, Špindleruv Mlýn, Czech Republic,1-3 June 2011, ISBN 978-80-01-04819-1, pp. 86-90

GALBOVÁ, K., ŠKULTÉTYOVÁ, I.: Methods of Modeling Leachate from a Landfill. In: Proceedings of 11th International Symposium on Water Management and Hydraulic Engineering, Gdansk, Poland, 5-9 September 2011. Current Events in Hydraulic Engineering. Wydawnictwo Politechniki Gdańskiej, 2011, ISBN 978-83-7348-375-0, pp. 104-111

HANKOVÁ, M.: Assessment of Water Networks by the FMEA Method. In: Proceedings of International Conference on Water Systems in Towns Affected by Substantial Anthropogenic Changes, Špindleruv Mlýn, Czech Republic,1-3 June 2011, ISBN 978-80-01-04819-1, pp. 128-135

HURBAN, Ľ.: Analysis of Water Network Defects. In: Proceedings of International Conference on Water Systems in Towns Affected by Substantial Anthropogenic Changes, Špindleruv Mlýn, Czech Republic,1-3 June 2011, ISBN 978-80-01-04819-1, pp. 142-147

CHABAL, L., RUSNÁK, D.: Pumping Station and Its Use in the Drainage of Agglomerated Waste Waters. In: Proceedings of International Conference on Water Systems in Towns Affected by Substantial Anthropogenic

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SOKÁČ, M., DUBOVÁ, V.: Anthropogenic Influences on the Water Balance in an Urban Area. In: Proceedings of 11th International Symposium on Water Management and Hydraulic Engineering, Gdansk, Poland, 5-9 September 2011. In: Technical Progress in Sanitary Engineering. Wydawnictwo Politechniki Gdańskiej, 2011, pp. 105-110

STANKO, Š., KRIŠ, J., ŠKULTÉTYOVÁ, I.: Types of Sewer Systems - Technical and Environmental Advances and Arrangements. In: Proceedings of Advanced Research Workshop, Advanced Water Supply and Wastewater Treatment : A Road to a Safer Society and Environment. Dordrecht, The Netherlands, Springer Verlag 2011, ISBN 978-94-007-0309-4, pp. 121-130

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DEPARTMENT OF BUILDING SERVICES

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1. Education

1.1 Graduate study

Obligatory subjects

Building Services I
Building Services II
Building Services 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

1.2 Postgraduate courses

Indoor Environment of Buildings
Energy Audit of Buildings
Ph.D. Project I, II, III
Ph.D. Project IV, V, VI
Teaching I –
Sanitary Installations
Heating
Ventilation and Air Conditioning

2. Theses

2.1 Graduate theses

- ÁLLÓOVÁ, G.: Heating and Hot Water Preparation in a Residential Building – Town of Šamorín.
Supervisor: KOUDELKOVÁ, D.
- BABUŠÍK, A.: Concept of a House with Almost Zero Energy Consumption.
Supervisor: KALÚS, D.
- HEYDER, P.: Solar System Design in a Residential Building.
Supervisor: LULKOVIČOVÁ, O.
- HORČIČÁK, Ľ.: Evaluation of Heat Pump Utilization and Comparison with a Solar Energy System.
Supervisor: FÜRI, B.
- HOLLÁ, M.: Design of Alternative Energy Sources – Biomass Base. Supervisor: TAKÁCS, J.
- KOŠINÁR, F.: Design of Ventilation and Air Conditioning System for an Office Building.
Supervisor: SZÉKYOVÁ, M.
- PIKÁLIOVÁ, M.: Comparison of Warm Water Heating and Low Temperature Underfloor Heating in a Family House.
Supervisor: TAKÁCS, J.
- POTÔČEK, J.: Renovation of Sanitary Techniques in a Residential Building.
Supervisor: PERÁČKOVÁ, J.
- ŠINDLEROVÁ, L.: Utilization of Renewable Energy for Heating and Hot Water Preparation in a Family House.
Supervisor: LULKOVIČOVÁ, O.
- TURNER, D.: Energy Audit of a Family House.
Supervisor: TAKÁCS, J.
- ZÁHUMENSKÁ, E.: Low Temperature Heating and High Temperature Cooling in a Low - Energy House.
- BARNOVÁ, P.: Design of Warm Water Underfloor Heating System for a Family House.
Supervisor: KOUDELKOVÁ, D.
- BENDÍK, M.: Utilization of Waste Heat from Cold Storage and Freezer for Heating in a Shop.
Supervisor: KALÚS, D.
- BRUNOVSKÁ, P.: Concept of Ventilation and Heating in a Low - Energy Residential Building. Supervisor: ŠABÍKOVÁ, J.
- KOVÁCS, G.: Evaluation of the Selected Parameters of an Indoor Environment.
Supervisor: ŠABÍKOVÁ, J.
- MAŇÁK, M.: Utilization of Rain Water in a Family House.
Supervisor: PERÁČKOVÁ, J.

MATEJKA, P.: Analysis of Ventilation and Air Conditioning Systems in an Operating Room.
Supervisor: SZÉKYOVÁ, M.

MENHARD, M.: Evaluation of Heat Pump Utilization for Heating. Earth – Water Base.
Supervisor: FÜRI, B.

BÉM, J.: Simulation of Rain Water Drainage System for a Roof.
Supervisor: PERÁČKOVÁ, J.

BLAŽEK, P.: Design of Underfloor Heating System in a Hotel. Electrical Base.
Supervisor: KOUDELKOVÁ, D.

BRUNCKO, L.: Design of a Heat Pump for Heating a Hotel.
Supervisor: LULKOVIČOVÁ, O.

GAVROŇ, M.: Design of an Energy System Using Environmental Energy.
Supervisor: PETRÁŠ, D.

HARGAŠ, M.: Design of Heat Source for Combined Heat Production and Electric Energy. Biomass Base.
Supervisor: TAKÁCS, J.

HLODÁK, P.: Ventilation at St. Jan Bosco Church.
Supervisor: BOĐO, R.

HURTÍKOVÁ, D.: Ventilation and Air Conditioning in Clean Spaces.
Supervisor: BOĐO, R.

HÖRČÍKOVÁ, M.: Design of Watering System Technologies.
Supervisor: JÁNOŠKOVÁ, T.

KADLEC, M.: Waste Water Disposal from a Multifunctional Residential Building.
Supervisor: LULKOVIČOVÁ, O.

KALUS, M.: Design of Heating System. Water – Air Heat Pump.
Supervisor: FÜRI, B.

KRAFČÍK, M.: Progressive Solutions for Hot Water Preparation in a Residential Building.
Supervisor: PERÁČKOVÁ, J.

KRIPPELOVÁ, Z.: Design of Solar Hot Water Energy System for a Residential Building.
Supervisor: LULKOVIČOVÁ, O.

KURTULÍK, J.: Air Conditioning in an Operations Hall.
Supervisor: SZÉKYOVÁ, M.

LAZOVÝ, M.: Heating in an Industrial Hall.
Supervisor: KALÚS, D.

MILO, T.: Design of a Heat Source with an 850 kWh Output.
Supervisor: KALÚS, D.

MIŠÍKOVÁ, D.: Design of Heating and Hot Water Preparation in a Family House. Heat Pump and Geothermal Base.
Supervisor: FÜRI, B.

NAGY, K.: Study of a Gas Supply Main and Installations.
Supervisor: JÁNOŠKOVÁ, T.

NEMCÍK, O.: Energy, Economic, and Environmental Analysis of a Heating System in a Building.
Supervisor: KALÚS, D.

PÁLFY, T.: Design of a Hot Water Boiler Room. Wood Pellets Base.
Supervisor: TAKÁCS, J.

PROZBÍK, M.: A Design and Draft for a Drainage System in an Office Building.
Supervisor: JÁNOŠKOVÁ, T.

SLAMINKA, J.: Ventilation of a Canteen in a Hotel.
Supervisor: TAKÁCS, J.

RICHTER, R.: Design of a Low Pressure Gas Boiler Room in a Multifunctional Building.
Supervisor: KOUDELKOVÁ, D.

SARKÁNY, T.: Solar Energy System for a Multifunctional Building.
Supervisor: LULKOVIČOVÁ, O.

RÁCZ, L.: Heat and Heating System Source for a Residential Building in Bratislava.
Supervisor: TAKÁCS, J.

TURZA, R.: Warm Air Ventilation in an Indoor Swimming Pool.
Supervisor: SZÉKYOVÁ, M.; KOVÁROVÁ, Z.

TRLICA, L.: Warm Air Ventilation in an Industrial Hall.
Supervisor: SZÉKYOVÁ, M.; KOVÁROVÁ, Z.

VIDOVÁ, M.: Technical Design in a Food Court.

3. Research

3.1 Research projects

Education without Borders – (LULKOVIČOVÁ, O.), CEEPUS II ,

Preparation of Teaching Materials for Building Service Specializations (LULKOVIČOVÁ, O.), KEGA 3/4105/06,

Determination of the Energy Balance of Building Services Using Renewable Energy as a Basis for an Energy Audit, Certificate, and Monitoring (PETRÁŠ, D.), VEGA 1/0730/08,

Analysis of Energy and Environmental Measures During the Operation of Sanitary Installations and Ventilation Systems in Low - Energy Buildings (PERÁČKOVÁ, J.) , VEGA 1/0730/08,

Implementation of Tools and Software for Energy Certification, Audit and Monitoring of Buildings in Slovak Conditions (PETRÁŠ, D.) , SLOVAK – NORWEGIAN Project SK 0013,

3.2 International cooperation

Cooperating institutions

ENSI – Energy Saving International AS, Oslo, Norway

D. Hansa, AG, Burglengenfeld, Germany

Geberit, AG, Rottenbrunn, Germany

GAS, Ltd, Prague, Czech Republic

Visit of staff members to foreign institutions / Participation in meetings

PETRÁŠ, D., LULKOVIČOVÁ, O., PERÁČKOVÁ, J., ŠABÍKOVÁ, J.: CVUT – Civil Engineering Faculty, Prague, Czech Republic

LULKOVIČOVÁ, O., PETRÁŠ, D., JELENÍKOVÁ, I.: VUT, Brno, Czech Republic

LULKOVIČOVÁ, O., TAKÁCS, J., PERÁČKOVÁ, J., KURČOVÁ, M.: VUT, Ostrava, Czech Republic

VALÁŠEK, J. : Deutsche Institute fur Bautechnik, Berlin, Germany

VALÁŠEK, J., PETRÁŠ, D.: Czech Association of Civil Engineers, Prague, Czech Republic

PETRÁŠ, D.: ASHRAE, Winter Meeting, New York, USA

PETRÁŠ, D.: REHVA, Brussels, Belgium

PETRÁŠ, D.: GA – REHVA, Berlin, Germany

PETRÁŠ, D.: Fachhochschule, Pinkafeld, Austria

PETRÁŠ, D., ĎURIŠOVÁ, E., PUSTAYOVÁ, H., SKALÍK, L., KRAJČÍK, M.: The Danish Technical University – International Center for the Indoor Environment and Energy, Lyngby, Denmark

PETRÁŠ, D.: ENSI, Oslo, Norway

PETRÁŠ, D.: B4 – UNI meeting, Vienna, Austria

PETRÁŠ, D.: Metropolit UNI, Warszawa, Poland

PETRÁŠ, D.: SAE meeting, Dubai

Membership in international professional organizations

PETRÁŠ, D.: ASHRAE – USA

PETRÁŠ, D.: REHVA – Brussels, Belgium

4. Publication

Books

HOJER, O., KABELE, K., KOTRBATÝ, M., SOMMER, K., PETRÁŠ, D.: Energy Efficient Heating and Ventilation of Large Halls. - Brussels : REHVA, 2011. - 99 p. - ISBN 978-2-930521-06-0. (in English)

LULKOVIČOVÁ, O., FÜRI, B., CHMÚRNY, I., PERÁČKOVÁ, J., SUCHÁNEK, P., TAKÁCS, J., ŽILINSKÝ, J., LAŠÁK, D., INSTITORIS, V., ŠALVATA, R., TKÁČIK, S., TRUHLÍK, L., ZIKÁN, Z.: Progressive Systems in Construction and Space Heating of Family Houses. - 1.vyd. - Bratislava : Antar, s.r.o., 2011. - 152 p. - ISBN 978-80-970739-0-9. (in Slovak)

Journals

BUGÁŇ, J., PETRÁŠ, D.: Construction Solutions to Warm Water Underfloor Heating Systems and Their Application in Buildings. In: Eurostav. - ISSN 1335-1249. - Vol.17, No.9 (2011), pp. 50-53 (in Slovak)

BUGÁŇ, J., PETRÁŠ, D.: Design of Hot Water Underfloor Heating. In: TZB Haustechnik. - ISSN 1803-4802. - Vol. 4, No. 3 (2011), pp. 10-13 (in Czech)

KONÍK, J., LULKOVIČOVÁ, O.: Operational Evaluation of Energy Efficiency of Heat. In: Service for Residential Buildings. - ISSN 1336-7919. - Vol. 6, No. 2 (2011), pp. 36-37. (in Slovak)

KOUDELKOVÁ, D.: Ventilation Control Based on Indoor Air Quality. In: TZB Haustechnik. - ISSN 1803-4802. - Vol. 4, No. 1 (2011), pp. 46-49 (in Czech)

KRAJČÍK, M., PETRÁŠ, D.: Energy Evaluation of Buildings in the Slovak Republic. In: Heating, Ventilation, Air Conditioning. - ISSN 1210-1389. - Vol. 20, No.1 (2011), pp. 25-29 (in Slovak)

MALINOVÁ, K.: Project Documentation for the Reconstruction of a Heating System. In: Service for Residential Buildings. - ISSN 1336-7919. - Vol. 6, No. 3 (2011), pp. 44-45 (in Slovak)

LAŠČEKOVÁ, L., PERÁČKOVÁ, J.: Coated Cover of Flat Roofs. In: Service for Residential Buildings. - ISSN 1336-7919. - Vol. 6, No. 3 (2011), pp. 32-34 (in Slovak)

MALINOVÁ, K.: Reconstruction of a Heat Source for Use of Biomass. In: Magyar Épületgépészet. - ISSN 1215-9913. (in xx)

PERÁČKOVÁ, J., JELENÍKOVÁ, I.: How Do You Ensure the Quality of Water in Distribution Systems? In: TZB Haustechnik. - ISSN 1210-356X. - Vol.19, No. 2 (2011), pp. 32-35 (in Slovak)

PETRÁŠ, D., BUGÁŇ, J.: Calculation and Design of Dydronic Floor Heating. What Are the Results According to Standard STN EN 1264-2? In: TZB Haustechnik. - ISSN 1210-356X. - Vol.19, No. 3 (2011), pp. 20-23 (in Slovak)

PETRÁŠ, D.: Review of Directive About the Energy Performance of Buildings 31/2010/EU. In: Eurostav. - ISSN 1335-1249. - Vol.17, No. 9 (2011), pp. 10-12 (in Slovak)

PUSTAYOVÁ, H., PETRÁŠ, D.: Assessment of Thermal Comfort and the Energy Performance of Residential Buildings. In: Eurostav. - ISSN 1335-1249. - Vol.17, Nos. 1-2 (2011), pp. 30-35 (in Slovak)

ŠPAČEK, R., PETRÁŠ, D., MIGUEL, E., CHYBÍK, J., BAHNÍK, R., PIFKO, H.: When It Works Properly : Eurostav. - ISSN 1335-1249. - Vol.17, No. 9 (2011), pp. 32 (in Slovak)

TAKÁCS, J.: Potential Uses for Residential Heat Exchange Stations, Reconstruction of Housing Stock. In: Service for Residential Buildings. - ISSN 1336-7919. - Vol. 6, No. 3 (2011), pp. 6-7 (in Slovak)

VALÁŠEK, J.: Zinc - Coated Water Pipelines in Buildings. In: TZB Haustechnik. - ISSN 1210-356X. - Vol.19, No.1 (2011), pp. 40-43 (in Slovak)

LAŠČEKOVÁ, L., PERÁČKOVÁ, J.: Coated Cover of Flat Roofs. In: Service for Residential Buildings. - ISSN 1336-7919. - Vol. 6, No. 3 (2011), pp. 32-34 (in Slovak)

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Conferences

CVÍČELA, M.: Development of a Wall Heating and Cooling System with an Internal Heat Source. In: Juniorstav 2011 VUT Brno – Civil Engineering Faculty, 2011. - ISBN 978-80-214-4232-0 (in Slovak)

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ĎURIŠOVÁ, E.: Design and Operation of Low Temperature Heating / High Temperature Cooling System with Almost Zero Energy Consumption. In: Summer School 2011. Český Šterberk - Prague: STP, 2011. - ISBN 978-80-02-02334-0. - pp. 1-7 (in Slovak)

ĎURIŠOVÁ, E., PETRÁŠ, D.: Environmental Evaluation of a Heating/Cooling System in an Office Building. In: Heating 2011. SSTP - ZSVTS, 2011. - ISBN 978-80-89216-38-3. - pp. 585-588 (in Slovak)

ĎURIŠOVÁ, E., PETRÁŠ, D.: Evaluation of Indoor Air in Office Building in Bratislava - in Summer and Also in Winter Period. In: INDOOR AIR 2011. Austin, Tx, USA.- 2011 (in English)

ĎURIŠOVÁ, E., PETRÁŠ, D.: Evaluation of the Thermal Comfort of Different Kinds of High Temperature Heating Systems. In: Ventilation and Air Conditioning. Tatranská Lomnica, Slovakia, 2011. - Bratislava : SSTP - ZSVTS. - ISBN 978-80-89216-39-0. - pp. 25-30 (in Slovak)

EHRENWALD, P.: Energy Management for an Intelligent Building. In: Facility Management 2011 : Bratislava, Slovakia, SSTP - ZSVTS, 2011. - ISBN 978-80-89216-41-3. - pp. 103-106 (in Slovak)

FILLOVÁ, E., KALÚS, D.: Green Buildings and Their Environmental Evaluation. In: Heating 2011 : Ľubovnianske kúpele, Slovak Republic, SSTP ZSVTS, 2011. - ISBN 978-80-89216-38-3. - pp. 593-597 (in Slovak)

FÜRI, B.: Heat Pumps as Energy Sources for Heating and Cooling. In: Facility Management 2011 : Bratislava, Slovakia, 2011. - Bratislava : SSTP - ZSVTS, 2011. - ISBN 978-80-89216-41-3. - pp. 99-102 (in Slovak)

FÜRI, B.: Periodical Inspection of Air Conditioning Systems. In: Ventilation and Air Conditioning 2011. Tatranská Lomnica, Slovakia, 2011. - Bratislava : SSTP - ZSVTS, 2011. - ISBN 978-80-89216-39-0. - pp. 95-98 (in Slovak)

FÜRI, B.: Evaluation of Energy Evaluation of Building Services Equipment. In: Heating 2011, Ľubovnianske kúpele, Slovak Republic. - Bratislava : SSTP - ZSVTS, 2011. - ISBN 978-0-89216-38-3. - pp. 331-335 (in Slovak)

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JANUŠKA, J.: Lessons Learned in Implementing Kitchen Operations. In: Sanhyga 2011. Slovakia, 2011. SSTP – ZSVTS . - ISBN 978-80-89216-42-0. - pp. 121-124 (in Slovak)

JANUŠKA, J.: Hydraulic Impact on Operating Costs of Heating System In: Heating 2011. Ľubovnianske kúpele, Slovak Republic, SSTP - ZSVTS, 2011. - ISBN 978-80-89216-38-3.

JELENÍKOVÁ, I.: Causes of Defects in Water Supplies in Buildings. In: Juniorstav 2011. Brno, VUT- Civil Engineering Faculty, 2011. - ISBN 978-80-214-4232-0 (in Slovak)

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LULKOVIČOVÁ, O., FÜRI, B., CHMÚRNY, I., PERÁČKOVÁ, J., SUCHÁNEK, P., TAKÁCS, J., ŽILINSKÝ, J., LAŠÁK, D., INSTITORIS, V., ŠALVATA, R., TKÁČIK, S., TRUHLÍK, L., ZIKÁN, Z.: Progressive Systems in Construction and Space Heating of Family Houses. - 1.vyd. - Bratislava : Antar, s.r.o., 2011. - 152 p. - ISBN 978-80-970739-0-9. (in Slovak)

DEPARTMENT OF ARCHITECTURE

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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

Colour 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

Landscape Design

Recommended subjects

Ecological Design in the Solar Age

Interior Design 2

Colour in Architecture 2

1.2 Postgraduate courses

Theory and Construction of Building Structures

Typology

Restoration and Preservation of Monuments

2. Theses

2.1 Bachelor theses

2.2 Graduate theses

BARBIRÍKOVÁ, L.: Hotel

Supervisor: KUSÝ, M.

VYHLÍDALOVÁ, M.: Piešťany Gallery

Supervisor: SEDLÁK, P.

FODOR, C.: Ecumenical Centre in Budapest

Supervisor: MUDRONČÍK, M.

BYSTRICAN, D.: Commercial Centre

Supervisor: LIŠČÁK, J.

BLAŠKO, M.: Hotel in Mountains

Supervisor: LIŠČÁK, J.

HORVÁTH, Z.: Hotel

Supervisor: BAUER, P.

SZABÓ, M.: Office Building

Supervisor: MUDRONČÍK, M.

TOMAN, P.: Hotel and Wellness Centre in T. Teplice

Supervisor: HÚSENICOVÁ, J.

MASAROVÍČOVÁ, B.: Gallery

Supervisor: KURÁŇ, J.

MARTIŠ, T.: Hotel

Supervisor: KURÁŇ, J.

MIKUŠOVÁ, M.: Office Building

Supervisor: KURÁŇ, J.

MAČÁK, Š.: Multifunctional Building in Bratislava

Supervisor: MUDRONČÍK, M.

HAUSKRECHTOVÁ, V.: Multifunctional Building

Supervisor: SEDLÁK, P.

SZEKERES, R.: Theatre

Supervisor: SEDLÁK, P.

LAKATOS, J.: Gallery

Supervisor: MUDRONČÍK, M.

GREGA-JAKUB, M.: Concert Hall in Plzeň

Supervisor: NÁDASKÁ, Z.

FRANCE, K.: Plzeň Gallery

Supervisor: KUSÝ, M.

KRČ, J.: Fire Station

Supervisor: SEDLÁK, P.

NEMCOVÁ, S.: Concert Hall in Plzeň

Supervisor: NÁDASKÁ, Z.

MIHÁLOVÁ, L.: Low-Energy Housing

Supervisor: NÁDASKÁ, Z.

RÍMEŠ, P.: Vlčany Cultural Centre

Supervisor: SEDLÁK, P.

LUTIŠAN, J.: Slovak Embassy in Berlin
Supervisor: PAŇÁK, P.

MIŠKOLCI, M.: Gallery in T. Teplice
Supervisor: ŠIMKOVIČOVÁ, V.

DANIŠ, M.: Revitalisation and Reconstruction of a
Merchant House in Trnava
Supervisor: ŠIMKOVIČOVÁ, V.

NAGYOVÁ, A.: Sport Centre
Supervisor: LIŠČÁK, J.

MAŠLONKA, R.: Hotel
Supervisor: PAŇÁK, P.

PAVOLOVÁ, N.: Hotel
Supervisor: PAŇÁK, P.

DIKANOVÁ, N.: Plzeň Gallery
Supervisor: KUSÝ, M.

BARTÁK, L.: Hotel in Vršatec
Supervisor: HÚSENICOVÁ, J.

KONŮPKA, T.: Humenné Commercial Centre
Supervisor: HÚSENICOVÁ, J.

JURČOVÁ, T.: Hotel in Mountains
Supervisor: KUBIŠOVÁ, M.

LUKÁČOVÁ, L.: Centre for Relaxation and Meditation
Supervisor: KUBIŠOVÁ, M.

PRIEVOZNÍK, P.: Jasenská Dolina Sky Centre
Supervisor: GRANDTNEROVÁ, A.

PRISTAŠOVÁ, V.: Golf Club
Supervisor: GRANDTNEROVÁ, A.

ADAMICZKY, L.: Church in Dunajská Streda
Supervisor: KUSÝ, M.

3. Research

3.2 International cooperation

Cooperating Institutions

VŠB - Technical University Ostrava, Faculty of Civil
Engineering, Czech Republic

ČVUT - Czech Technical University in Prague, Faculty of
Civil Engineering, Czech Republic

Visit of staff members to foreign institutions / Participation in meetings

DOHŇANSKÁ, E. NÁDASKÁ, Z.: Exhibition Architecture
Week Prague, ČVUT Praha, Czech Republic (October
2011)

4. Publications

Journals

BACOVÁ, A., KUBÍK, I., PAŇÁK, P., ŠPAČEK, R.,
ŠUJAN, J.: On Missing Continuity and Turning Points:
Discussion. In: Arch. - ISBN 1335-3268. - Vol.16, No. 9
(2011), pp. 22-27 (in Slovak)

NÁDASKÁ, Z., JAMNICKÝ, M.: Architectural Proposal of
the Regional Centre for Technical Training in Kočovce.
In: Informácie. - Vol.11, No.1 (2011), p. 2 (in Slovak)

NOVÁKOVÁ, M., DOHŇANSKÁ, E., VITKOVÁ, L.,
PÁSZTOR, P., VAŠKO, I.: Education of Young Architects
in Slovakia. In: ASB – Architecture – Building Industry-
Business, ISBN 1335-1230. - Educating Young
Architects in Slovakia (2011), pp. 74-77 (in Slovak)

ŠIMKOVIČOVÁ, V.: Emil Belluš - Architectonic
Refinement and Protestant Ethic. In: Arch. - ISBN 1335-
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Conferences

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Determining Objectives for Identifying Targets for the
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552-0644-8. - pp. 20-25 (in Slovak)

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Conference on Urban, Architectural and Technical
Aspects of Rural Renewal X: Bratislava, SR 25.5.2011 -
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HÚSENICOVÁ, J.: Vision of the Territorial Development
of the Slovak Republic for the Years 2013-2020. In:
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Renewal X: Bratislava, SR 25.5.2011 - Bratislava STU
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Slovak)

GULDAN, M.: Buildings in the Vineyards of Southern
Slovakia. In: Proceedings of International Scientific
Conference on Urban, Architectural and Technical
Aspects of Rural Renewal X: Bratislava, SR 25.5.2011 -
Bratislava STU SvF, 2011. - ISBN 978-80-227-3536-0. -
pp. 74-76 (in Slovak)

KAPALOVÁ, G.: Renaissance Manor Houses in Eastern
Slovakia. In: Proceedings of International Scientific
Conference on Urban, Architectural and Technical
Aspects of Rural Renewal X: Bratislava, SR 25.5.2011 -
Bratislava STU SvF, 2011. - ISBN 978-80-227-3536-0. -
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Adjustment of the Folk Architecture in Slovakia. In:
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Industrial Architecture - Waterworks in Komárno. In:
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NABOUTOVÁ, K.: Proposed Evaluation of the System of Sustainable Buildings for Housing in the Syrian Republic. In: Proceedings of International Scientific Conference on Urban, Architectural and Technical Aspects of Rural Renewal X: Bratislava, SR 25.5.2011 - Bratislava STU SvF, 2011. - ISBN 978-80-227-3536-0. - pp. 77-83 (in Slovak)

NÁDASKÁ, Z.: The Possibilities for the Strategic Development of Tourism and Community Life in the Countryside. In: Proceedings of International Scientific Conference on Urban, Architectural and Technical Aspects of Rural Renewal X: Bratislava, SR 25.5.2011 - Bratislava STU SvF, 2011. - ISBN 978-80-227-3536-0. - pp. 119-121 (in Slovak)

ONDREJKA, M.: The Importance of Types of Landscapes and Their Regional Particularity. In: Proceedings of International Scientific Conference on Urban, Architectural and Technical Aspects of Rural Renewal X: Bratislava, SR 25.5.2011 - Bratislava STU SvF, 2011. - ISBN 978-80-227-3536-0. - pp. 84-86 (in Slovak)

ORAVCOVÁ, K.: Technical Monuments of Southern Slovakia - Water Mills. In: Proceedings of International Scientific Conference on Urban, Architectural and Technical Aspects of Rural Renewal X: Bratislava, SR 25.5.2011 - Bratislava STU SvF, 2011. - ISBN 978-80-227-3536-0. - pp. 206-208 (in Slovak)

PRIBYLINEC, P.: Phenomena of Hysteresis in Porous Materials. In: Proceedings of International Scientific Conference on Urban, Architectural and Technical Aspects of Rural Renewal X: Bratislava, SR, 25.5.2011 - Bratislava STU SvF, 2011. - ISBN 978-80-227-3536-0. - pp. 260-262 (in Slovak)

SCHLESINGER, R.: Ruins and the Applicable Selection for the Interpretation of its Reconstruction from an Architect's Perspective. In: Proceedings of International Conference of Doctoral Degree Students of the Technical Sciences: Brno, ČR, VUT 4.2.2011. - Brno : Vysoké učení technické v Brně – Faculty of Civil Engineering, 2011. - ISBN 978-80-214-4232-0. - p. 30 (in Slovak)

TIBENSKÁ, M.: Social Housing-The Slums. In: Proceedings of International Conference of Doctoral Degree Students of the Technical Sciences: Brno, ČR, VUT 4.2.2011. - Brno : Vysoké učení technické v Brně – Faculty of Civil Engineering, 2011. - ISBN 978-80-214-4232-0. - p. 32 (in Slovak)

VANEK, S.: Clay Buildings as an Alternative to Social Housing. In: Proceedings of International Conference of Doctoral Degree Students of the Technical Sciences: Brno, ČR, VUT 4.2.2011. - Brno : Vysoké učení technické v Brně – Faculty of Civil Engineering, 2011. - ISBN 978-80-214-4232-0. - p. 435 (in Slovak)

VARGOVÁ, K.: Typological Draft - Buildings for Ordinary Relaxation - People and Animals - Application to the

Countryside. In: Proceedings of International Conference on Rural Buildings: Nitra, SR 8.-9.9.2011. - Nitra : SPU v Nitre, 2011. - ISBN 978-80-552-0644-8. - pp. 149-152 (in Slovak)

WIRTHOVÁ, P.: Cycling and Its Equipment. In: Proceedings of International Scientific Conference on Urban, Architectural and Technical Aspects of Rural Renewal X: Bratislava, SR, 25.5.2011 - Bratislava STU SvF, 2011. - ISBN 978-80-227-3536-0. - pp. 72-73 (in Slovak)

CHMELÍK, V., RYCHTÁRIKOVÁ, M., TOMAŠOVIČ, P.: Noise Reduction in Large Halls Without Additional Absorption. In: Material - Acoustics - Place 2011 : Proceedings of the 6th International Conference. Zvolen, SR 14.-14.9.2011 - ISBN 978-80-228-2258-9. - pp. 107-110 (in Slovak)

DOHŇANSKÁ, E: Conversion of Industrial Buildings in the Countryside. In: Proceedings of International Scientific Conference on Urban, Architectural and Technical Aspects of Rural Renewal X: Bratislava, SR 25.5.2011. - Bratislava STU SvF, 2011. - ISBN 978-80-227-3536-0. - pp. 158-161 (in Slovak)

5. Activity in the Field of Arts

ŘEHÁK, I.: Czech National Bank Design Competition: Commemorative Silver Coin, "Aloys Klar", 2011, Award

ŘEHÁK, I.: Slovak National Bank Design Competition: Collector's Silver Coin, Master Pavol from Levoča, 2011, Award

ŘEHÁK, I.: Slovak National Bank Design Competition: Collector's Silver Coin, 250th Anniversary of Chatam Sofer, 2011, Award

ŘEHÁK, I.: Slovak National Bank Design Competition: Collector's Gold Coin, Prince Pribina from Nitra, 2011, 1st Prize

ŘEHÁK, I.: World Money Fair Berlin 2011 Competition: World's Best Coin 2011, Slovak 2 euro coin, 1st Prize

PRIBIŠ, M.: Czech National Bank Design Competition: Commemorative Silver Coin, 20th Anniversary of the Czech National Bank, 2011, Award

PRIBIŠ, M.: Czech National Bank Design Competition: Commemorative Silver Coin, Kamil Lhoták, 2011, Award

PRIBIŠ, M.: Prague Art Exhibition – Collection of 12 Objects, D+Gallery Prague, 2011

PAŇÁK, P. (tutor), BAKYTA, R., Grega-Jakub, M. (students): Student Competition Slovnaft, 2nd Prize, 2011

PAŇÁK, P. (tutor), BAKYTA, R. (student): Student Competition XELLA 16 year, Concert Hall - Czech Radio Plzeň, 2nd prize, 2011

INSTITUTE FOR FORENSIC ENGINEERING

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1. Education

1.1 Graduate study

Optional subjects

Basics of Legal Expertise
Real Estate Valuation

1.2 Postgraduate courses

Specialized courses for experts in the Building Industry field
Specialized courses concerning the performance method of expert activities
Specialized courses "Improvement of Experts"

3. Research

3.1 Research projects

Resistance Analysis of Concrete, Masonry and Composite Steel - Concrete Structures (2011-2013, FILLO, Ľ.), VEGA 1/0857/11,

Factors Affecting the Effectiveness of Utilization of High Strength Concrete in Load-Bearing Elements and Structures (2011-2013, HUDOBA, I.), VEGA1/0458/11

Application of Probabilistic Methods to Improve the Reliability of Concrete Structures (2009-2011, BILČÍK, J.), VEGA 1/0306/09,

3.2 International cooperation

Cooperating institutions

VUT Brno, Czech Republic

VŠB Ostrava, Czech Republic

4. Publications

Textbooks

SKÁKALA, P.: Value of Construction Works. STU in Bratislava 2011, ISBN 978-80-227-3609-1, 75 pp. (in Slovak)

Journals

DRŽKA, M., GREGUŠOVÁ, S.: Causes of Failures: Assessments of Wooden Windows. In: Almanach znalca.

- ISSN 1336-3174. - Vol. 10, Nos. 2-3 (2011), pp. 35-41. (in Slovak)

KAREL, J.: Determination of Interest Rate/Main Refinancing Operations (Fixed Rate) for the Previous Period. In: Almanach znalca. - ISSN 1336-3174. - Vol. 10, No. 1 (2011), pp. 53-55 (in Slovak)

PRIECHODSKÝ, V., NIČ, M., CICANIČ, M.: Identify the Reasons for the Collapse of a School Building. In: Almanach znalca. - ISSN 1336-3174. - Vol. 10, Nos. 2-3 (2011), pp. 48-52 (in Slovak)

SKÁKALA, P.: Technical Value in Expert Practise. In: Almanach znalca. - ISSN 1336-3174. - Vol. 10, Nos. 2-3 (2011), pp. 69-71 (in Slovak)

Conferences

CICANIČ, M.: Determining the Cause of the Collapse of the Nacina Ves Elementary School. In: Junior Forensic Science Brno 2011 :3rd Conference of PhD Study. Brno University of Technology, Czech Republic, ISBN 978-80-214-4276-4 (in Slovak)

GREGUŠOVÁ, S.: The Determining Water Absorption Coefficient of Burnt-Clay Brick. In: Junior Forensic Science Brno 2011: 3rd Conference of PhD Study. Brno University of Technology, Czech Republic, ISBN 978-80-214-4276-4 (in Slovak)

KAREL, J.: Deterioration and Life Cycle of Residential Buildings and Flats. In: Junior Forensic Science Brno 2011: 3rd Conference of PhD Study. Brno University of Technology, Czech Republic, ISBN 978-80-214-4276-4 (in Slovak)

NIČ, M.: Proposals to Streamline Forensic Activities. In: Expert Activities in the Field of Geodesy and Cartography. Bratislava, 13rd October 2011, ISBN 978-80-969692-8-9, pp. 9-21 (in Slovak)

SOJKOVÁ, V. – GREGUŠOVÁ, S.: How to Become an Expert in the Field of Geodesy and Cartography. In: Expert Activities in the Field of Geodesy and Cartography. Bratislava, 13rd October 2011, ISBN 978-80-969692-8-9, pp. 31-35 (in Slovak)

DEPARTMENT OF LANGUAGES

Head of Department
PhDr. Dagmar Špíldová

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1. Education

1.1 Graduate study

Optional Subjects

English
German

1.2 Postgraduate courses

PhD. courses in advanced English
UNlcert – ESP certificate courses in English

3.2 International cooperation

Cooperating institutions

British Council, Bratislava, Slovakia

University of Washington, Washington, USA

Institute of Technology, Tralee, Ireland

Membership in international professional organizations

FILIPOIU, T. – The chairperson for Auditing Commission for Slovak Section of CASAJC

4. Publications

Textbooks

PÁLOVÁ, A.: Colloquial German in a Good Style, Part 1, Publishing House of the Slovak Technical University, Bratislava 2011, 64 pp. (in German)
ISBN 978-80-227-3487-5

PÁLOVÁ, A.: Civil Engineering – Text and Exercise Book of German Terminology, Vol. 1, Publishing House of the Slovak Technical University, Bratislava 2011, 133 pp. (in German) ISBN 978-80-227-3466-0

ŠPILDOVÁ, D.: English for Civil Engineers, Publishing House of the Slovak Technical University, Bratislava 2011, 153 pp. (in English) ISBN 978-80-227-3463-9

VAŠKOVÁ, S.: Supplementary reading: The Environment, Publishing House of the Slovak Technical University, Bratislava 2011, 62 pp. (in German)
ISBN 978-80-227-3444-8

Journals

NĚNIČKOVÁ, J.: Eton – Friendship - February 2011, Published by: FLP for the SR and the CR

NĚNIČKOVÁ, J.: Win a Trip to England - Friendship – February 2011, Published by: FLP for the SR and the CR

NĚNIČKOVÁ, J.: Japanese Peace Pagoda - Friendship - February 2011,

Published by: FLP for the SR and the CR

NĚNIČKOVÁ, J.: Benjamin Franklin and His Sense of Humour – Friendship – April 2011, Published by: FLP for the SR and the CR

NĚNIČKOVÁ, J.: Do You Like Watching Films? – The Way Back – Friendship – May – June 2011, Published by: FLP for the SR and the CR

NĚNIČKOVÁ, J.: Tintagel Castle – Friendship – May – June 2011, Published by: FLP for the SR and the CR

NĚNIČKOVÁ, J.: What is the European Day of Languages? – Friendship – September – October 2011, Published by: FLP for the SR and the CR

NĚNIČKOVÁ, J.: The New School Year Has Just Begun – Friendship – September – October 2011, Published by: FLP for the SR and the CR

NĚNIČKOVÁ, J.: Christopher Columbus – Friendship September – October 2011, Published by: FLP for the SR and the CR

NĚNIČKOVÁ, J.: Lidice – Friendship - September - October 2011, Published by: FLP for the SR and the CR

NĚNIČKOVÁ, J.: Inspector Colombo – Friendship – September – October 2011, Published by: FLP for the SR and the CR

NĚNIČKOVÁ, J.: Rock and Roll Hall of Fame and Museum– Friendship – November 2011, Published by: FLP for the SR and the CR

NĚNIČKOVÁ, J.: Breaking Free - Friendship – November 2011, Published by: FLP for the SR and the CR

NĚNIČKOVÁ, J.: Making Peace with Your Parents - Friendship – December - January 2011, Published by: FLP for the SR and the CR

NĚNIČKOVÁ, J.: Edith Wharton – The Line of Least Resistance – Friendship – December - January 2011, Published by: FLP for the SR and the CR

NĚNIČKOVÁ, J.: Is Texting 2 Bad 4 U? – Friendship – December - January 2011, Published by: FLP for the SR and the CR

FILIPOIU, T.: Wellington Arch – Friendship – April 2011, Published by: FLP for the SR and the CR

FILIPOIU, T.: On Drugs at 12 – Friendship – May - June 2011, Published by: FLP for the SR and the CR

ŠPILOVÁ, D.: Oxford– Friendship – February 2011, Published by: FLP for the SR and the CR

ŠPILDOVÁ, D.: Meet the English – Friendship – September - October 2011, Published by: FLP for the SR and the CR

ŠPILDOVÁ, D.: Speech as a Social Indicator – Friendship – November 2011, Published by: FLP for the SR and the CR

ŠPILDOVÁ, D.: English Homes and Gardens – Friendship – December - January 2011, Published by: FLP for the SR and the CR

GAMBRILL, D.: Swap till You Drop – Friendship - April 2011, Published by: FLP for the SR and the CR

GAMBRILL, D.: Debbie's column – Friendship – September - October 2011, Published by: FLP for the SR and the CR

AMBRILL, D.: Notting Hill Festival – Friendship – September - October 2011, Published by: FLP for the SR and the CR

GAMBRILL, D.: Global Cooling – Friendship - September – October 2011, Published by: FLP for the SR and the CR

GAMBRILL, D.: Debbie's column – Friendship – November 2011, Published by: FLP for the SR and the CR

GAMBRILL, D.: Debbie's column – Friendship – December - January 2011, Published by: FLP for the SR and the CR

GAMBRILL, D.: Kwanza! Las Posadas! Surprising Christmas Celebrations in the United States – Friendship – December - January 2011, Published by: FLP for the SR and the CR

HOBOTH, K.: Research on Language for Specific Purposes in Slovakia: Past and Present – Forum - Vol. 13, No. 2 (2011), pp. 25-36 ISSN 1335-4361

HOBOTH, K.: Bilingualism in the Usage and Teaching of a Professional Language, Budapest 2011

Parts of books

ŠPILDOVÁ, D.: Teaching English for Specific Purposes, In: Foreign Languages within the Context of Non-Philological University Studies, Proceedings from scientific seminar. Zvolen 2011, pp. 103 -108 (in English) ISBN 978-80-228-2240-4

Editing

1. GAMBRILL, D.: Annual Report 2010
2. GAMBRILL, D.: Journal of Civil Engineering
Volume XIX
2011/1
2011/2
2011/3
2011/4

Conferences

HOBOTH, K.: Evaluation of Textbooks in View of the Experience from Transitions and Dissimilarities Cluj (Romania), August 2011

HOBOTH, K.: Technical Language, Teaching and Textbooks (Problems with Technical Language Textbooks and Teaching in a Bilingual Environment) Szombathely (Hungary), August 2011

HOBOTH, K.: Problems of the Terminology in Bilingual Structural Engineering Dictionaries and Textbook Registers Budapest (Hungary), October 2011

HOBOTH, K.: Possibilities in the Use of Terminology and Translation in Civil Engineering Nitra (Slovakia), October 2011

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

DEPARTMENT OF HUMANITIES

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1. Education

1.1 Graduate study

Obligatory subjects

Basic Law
Civil Law
Construction and Commercial Law
Construction and Commercial Law
Construction and Land Law
Entrepreneurship Law
Environmentalism
Geoecology
History of Civil Engineering
History of Civil Engineering & Surveying
Land Law
Macroeconomics
Philosophy
Political Science
Public Administration
Sociology

3. Research

3.1 Research projects

Tempus-Tacis Joint European Project 25186-2004:
FREL P – Master's Degree in Environmental Law and
Policies in the Russian Federation (HUSZÁR, Š.)

3.2 International cooperation

Cooperating institutions

Tambov State Technical University, Tambov, Russian
Federation

Czech Technical University, Prague, Czech Republic

4. Publications

Parts of books

GAJNIÁK, J.: Legislation for Environmental Education at
the Faculty of Civil Engineering in Bratislava. In: The
Process of Globalization and Its Impact on the Economy
and Society (electronic) Bratislava, 2011. - ISBN 978-80-
227-3585-8. - pp. 17-24 (in Slovak)

GAJNIÁK, J.: New Trends in the Teaching of Legal
Disciplines at the Faculty of Civil Engineering STU in
Bratislava. In: Academic Insights into the Knowledge
Economy. Proceedings of the Department of Applied
Economics. Faculty of Philosophy at the University of
Olomouc. - Olomouc : Societas Scientarium Olomucensis
II, 2011. - ISBN 978-80-904477-8-3. - pp. 78 - 82 (in
Slovak)

HERETIKOVÁ, K.: Gradual Transition to a Knowledge -
Based Economy and Society - Consequences of
Globalization. In: The Process of Globalization and Its

Impact on the Economy and Society (electronic)
Bratislava, 2011. - ISBN 978-80-227-3585-8. - pp. 25-28
(in Slovak)

HERETIKOVÁ, K.: The Knowledge Economy as a
Consequence of Progressive Globalization. In: Academic
Insights into the Knowledge Economy. Proceedings of
the Department of Applied Economics, Faculty of
Philosophy at the University of Olomouc. - Olomouc :
Societas Scientarium Olomucensis II, 2011. - ISBN 978-
80-904477-8-3. - pp. 92-96 (in Slovak)

HUSZÁR, Š.: Environmental Measures for Engineering
Education. In: Academic Insights into the Knowledge
Economy. Proceedings of the Department of Applied
Economics, Faculty of Philosophy at the University of
Olomouc. - Olomouc : Societas Scientarium Olomucensis
II, 2011. - ISBN 978-80-904477-8-3. - pp. 112-115 (in
Slovak)

Journals

ZAJACOVÁ, J.: Selected Manners of Safety
Responsibilities in the Financing of Properties. In:
Nehnuteľnosti a bývanie. - ISSN 1336-944X. - Vol. 6, No.
2 (2011), pp. 23-37 (in Slovak)

Conferences

GAJNIÁK, J.: Optimizing the Scope and Content of the
Teaching Disciplines at the Civil Engineering Faculty in
Bratislava. In: Humanization of Education at the
University of Civil Engineering. In: 20 Years of the
Department of Humanities at the Faculty of Civil
Engineering. International Colloquium Bratislava, 2011. -
ISBN 978-80-227--3530-8. - pp. 23-31 (in Slovak)

GAJNIÁK, J.: The Teaching of Legal Disciplines in the
Curriculums of Geodesy and Cartography. In: Current
Problems of Surveying, Engineering Surveying and
Photogrammetry. Seminar with international participation
on the 60th Anniversary of the Department of Surveying
of FCE of SUT in Bratislava, 14.6.2011. - ISBN 978-80-
227-3501-8. - unpaginated (in Slovak)

HERETIKOVÁ, K.: Information and Education as a Basis
of a Knowledge - Based Society. In: Humanization of
Education at the University of Civil Engineering. In: 20
Years of the Department of Humanities at the Faculty of
Civil Engineering. International Colloquium, Bratislava,
2011. - ISBN 978-80-227--3530-8. - pp. 36-39 (in Slovak)

ZAJACOVÁ, J.: Living in Residential Houses in
Conditions of the Slovak Republic. In: Organization,
Technology and Management in Construction.
Proceedings (electronic): 10th International Conference.
Croatia, Šibenik, 7.-10.9.2011. - Zagreb : Croatian
Association for Construction Management, 2011. - ISBN
978-953-7686-02-4. - unpaginated (in English)

CONTACTS

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813 68 Bratislava
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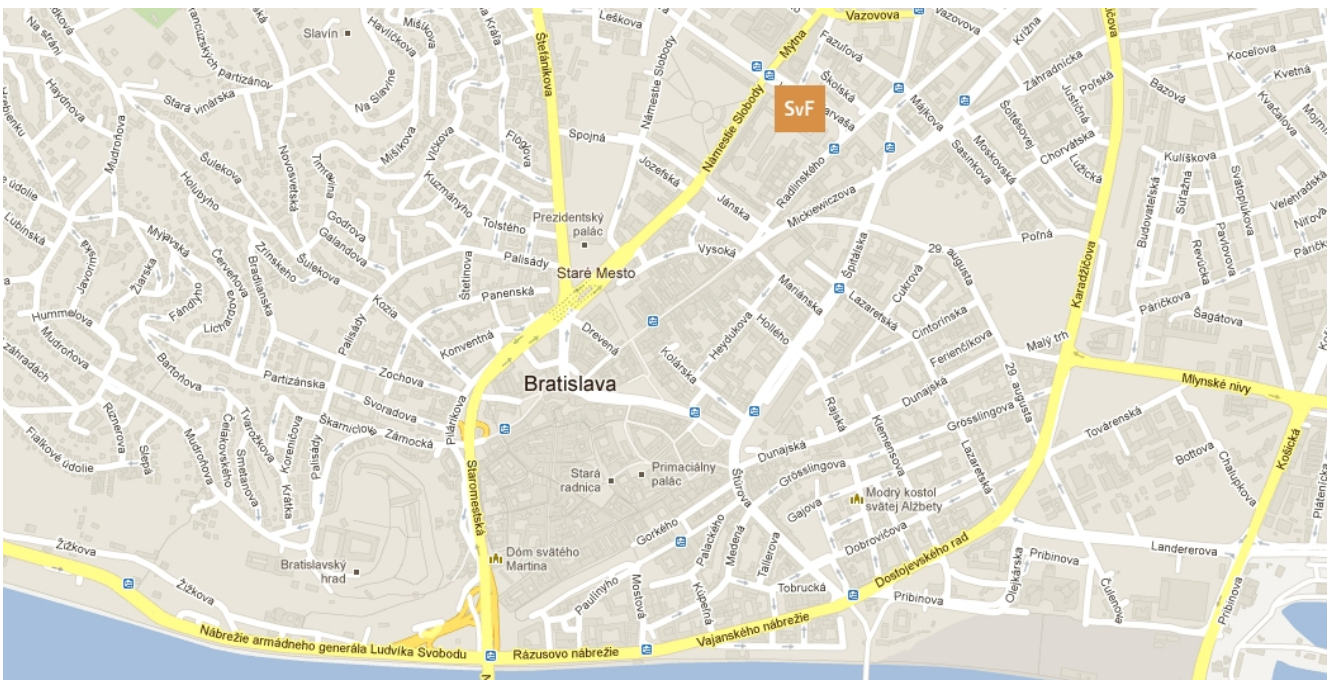
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