2015
ANNUAL REPORT
of the Faculty of Civil Engineering

Bratislava
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The activities of the Faculty are governed by Act No. 131/2002 Coll., on universities and other principal documents of the Faculty and University, including the Long-Term Development Goals of the Faculty.

In accordance with the Bologna Declaration, the studies at the Faculty of Civil Engineering have three levels that implement the credit system for assessments. The instruction is realized in 30 study programs with the following structure: 8 at the bachelor level, 13 at the engineering level and 9 at the doctoral level. After completing the process of complex accreditation, instruction in the winter semester 2015/2016 was provided according to the new structure of the study programs: 8 at the bachelor level, 11 at the engineering level and 9 at the doctoral level.

In the admissions process of students for bachelor studies, the entrance examination has been omitted since the academic year 2012/13. In addition, the Faculty of Civil Engineering organized a second round of the entrance examinations for bachelor and engineering studies in the assessed year. In spite of this fact, we again noticed a slight decline in students enrolled in the first year of the bachelor as well as the engineering studies. The number of graduates at the bachelor and engineering levels declined; the number of graduates at the doctoral level increased. The percentage of students who successfully completed the last year of the bachelor and engineering levels remained balanced with 60% at the bachelor and 85% at the engineering level.

A long-term positive trend is the number of students who achieve excellent study scores as well as the number of students of the Faculty of Civil Engineering who take part in various competitions organized by the commercial sector and who receive numerous awards. We managed to increase the number of students who went to study abroad, but the number of foreign students at the FCE is consistently low (3% of the number of students). One of the Faculty’s goals is to increase the number of foreign students as well as the number of students of the Faculty of Civil Engineering who will take advantage of student mobility programs.

The Faculty of Civil Engineering applies various tools to monitor the teaching process. The Faculty regularly organizes an anonymous evaluation of the teaching process by the students. In the previous semester 50% of the students took part in this anonymous survey. We require the lecturers to consider this information and respond to the students by an email sent to all of them. The students said they appreciated this activity at several meetings. They also appreciated the prepared posters for the exhibition of their dissertations and inspections at their classes (a total of 243 this academic year).

In compliance with the provisions of the Act on Higher Education, creative scientific and research work is an integral part of the university’s educational activities. 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 predicted European and world trends in civil engineering and geodesy. The bodies of the Faculty have discussed, and the Scientific Board has 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, modelling 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, optimization of planning, exploitation of hydraulic structures and their interactions with the environment, and integrated protection from hydroospheric extremes, including the monitoring of global and regional changes to the environment. The Faculty, through their employees and partners, has taken an active part in the creation of a transnational concept and state scientific policy – The Strategy of Research, Development and Innovations (RIS3). They have striven to incorporate the key issues of civil engineering and water management in the conceptual materials which are being prepared. The Faculty constantly strives to disseminate information to the practice concerning the creation and updating of international, European and domestic norms, as well as the realization of tasks requested by companies or institutions.

In 2015, research teams of the Faculty submitted a total of 65 new projects. The Faculty has been working on 67 projects – out of that number, 39 were VEGA, 12 APVV, and one grant project from the Ministry of Culture. The total amount of funding from the national budget for these projects was 1 million Euros.

Within the framework of the Operational Research and Development Program, the Faculty is involved in a number of university projects aimed at the field of diagnostics of deformations of the Earth’s surface in Slovakia by the application of satellites, gravimetric and tropospheric measurements, the development of methods for the excavation of high-volume energy wells, the development of accumulative vacuum tanks, and the creation and development of environmental technologies in the flood protection of settlements in the region of the Small Carpathians. Projects are also aimed at the development of integration systems for the simulation of drain processes, the applied research of methods for the determination of climate and hydrological design variables, and the development of intel-
lignet technologies for the use of electronics and computation in the systems and services of constructions. The Faculty devoted a large part of the year to the realization of tasks of the University Scientific Park and other projects funded from the Structural Funds (SF); it received more than 7.5 million Euros for construction works and laboratory equipment.

The Presidium of the Faculty, along with the Scientific Board of the Faculty, has recommended diversifying the Faculty's 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).

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 favourable conditions for creative work, including publishing work.

Due to the activities of its employees, FCE, STU is currently participating in all the significant EU programs, including TEMPUS, SOCRATES, and ERASMUS+, but we also have to mention other international activities, especially the CEEPUS II program and bilateral programs based on our employees' contacts with foreign partner universities. A total of 28 research and educational projects within various forms of EU framework programs were submitted in 2015. In 2015, the Faculty obtained 200,000 Euros for international projects and projects of the State Fund.

The Faculty has to vigorously 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 graduates' 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 the care of its employees.

In the previous year the Presidium of the Faculty continued in its effort to improve not only the teaching process but also the standard services provided to the students. As a result, many classrooms were renovated and equipped with data projectors, and the network's infrastructure was upgraded. The students can also consult on a daily basis with the professionals from the Centre of Information Technologies of the Faculty. The computer classrooms are visited by an average of 1,500 students per week, i.e., more than 40,000 students per year.

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 at the Library and Information Centre of the FCE, STU, with students spending longer periods of time there on average. The modernization of the library and its higher quality services has had a positive impact on attendance in the library's reading room, which steadily increases every year. There was a continuing trend of increased attendance in 2015 as well, and the number of visitors has reached more than 68,000 per year. 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 centre for education and the meaningful use of free time during breaks between classes.

From the point of view of investment activities in the year 2015, the Faculty is aiming at completing the reconstruction of the manor house in Kočovce as well as basic repair work and maintenance of the premises of the FCE.

The manor house in Kočovce belongs among the protected monuments registered on the Central List of the Monumental Fund of the SR under No. 1234/1-2. The manor house in Kočovce is used as an instruction and training facility for the Faculty of Civil Engineering of the STU in Bratislava. As its latest reconstruction was realized in the 1970s, the manor house is exhibiting a number of significant defects. Reconstruction of the manor house is a part of an approved project of OPVaV with the title of “Complex modernization of educational, tangible and information-communicational infrastructure CAMPUS – Bottova II. and reconstruction of the Kočovce instruction and training facility," which is being realized in cooperation with the Faculty of Material Engineering of STU in Trnava. The ongoing restoration of the windows and the interior of the manor house will cost 554,000 Euros.

The above-mentioned activities represent just a small part of the measures aimed at a common effort of improving the standard of our pedagogical and research infrastructure and improving the quality of the rooms where our lecturers have to work and where our students learn.

In this period there are opportunities for using financial resources of a relatively high amount other than government funding. However, this means more work and administrative burdens for many employees of the Faculty. A stable economic environment is a precondition for the successful realization of the Faculty's future activities. From this point of view, it is significant for the Faculty to make a profit either due to the Faculty's core or entrepreneurial activities. In the future it will be possible to continue this trend only through a higher degree of quality, not only in the Faculty's pedagogy, but also by focusing on international cooperation.
BODIES OF THE FACULTY

1. THE DEAN OF THE FACULTY

Prof. Ing. Stanislav Unčík, PhD.

2. PRESIDIUM OF THE FACULTY

Prof. Ing. Stanislav Unčík, PhD.
Prof. Ing. Ján Szolgay, PhD.

Assoc. Prof. Ing. Peter Makýš, PhD.
Prof. Ing. Vladimír Benko, PhD.
Prof. Ing. Boris Bielek, PhD.
Ing. Tomáš Šatura
Assoc. Prof. Ing. arch. Jarmila Húsenicová, PhD.
Petra Danišová/Michal Karpel
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. Stanislav Unčík, PhD.
Prof. Ing. Ján Szolgay, PhD.

Assoc. Prof. Ing. Peter Makýš, PhD.
Prof. Ing. Vladimír Benko, PhD.
Ing. Peter Kyrinovič, PhD.
Ing. Tomáš Šatura
Assoc. Prof. Ing. arch. Jarmila Húsenicová, PhD.
Petra Danišová/Michal Karpel
Ing. Miloslav Štujber
Prof. Ing. Juraj Bílčik, PhD.
Ing. Tibor Schlosser, 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 Organization
— Head of Department of Concrete Construction and Bridges
— Head of Department of Transportation Engineering
### 4. SCIENTIFIC BOARD OF THE FACULTY

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

**Chair man:**
Prof. Ing. Stanislav Unčík, PhD.

**Vice-Chair man:**
Prof. Ing. Ján Szolgay, PhD.

- Prof. Ing. Ivan Baláž, PhD., Department of Steel and Timber Structures
- Prof. prof. Ing. Vladimír Benko, PhD., Vice-Dean for Public Relations
- Prof. Ing. Jaroslav Halvónik, PhD., Department of Concrete Structures and Bridges
- 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 Kopáček, PhD., Dean of the Faculty, Department of Surveying
- Assoc. Prof. Štefan Stanko, PhD., Department of Sanitary and Environmental Engineering
- Prof. Ing. Viliam Macura, PhD., Department of Land and Water Resources Management
- Assoc. Prof. Ing. Peter Makýš, PhD., Department of Building Technology
Prof. RNDr. Radko Mesiar, DrSc., Department of Mathematics and Constructive Geometry
Prof. Ing. Dušan Petráš, PhD., Department of Building Services
Prof. Ing. Boris Bielek, PhD., Department of Building Structures
Prof. Ing. Norbert Jendželovský, PhD., Department of Structural Mechanics
Prof. Ing. Milan Sokol, PhD., Department of Structural Mechanics
Prof. Ing. Andrej Šoltész, PhD., Department of Hydraulic Engineering
Prof. Ing. Emilia Bednárová, PhD., Department of Geotechnics
Assoc. Prof. Ing. Arch. Lubica Vítková, PhD., Dean of the Faculty of Architecture, SUT

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

Prof. Ing. Ján Čelko, PhD., Faculty of Civil Engineering, University of Žilina
Assoc. Prof. Ing. Peter Černík, PhD., STRABAG Development Slovakia, Ltd.
Assoc. Prof. RNDr. Ján Feranec, DrSc., Geographical Institute SAS Bratislava
Prof. Ing. Mária Kozlovská, PhD., Faculty of Civil Engineering, Technical University of Košice
Ing. Peter Matiašovský, CSc., Institute of Construction and Architecture SAS Bratislava
Prof. RNDr. Daniel Ševčovič, CSc., Faculty of Mathematics, Physics and Informatics, Comenius University Bratislava
Assoc. Prof. Ing. Peter Halaj, CSc., The Faculty of Horticulture and Landscape Engineering, Slovak University of Agriculture in Nitra
RNDr. Pavla Pekárová, DrSc., Slovak Academy Of Sciences, Bratislava

Members of the Scientific Board (honorary members)

The Scientific Board consists of the representatives of the following entities:
Dean of the Faculty of Civil Engineering, Czech University in Prague
Dean of the Faculty of Civil Engineering, Brno University of Technology
Dean of the Faculty of Civil Engineering, Technical University Ostrava
Dean of the Faculty of Civil Engineering, University of Žilina
Dean of the Faculty of Civil Engineering, Technical University of Košice
Dean of the Faculty of Architecture, STU Bratislava
Chairman, Bureau of Geodesy, Cartography and Cadaster of the SR
President of the Slovak Association of Construction Entrepreneurs
Chairman of the Slovak Chamber of Civil Engineers
Chairman of the Directorate of the Chamber of Surveyors and Cartographers
President of the Slovak Chamber of Architects
The honorable members in the year 2015 were:

Prof. Ing. Alena Kohoutková, CSc., Dean of the Faculty of Civil Engineering ČVUT Prague,
Prof. Ing. Rostislav Drochytka, CSc., Dean of the Faculty of Civil Engineering VUT Brno,
Prof. Ing. Radim Čajka, CSc., Dean of the Faculty of Civil Engineering VŠB TU Ostrava,
Prof. Ing. Josef Vičan, CSc., Dean of the Faculty of Civil Engineering ŽU Žilina,
Prof. Ing. Vincent Kvočák, PhD., Dean of the Faculty of Civil Engineering TU Košice,
Ing. Mária Frindrichová, Head of the Geodesy, Cartography and Cadastre Authority of the Slovak Republic,
Ing. Zsolt Lukáč, President of the Association of Construction Entrepreneurs in Slovakia,
Ing. Ján Hardoš, Chairman of the Board of the Chamber of Surveyors and Cartographers,
Ing. arch. Imrich Pleidel, Chairman of the Slovak Chamber of Architects,
Prof. Ing. Vladimír Benko, PhD., Chairman of the Slovak Chamber of Civil Engineers (he is also a regular member of the Scientific Board).

5. THE FACULTY’S ACADEMIC SENATE

After the election procedure and the approval of its results, the Academic Senate of the Faculty was appointed for the period from 2015 to 2019 at the session of the AS of the Faculty on 27.3.2015. The presiding officers were elected at this session, and the members were delegated their functions on the following working committees:

Presiding Officers:
Assoc. Prof. Ing. arch. Jarmila Húsenicová, PhD.
JUDr. Jana Zajacová, PhD.
Prof. RNDr. Radko Mesiar, DrSc.
Prof. Ing. Ludovít Fillo, PhD.
Petra Danišová
Bc. Kristína Vaňová

The Academic Senate Member
Assoc.Prof. Ing. Ludovít Možiešik, PhD.
Assoc. Prof. Ing. Ladislav Husár, PhD.
prof. Ing. Ivan Baláž, PhD.
Ing. Mária Kurčová, PhD.
Ing. Alena Struhárová, PhD.
Ing. Peter Buday, PhD.
Monika Pračková
Ondrej Bruncko
Jozef Kováč
Assoc.Prof Ing. Luboš Hruštinec, PhD.
6. THE INDUSTRY BOARD

The Industry Board is the Dean’s advisory body that consists mainly of leaders of the most significant companies and organisations in the fields of civil engineering and geodesy and cartography in Slovakia. Its sessions are held twice a year in the spring and autumn, and it comments on the Faculty’s activities, especially on education, the structure of the study programs and the profile of the graduates of FCE from the point of view of their future employment.

The Industry Board provides a direct contact of the Faculty with the building industry, which is necessary for an institution training graduates for these companies and organisations.

Members of the Industry Board:

Prof. Ing. Vladimír Benko, PhD., Faculty of Civil Engineering STU, Vice-Dean for PR, Chair of the Slovak Chamber of Civil Engineers
Ing. Igor Beroun, Director General of JOHNSON CONTROLS CR and SR
Ing. Mikuláš Bobik, Director of Applied Precision, Ltd.
Mgr. Magdaléna Dobišová, Chairman of the Board and General Director of Skanska SK a.s.
prof. Ing. Ludovit Fillo, Ph.D., Faculty of Civil Engineering STU Bratislava
Ing. Luboš Fussek, Director of BAUMIT, Ltd.
Ing. Peter Glaus, Hydroconsulting, Ltd.
Ing. Martin Greguš, Saint-Gobain Construction Products, Ltd.
Ing. Peter Halász, Director of Jaga Group, Ltd.
Ing. Ján Hardoš, Chairman of the Chamber of Surveyors and Cartographers, Director of fy SIGEO
Ing. Juraj Hirner, Executive Manager and Director of STRABAG Corporation – Building and Civil Engineering Constructions, Ltd.
Ing. Oto Hornáček, General Director of HORNEX, a.s.
Ing. Stanislav Hreha, Chairman of the Board of the Association of Water Companies, Chairman of the Board of the East-Slovakian Water Company, a.s.

Ing. Milín Kaňuščák, Executive Manager of KAMI PROFIT, Ltd.

Ing. Arch. Pavol Kollár, Chief of Holding Invest-in

Prof. Ing. Alojz Kopáčik, PhD., President of the Association ABF Slovakia, Faculty of Civil Engineering STU Bratislava

Ing. Lubica Kopčová, General Director of the Research Institute for Water Management, Chairman of the Executive Board of the Association of Employers in Water Management in Slovakia

Ing. Arch. Ivan Kubík, Ateliér Ivan Kubík, Ltd.

Ing. Peter Kyrinovič, PhD., Vice-Dean for Faculty Development, Faculty of Civil Engineering STU Bratislava

Ing. Miroslav Leško, Director, Premac

Ing. Žsolt Lukáč, President of the Association of Construction Entrepreneurs in Slovakia

Ing. Ján Majerský, Director of PROMA, Ltd.

Assoc. Prof. Ing. Peter Makýš, PhD., Vice-Dean for Education, FCE STU Bratislava

Prof. Ing. Dušan Petráš, PhD., President of ZSVTS, FCE STU Bratislava

Ing. Ladislav Piršel, Slovak Council for Green Buildings

Ing. Slavomír Podmanický, General Director of REMING Consult, a.s.

Ing. Peter Pochaba, T-Klima, Ltd.

Ing. Jozef Ružanský, General Director of Drevona, a.s.

Ing. Vladimir Stromček, Director of Geodézia, a.s. Žilina, member of the Board of the Chamber of Surveyors and Cartographers

Assoc. Prof. Ing. Peter Suchánek, PhD., procurement officer, head of the branch of window and façade systems, REHAU, Ltd.

Ing. Marián Supek, General Director of the Slovak Water Management Enterprise

Prof. Ing. Ján Szolgay, PhD., Vice-Dean for Science, Research and International Relations, FCE STU Bratislava

Ing. Ján Šedivý, Chairman of the Board and Director of the company, SCS UNI&Co., a.s.

Ing. Róbert Šinály, General Director EUROVIA SK, a.s.

Prof. Ing. Andrej Šoltész, PhD., Alumni Chairman of FCE STU Bratislava

Ing. Vladimír Uhlik, General Director of Geodézia a.s.

Prof. Ing. Stanislav Unčík, PhD., Dean of FCE STU Bratislava

Ing. Ján Záhradník, Sales Director of Doprastav, a.s. Directorate General

Ing. František Zvrškovec, President of Dividend Group Sk
DEPARTMENTS
DEPARTMENT OF CONCRETE STRUCTURES AND BRIDGES

Head of Department
Prof. Ing. Juraj Bilčík, PhD.
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Fax: +421 2 5292 6213
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 (Slovak and English)
- Execution of Concrete Structures
- High - Rise and Span Structures
- Masonry Structures of Buildings
- Prestressed Concrete
- Reinforced and Prestressed Members
- Repair of Concrete Constructions
- Special Problems of Concrete Structures

Obligatory elective subjects
- Masonry Structures
- Experimental Testing of Concrete Structures
- Modeling of Civil Engineering Works

Optional subjects
- Modeling of Concrete Structures
- Recommended subjects
- Modeling of 2D Reinforced Concrete Structures
- Modeling of 3D Reinforced Concrete Structures

1.2 Postgraduate courses

- Modeling of Concrete Structures
- Experimental Testing of Concrete Structures

2. THESES

2.1 Bachelor theses
There were 6 works

2.2 Graduate theses
- Antal, M.: Design of a High-Rise Building
  Supervisor: Fillo, Ľ.
- Behúl, L.: Design Calculations of a Multi-Storey Garage: Precast Concrete Structure
  Supervisor: Bilčík, J.
- Bolješik, D.: Reinforced Concrete Underground Collector for Cooling Water Pipes
  Supervisor: Hudoba, I.
- Csekes, Á.: "Uzbecká – Dolné Hony – Bratislava" Apartment Block: Cast-in-Situ RC Wall Bearing Structure with Stiffening Cores
  Supervisor: Abrahoim, I.
- Díko, Ľ.: Staré Grunty – Bratislava Hotel ***: Combined Cast-in-Situ Reinforced Concrete Structure with Stiffening Cores
  Supervisor: Abrahoim, I.
- Dobsovec, K.: Multifunctional Residential Building, Petrážalka, Bratislava: Cast-in-Situ Reinforced Concrete Structure with Stiffening Cores
  Supervisor: Abrahoim, I.
- Dolhý, M.: Static and Dynamic Analysis of a High-Rise Building
  Supervisor: Šoltész, J.
- Drevínák, M.: Road Bridge: Post-Tensioned Cast-in-Situ Concrete Structure
  Supervisor: Borzovíč, V.
- Držíková, D.: Cast-in-Situ Prestressed Concrete Bridge on Motorway D1
  Supervisor: Halvoník, J.
- El Hajjar, M.: Bridge No. 202 on Sverepce – Všišňové Highway Section
  Supervisor: Paulík, P.
Farkašová, K.: Design Calculations of a High-Rise Building Made from Structural Concrete
Supervisor: Fillo, L.

Fülöp, P.: Load-Bearing Structure of a Multifunctional High-Rise Building
Supervisor: Gramblíčka, H.

Gaban, P.: Design Calculations of an Underground Garage under the Winter Stadium in Bratislava: Cast-in-Situ RC Structure
Supervisor: Bilič, J.

Gahérová, M.: Load-Bearing Structure of a High-Rise Office Building
Supervisor: Gramblíčka, Š.

Gúcky, T.: 25 - Storey High-Rise Building of an Administration Centre. Cast-in-Situ RC Structure with Flat Slabs and a Stiffening Core
Supervisor: Harvan, I.

Gura, A.: Office Block: Cast-in-Situ Reinforced Concrete Structure
Supervisor: Hollý, I.

Holý, P.: Road Bridge: Post-Tensioned Cast-in-Situ Concrete Structure
Supervisor: Borzovič, V.

Juranová, M.: "Trinity" Multifunctional Building: Cast-in-Situ Reinforced Concrete Structure
Supervisor: Halvoník, J.

Klimová, M.: High-Rise Apartment House: Bearing Structure
Supervisor: Gramblíčka, Š.

Koterec, D.: Multifunctional Building: Cast-in-Situ Concrete Structure
Supervisor: Bilič, J.

Kovácsová, N.: "Trinity" Multifunctional Complex: Cast-in-Situ Reinforced Concrete Structure
Supervisor: Halvoník, J.

Kučera, M.: Structural Design of a Tram Bridge in Bratislava
Supervisor: Halvoník, J.

Lamparský, J.: Load-Bearing Structure of a Multifunctional Building
Supervisor: Gramblíčka, Š.

Matašková, L.: Control Center for an Industrial Enterprise. Design of a Bearing System Subjected to Blast Loading
Supervisor: Bartók, A.

Milóvá, K.: Central Police Office in Bratislava: Multi-Storey RC Skeleton Structure with Stiffening Cores
Supervisor: Harvan, I.

Mižák, V.: Design Calculations of Multi-Storey Garage: Cast-in-Situ RC Structure
Supervisor: Bilič, J.

Matín, J.: Shopping Centre: Precast Concrete Structure
Supervisor: Borzovič, V.

Országhová, L.: Hotel Delfín, Senec: Combined Cast-in-Situ Reinforced Concrete Structure with a Stiffening Core
Supervisor: Abrahaim, I.

Pečník, M.: Design Calculations of an Office Block: Cast-in-Situ RC Structure
Supervisor: Bilič, J.

Plancsiková, A.: Static and Dynamic Analysis of a High-Rise Building
Supervisor: Šoltész, J.

Potempová, A.: Office Building - Generali Slovakia Insurance Company, Bratislava: Cast-in-Situ Reinforced Concrete Structure with Flat Slabs and Stiffening Cores
Supervisor: Abrahaim, I.

Prostredný, M.: Bridge No. 203 on Sverepec – Višňové Highway Section
Supervisor: Paulík, P.

Revaj, M.: Office Block
Supervisor: Brondoš, J.

Supervisor: Šoltész, J.

Sárosfai, Á.: Automobile Centre: Bratislava Rožňavská: Cast-in-Situ Reinforced Concrete Combined Bearing Structure with a Stiffening Core
Supervisor: Abrahaim, I.

Siládi, R.: Hotel "TULA", Banská Bystrica: Cast-in-Situ RC Combined Structure on a Skeleton Pedestal with a Stiffening Core
Supervisor: Harvan, I.

Skladaný, P.: Underground Cast-in-Situ Reinforced Concrete Retention Tank
Supervisor: Hudoba, I.

Tisoň, L.: Office Block: Cast-in-Situ Reinforced Concrete Structure
Supervisor: Hollý, I.

Viteková, M.: Bridge on R1 Expressway, Nitra West Seleneč
Supervisor: Halvoník, J.

Wachal, M.: Multifunctional Building: Cast-in-Situ Reinforced Concrete Structure
Supervisor: Borzovič, V.

Žigmond, M.: Static and Dynamic Analysis of 120 m Tall Reinforced Concrete Chimney
Supervisor: Šoltész, J.
2.3 Doctoral theses

Ignáčák, M.: Thermodynamic and Stress Analysis of Base Slabs at an Early Stage
Supervisor: Šoltész, J.

Sonnenschein, R.: Parameter Analysis of a Reinforcement for the Control of the Width of Early Cracks in Concrete
Supervisor: Bílčík, J.

3. RESEARCH

3.1 Research projects

Analysis of Reliability Risks in the Design and Execution of Concrete Structures (2015-2017, Bílčík, J.), VEGA /0583/15

Historical Experience and Current Requirements for the Design of Concrete Bridges and Knowledge Transfer of Information Acquired in Technical Practice (2013-2016, Halvoník, J.), APVV-0442-12
Diagnosis of Oldest Reinforced Concrete Bridges in Slovakia (2013-2015, Halvoník, J.), VEGA 1/0690/13

Reliability and Resistance of Concrete and Composite Steel-Concrete Structures (2014-2016, Fillo, L.), VEGA 1/0696/14

3.2 International cooperation

Cooperating institutions

Klokner Institute ČVUT Prague, Czech Republic
ETH – Laboratory for Building Materials, ETH Zurich, Switzerland
Baustoffinstitut, TU Munich, Germany
Institut für Baustatik und Konstruktion, ETH Zurich, Switzerland
Department of Civil and Materials Engineering, University of Illinois at Chicago, USA
RIB Bausoftware, Stuttgart, Germany
Betosan, s.r.o., Prague, Czech Republic
European Commission, DG Research, Brussels, Belgium
Imperia 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

Membership in international professional organizations

Benko, V.: Austrian Standard Institut. Standard Committees – ON-AG 01301, ON-AG 1011 01, ON-AG 010 01, ON-AG 176 02. ON-K 176, ON-K 010
Benko, V.: ECECE European Council of Engineers Chamber

Benko, V.: ECCE European Council of Civil Engineers
Benko, V.: ASCE American Society of Civil Engineers
Bílčík, J.: American Concrete Institute
Fillo, L.: CEN TC 250 – SC2 Eurocode: Design of Concrete Structures
Fillo, L.: Task Group fib TG 1.1 Design Application
Fillo, L.: Czech Concrete Society, Hradec Králové, Czech Republic
Halvoník, J.: CEN TC 250 SC1 Eurocodes
Halvoník, J.: CEN TC 250 SC1 Eurocodes

4. PUBLICATIONS

Books

Parts of Books


Journals


Conference Proceedings


1. EDUCATION

1.1 Graduate study

Obligatory subjects

Airport Planning and Design
Bachelor Thesis
Design Studio of Urban Planning I
Design Studio of Urban Planning II
Design Studio of Spatial Planning
Diploma Thesis
Environmental Transport
Experimental Verification
Excursion
Modeling and Graphics in Road Construction
Pavement Diagnosis and Reconstruction
Pavement Mechanics
Predictions and Scenarios for the Development of Transport
Project: Road Constructions
Railway
Roads in Urban Areas
Road Intersections
Transport Forecasting

Obligatory elective subjects

Design and Realization of a Transport Infrastructure
Ecology of Urban Settlements and Urban Transportation Planning
Experiments and Testing
Project II
Project II: Transport Infrastructure
Selected Chapters on Roads and Motorways
Special Lectures of Transportation Structures
Technology of Engineering Construction
Transport Construction
Urban Transportation Planning
Urban Planning I

2. THESSES

2.1 Bachelor theses

There were 14 works.

2.2 Graduate theses

Balucha, E.: Western Bypass of R4 Stropkov – Technical Study
Supervisor: Bačová, K.

Bežuch, J.: Transport in a Zoning Plan
Supervisor: Bezák, B.

Bohunická, M.: Proposed Reconstruction of Roads in a Desired Location
Supervisor: Bačová, K.

Dobrovodský, M.: Double Track Railway Project at a Specified Section
Supervisor: Bačová, K.

Halaj, M.: Reconstruction of Road Communications on the Road I/66 Babiná – Bypass
Supervisor: Zuzulová, A.

Haraslín, L.: Continuously Reinforced Concrete Pavement in a Tunnel on Highway D1
Supervisor: Zuzulová, A.

Harmata, T.: Evaluation of the Road Conditions in the Area of Road I/59 Likavka – Valaská Dubová
Supervisor: Zuzulová, A.

Jochman, J.: Solutions for Road Constructions on Cycling Communications
Supervisor: Zuzulová, A.

Kesidi, E.: Transfer Node of Railway Station at Devínska Nová Ves
Supervisor: Bezák, B.

Klein, M.: Study of Porúbká Bypass
Supervisor: Bačová, K.

Kubovičová, M.: Transport Study on Trnavské Myto Transfer Node in Bratislava
Supervisor: Bezák, B.

Lichvár, D.: Renovation of Cement Concrete Pavement on Roads I/62 and I/75
Supervisor: Zuzulová, A.
3. RESEARCH

3.1 Research projects


Environmental Mixtures (2015, Bachratá, M.), Acronym: ENVIZ

3.2 International cooperation

Cooperating institutions

Bauhaus-University Weimar, Weimar, Germany
Cologne University of Applied Science, Cologne, Germany
Czech Technical University in Prague, Faculty of Civil Engineering, Prague, Czech Republic
Czech Technical University in Prague, Faculty of Transportation Sciences, Prague, Czech Republic
Hellenic Institute of Transport, Thessaloniki, Greece
Institute for Transport Studies, Department of Landscape, Spatial and Infrastructure Sciences, BOKU, Vienna, Austria
Cracow University of Technology, Faculty of Civil Engineering, Cracow, Poland
Széchenyi István University, Department of Transportation Infrastructure and Municipal Engineering, Győr, Hungary
University of Maribor, Faculty of Civil Engineering, Department of Transportation Engineering, Maribor, Slovenia
University of Pardubice, Jan Perner Transport Faculty, Pardubice, Czech Republic
Vienna University of Technology, Faculty of Civil Engineering, Institute of Transportation, Vienna, Austria
Vilnius Gediminas Technical University, Faculty of Transport Engineering, Vilnius, Lithuania

VŠB-Technical University of Ostrava, Faculty of Civil Engineering, Ostrava, Czech Republic
Wroclaw University of Technology, Faculty of Civil Engineering, Institute of Building Engineering, Wroclaw, Poland

Membership in international professional organizations

Bezák, B.: Member of the PIARC - TC 3.2 Design and Operation of Safer Road Infrastructure, Paris, France
Bezák, B.: Member of the Southeast European Transport Research Forum, SETREF, Thessaloniki, Greece
Bezák, B.: Member of the Editorial Board -Transport Review, London, UK
Bezák, B.: Member of the Editorial Board – Acta Technica Jaurinensis, Győr, Hungary
Bezák, B.: CEI Vienna - Central European Initiative – Subgroup for Transport and the Environment, Austrian Federal Ministry of Agriculture, Forestry, the Environment and Water Management, Vienna
Cápayová, S.: Member of the PIARC – TC 4.2 Road Pavements, Paris, France
Gschwendt, I.: Member of the PIARC – TC 4.2 Road Pavements, Paris, France
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
Ondrovič, M.: Member of the PIARC – TC 3.2 Design and Operation of Safer Road Infrastructure, Paris, France
Zuzulová, A.: Member of the Editorial Board - Przegląd komunikacyjny, Wroclaw, Poland

4. PUBLICATIONS

Journals


Conference Proceedings


1. EDUCATION

1.1 Graduate study

Obligatory subjects

Information Technologies
Processing and Analysis of Measurements 1
Processing and Analysis of Measurements 2
Geoinformatics
Geoinformatics (Institute of Management)
Local Geodetic Networks
Global Geodesy 1
Geodesy in Spatial Planning (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
Spatial Data Management
Satellite Geodesy
Spatial Modelling in GIS
Metrology in Geodesy
Mathematical Models in Geodesy
Specialized Field Education
GIS in Building Sciences

Obligatory elective subjects

Gravimetry
Geodynamics
GIS Design and Implementation
Database Systems in GIS

Optional subjects

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

1.2 Postgraduate courses

Processing and Analysis of Measurements
Global Geodesy
Geodynamics
Geographic Information Systems

2. THESSES

2.1 Bachelor theses

There were 20 works.

2.2 Graduate theses

Ceizel, P.: The Influence of Atmospheric Pressure Variations on Gravity
Supervisor: Hábel, B.

Čechovský, M.: Documentation Methods for Archaeological Structures and
Their Implementation in GIS
Supervisor: Lieskovský, T.

Ficová, M.: Spatial Model of Utilities
Supervisor: Fencík, R.

Herceg, M.: Methodology for Processing Absolute Gravity Measurements
Supervisor: Janák, J.

Hrušovská, M.: Design of 3D GIS System to Support Archeological Research
in the Petén – Guatemala
Supervisor: Lieskovský, T.

Krivovudská, M.: Global Gravity Field Models of the Earth and Their Applications
Supervisor: Janák, J.

Macejová, A.: Monitoring of the Stability of Geodetic Points
Supervisor: Gerhátová, Ľ.
3. RESEARCH

3.1 Research projects

National Centre for Diagnosing the Earth’s Surface Deformations in Slovakia (2010-2015, Možiš, M.), ITMS 26220220108

Recognition of Objects Based on High Resolution Radar Imagery (2012-2015, Papčo, J. – Bakoň, M.), TSX-Archive-2012, Project ID LAN1583 Accepted by DLR


3.2 International cooperation

Cooperating institutions

CEGRN – Central European Geodynamic Regional Network Consortium

EPN – EUREF Permanent Network

Freie Universität Berlin - Tell Fehlicher Research Project, Germany

Chinese University of Hong Kong, Institute of Space and Earth Information Science, China SAR

Italian National Research Council, Institute for Marine Sciences, Italy

Kiel University, Institute of Geosciences, Germany

North Carolina State University, Department of Marine Earth and Atmospheric Sciences, United States of America

Purdue University, School of Civil Engineering, Indiana, United States of America

Research Institute of Geodesy, Topography and Cartography, Czech Republic

Technical University of Ostrava, Institute of Geoinformatics, Czech Republic

UNAVCO - A Non-Profit University-Governed Consortium, Facilitates Geoscience Research and Education Using Geodesy

University of Environmental and Life Sciences, Institute of Geodesy and Geoinformatics, Wrocław, Poland

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

University of Stuttgart, Institute of Navigation, Germany

University of Trás-os-Montes e Alto Douro, Vila Real, Portugal

University of Trieste, Department of Earth Sciences, Italy

University of Vienna, Department of Meteorology and Geophysics, Austria

University of West Bohemia in Pilsen, Faculty of Applied Sciences, Department of Mathematics, Czech Republic

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

Membership in international professional organizations

Hefty, J.: American Geophysical Union

Hefty, J.: European Geosciences Union

Hefty, J.: International Association of Geodesy

Janák, J.: European Geosciences Union

Možiš, M.: American Geophysical Union

Možiš, M.: CEGRN Consortium

Možiš, M.: European Geosciences Union

Možiš, M.: International Association of Geodesy
4. PUBLICATIONS

Books


Parts of Books


Textbooks


Journals


Conference Proceedings


1. EDUCATION

1.1 Graduate study

Obligatory subjects

- Cadastral Mapping
- Cadastre of Real Estate
- Cartometry and Analysis of the Cadastre of Real Estate
- Diploma Seminar
- Engineering Surveying I, II
- Environmental Modelling and Landscape Evaluation
- Field Practice in Surveying
- Field Practice in Cadastral Mapping and the Cadastre of Real Estate
- Field Practice in Engineering Surveying
- History of Surveying
- Industrial Surveying
- Land Consolidation I, II
- Legislation of Geodetic Activities
- Photogrammetry I, II
- Professional Practice
- Remote Sensing
- Special Seminar
- Staking and Monitoring of Construction Objects
- 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, Cartography and Cadastre
- Surveying in Building Construction (branch of study: Engineering Constructions and Transportation Structures)
- Surveying in Civil Engineering (English)
- Vocational Practice

Obligatory elective subjects

- Applied Close–Range Photogrammetry
- Bachelor Thesis

Optional subjects

- Diploma Thesis
- Surveying in Underground Areas

1.2 Postgraduate courses

- Cadastre of Real Estate and Land Consolidation
- Engineering Surveying
- Photogrammetry

2. THESIS

2.1 Bachelor theses

There were 19 works.

2.2 Graduate theses

- Breza, J: Geodetic Monitoring of Holcim Cement Plant During Demolition Works
  Supervisor: Bajtala, M.
- Čmelová, M.: The 3rd Spatial Dimension and the Land Register
  Supervisor: Hudecová, L.
- Guzma, M.: Location of Persons in an Indoor Environment
  Supervisor: Erdélyi, J.
  Supervisor: Lipták, I.
- Holčík, V.: Measurement of Vertical Displacements of Flood Protection Structures
  Supervisor: Ježko, J.
- Jančí, B.: Photogrammetric Documentation of Tall Buildings
  Supervisor: Marčíš, M.
  Supervisor: Sokol, Š.
3. RESEARCH

3.1 Research projects


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
Technische Universität Munich, Germany
University of Zagreb, Croatia
Geodetic and Geophysical Institute MTA, Hungary
Vienna University of Technology, Austria
Kavala Institute of Technology, Greece
“1 Decembrie 1918” University of Alba Iulia, Romania
University of West Hungary, Hungary
“Politehnica” University of Timisoara, Romania
Central Mining Institute, Poland

Membership in international professional organizations

Hudecová, L.: National Delegate to International Federation of Surveyors (FIG), Commission 3: Spatial Information Management
Hudecová, L.: National Delegate to International Federation of Surveyors (FIG), Commission 7: Cadastre and Land Management
Kopáčik, A.: Bavarian Academy of Sciences: Surveying Commission
Kopáčik, A: FTBGU
Kopáčik, A: International Association of Geodesy, SC4 WG2: Building Structures as Kinematic Systems
Kopáčik, A.: National Delegate to International Federation of Surveyors (FIG), Commission 2: Professional Education
Kopáčik, A.: National Delegate to International Federation of Surveyors (FIG), Commission 6: Engineering Surveying
Kopáčik, A.: National Delegate to International Federation of Surveyors (FIG), WG 6.2: Engineering Surveying for Industry and Research
Kopáčik, A.: European Education in Geodetic Engineering, Cartography and Surveying, WG1: Pregraduate Education
Lukáč, Š.: National Delegate to International Federation of Surveyors (FIG), Commission 1: Professional Standards & Practice
Lukáč, Š.: International Federation of Surveyors (FIG), Working Group 6.1: Deformation Measurements and Analysis
4. PUBLICATIONS

Books


Parts of Books


Journals


Lipták, I.: Software Solution for Dynamic Geodetic Measurements. In: Interdisciplinarity in Theory and Practice. ISSN 2344–2409. No. 6 (2015), pp. 5–8 (in English)


Conference Proceedings


1. EDUCATION

1.1 Graduate study

Obligatory subjects

Engineering Geology
Engineering Geology and Rock Mechanics
Soil Mechanics
Foundation Engineering
Soil Mechanics and Foundations
Geotechnical Structures
Geotechnical Constructions
Geology
Underground Constructions
Properties of Rocks and Soils
Spread and Deep Foundations
Foundation Pits
Water Reservoirs and Dams
Landfills and Ponds
Special Problems of Geotechnical Engineering
Geology and Geomorphology
Geomechanics
Soil Construction

Recommended subjects

Spread and Deep Foundations
Diploma Seminar
Roads and Highway Tunnels
Laboratories of Soil Mechanics
Urban Underground Construction
The Aging and Reconstruction of Dams
Underground Water Management Constructions
Construction, Maintenance and Reconstruction of Railway Tunnels

1.2 Postgraduate courses

Engineering Geology and Hydrogeology
Soil Mechanics
Foundation Engineering
Geotechnical Structures
Filtration and Stability Tasks of Embankment Dikes
Dams and Water Reservoirs – Selected Topics

2. THESES

2.1 Bachelor theses

There were 5 works.

2.2 Graduate theses

Benko, A.: Design and Assessment of the Foundation of Bridge Structure No. 201 on the D1 Highway in the Dubna Skala – Turany, km 0.400 Section. Supervisor: Hruštinec, L.

Ďuran-Bašták, M.: Proposed Substructure Ecducts over a Highway
Supervisor: Frankovská, J.

Jančová, B.: Design of the Primary Lining of the Čebrat Tunnel
Supervisor: Chabroňová, J.
2.3 Doctoral theses

Hromada, M.: Subsoil Deformation Analysis at a High Intensity Load
Supervisor: Hrušťinec, L.

Martinka, L.: Analysis of the Properties of Non-Standard Geomaterials
Supervisor: Masarovičová, M.

Stacho, J.: Analysis of Pile Design Taking Into Account the Impact of Technology
Supervisor: Frankovská, J.

3. RESEARCH

3.1 Research projects


Determination of the Critical Parameters of the Activation of Landslide Areas that Threaten Transport Construction and Waterworks (2014-2016, Kopecký, M.), VEGA 1/0533/14


3.2 International cooperation

Membership in international professional organizations

Frankovská, J.: Representative of the Slovak Republic on the Czech and Slovak Committee of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE)

Frankovská, J.: Representative of the Slovak Republic on CEN – TC 250/SC7 Geotechnics design

Frankovská, J.: Representative of the Slovak Republic on TC 308 Energy Geotechnics of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE)

Frankovská, J.: Representative of the CEN – TC 396 Earthworks / WG 2 – Soil and Rock Classification for Earthworks

Chabroňová, J.: Representative of the Slovak Republic at the German – Czech Scientific Foundation (WSDTI) of the European Forum Underground Construction (EFUC)

Frankovská, J.: Representative of the Slovak Republic on ETC 10 Evaluation of Eurocode 7 of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE)

Hrušťinec, L.: Representative of the Slovak Republic on the Czech and Slovak Committee of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE)

Hulla, J.: Representative of the Slovak Republic on the Czech and Slovak Committee of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE)

Kopecký, M.: Representative of the Slovak Republic on the Slovak Committee of the International Association of Engineering Geology (IAEG)

Masarovičová, M.: Representative of the Slovak Republic on the Czech and Slovak Committee of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE)
4. PUBLICATIONS

Books


Journals


Baliak, F. – Brček, M.: Slope Movements as Geofactors of the Environment and Their Impact on Humans. In: Acupuncture and Natural Medicine [online], Nos. 5 – 6 (2015), pp. 49-56. ISSN 1339-4703 (in English)


Conference Proceedings


1. EDUCATION

1.1 Graduate study

Obligatory subjects

- Hydrology
- Landscape Ecology
- Landscape Ecology and Biocology
- 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 Horous 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. THESIS

2.1 Bachelor theses

There were 12 works.

2.2 Graduate theses

Supervisor: Danáčová, M.

Supervisor: Výleta, R.

Supervisor: Macura, V.

Supervisor: Macura, V.

Maliarik, P.: Stabilization of the Handlovka River Channel in Handlová.
Supervisor: Škrinár, A.

Ďurecová, Z.: Analysis of Rainfall Intensities and Their Changes in Slovakia.
Supervisor: Kohnová, S.
Marková, R.: Analysis of SCS-CN Parameters on the Myjava River Basin  
Supervisor: Kohnová, S.

Morvayová, V: Proposed Landscape Engineering Measures and Soil Erosion  
Control for a Selected River Basin.  
Supervisor: Hlavčová, K.

Csicsóová, A.: The Effect of Different Crops on the Course of a Soil Water  
Regime.  
Supervisor: Skalová, J.

Ďurechová, L.: Determining the Course of the Water Retention Curves for the  
Soils of Slovakia.  
Supervisor: Skalová, J.

2.3 Doctoral theses
Jeneiová, K.: Detection of Changes in Annual Flood Time Series  
Supervisor: Kohnová, S.

3. Research
3.1 Research projects
Development of a Regional System of Climate and Rainfall – Runoff Models  
for the Prediction of Runoff under a Changed Climate in the Mountainous  
Regions of Slovakia (2012-2015, Hlavčová, K.), Research Project of APVV- 0303-11

Development of Methods for Determining Climatic and Hydrological Design  
Characteristics (2012-2015, Kohnová, S.) (Research project of the European  
Fund for Regional Development)

Preventing and Remediating Degradation of Soils in Europe Through Land  
Care (RECARE). (2013-1018, Szolgay, J.), Research Project of 7FP No.  
603498.

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
University of Uppsala, Sweden
Delft Hydraulics, Delft, The Netherlands
Wageningen University, Wageningen, 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
University of Natural Resources and Life Sciences, Institute of Hydrobiology  
and Aquatic Ecosystem Management, Vienna, Austria

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 the Editorial Board of the Journal of River Basin  
Management
Szolgay, J: Member of the Editorial Board of Water Resources Management  
Szolgay, J: Member of the Editorial Board of the Journal of Hydrology  
Szolgay, J: Member of the 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 the EGU
Szolgay, J.: Member of the Association of Hydrological Sciences

Books
Bezák, J.: Analysis of the Use of Hybrid Data-Driven Models for Predictions of  
Hydrological Variables. 1st ed. Bratislava: Slovak University of Technology in  


Regionalization of Pedotransfer Functions of Water Retention Curves for Soils  
in Slovakia. 1st ed. Bratislava: Slovak University of Technology in Bratislava,  

Textbooks
Bratislava: Slovak University of Technology in Bratislava, 2015, 77 pp. ISBN  
978-80-227-4493-5 (in English)
Journals


Conference Proceedings


1. EDUCATION

1.1 Graduate study

Obligatory subjects
Hydraulics I
Hydraulics II
Hydromechanics
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
Hydropower Engineering
Construction of Metallic Hydraulic Structures
Hydraulic Research
Engineering Networks and Water Structures
Automation of Engineering Problems
Special Articles of Hydraulic Structures
Numerical Modelling of Hydraulic Processes
Water and Road Constructions

1.2 Postgraduate courses

Hydropower Systems
Hydraulic Modelling of Hydrodynamic Phenomena
Fluid Mechanics
Advanced Issues of Hydraulic Structures

2. THESIS

2.1 Bachelor theses
There were 15 works.

2.2 Graduate theses
Supervisor: Orfánus, M.

Chlebák, O.: Design of the Sajkov Small Hydropower Plant on the Hornád River
Supervisor: Dušička, P.

Hanzlík, M.: Design of the Hydropower Utilization of the Weir at Vyškovce nad Ipľom
Supervisor: Šulek, P.

Supervisor: Orfánus, M.

Janík, A.: Solution of the Flood Protection of Urban Areas in the Small Carpathians
Supervisor: Šoltész, A.

Klenovič, M.: Design of a Small Hydropower Plant on the Hornád River
Supervisor: Rumann, J.

Kopáčová, A.: Design of Water Management Measures and Hydropower Utilization in the Area of Třistie
Supervisor: Dušička, P.

Križan, M.: Design of a Control Weir on the Váh River
Supervisor: Gramblíčka, M.

Kyseláková, M.: Assessment of the Possibilities of Hydropower Utilization of the Váh River in the Kralovany – Ružomberok Stage
Supervisor: Rumann, J.

Motyka, T.: Design of a Small Hydropower Plant
Supervisor: Šulek, P.

Supervisor: Baroková, D.
Supervisor: Možiešik, L.

2.3 Doctoral theses
Supervisor: Šoltész, A.

Kelčík, S.: Application of Artificial Intelligence Methods in Solving Hydrotechnics Problems  
Supervisor: Květon, R.

Pindjaková, T.: Influence of Hydraulic Parameters on the Groundwater Regime in Urban Areas  
Supervisor: Šoltész, A.

3. RESEARCH

3.1 Research projects


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

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 Group

4. PUBLICATIONS

Books


Textbooks

Journals

Conference Proceedings


1. EDUCATION

1.1 Graduate study

Obligatory subjects

Building Acoustics and Illumination
Building and Energy
Building Constructions 1
Building Constructions 2
Building Constructions 3
Building Constructions 4
Building Constructions 5
Building Constructions V
Building Energy and Environmental Simulation
Building Energy and Indoor Environment Simulation
Building Pathology
Building Physics (in English)
Constructions in Architecture 1 (in English)
Constructions in Architecture 2 (in English)
Constructions in Architecture 3 (in English)
Design Basics
Design of Architectural Constructions
Design Studio
Design Studio 3
Design Studio 4
Ecological Architecture
Excursion
Final Thesis
Fire Engineering of Buildings
Fire Safety of Buildings
Master’s Seminar
Master’s Thesis
Methodology of Scientific Experiments
Modelling of Climatic Processes
Physics of Indoor Environments
Practical Training

Professional Practice
Project 1 – Low-Energy Buildings
Reconstruction of Buildings and Preservation of Monuments 1
Renovation of Buildings
Selected Problems of Building Constructions
Special Architectural Structures
Special Building Constructions
Studio of Building Design I
Studio of Building Design II
Studio of Building Design III
Technical Drawing
Thermal Performance of Buildings

Obligatory elective subjects

Acoustics in Architecture
Advanced Building Materials and Constructions
Aerodynamics and Hydrodynamics of Buildings
Facade Techniques of Intelligent Buildings
Solar Technology and Illumination of Buildings
Thermal Protection of Buildings

Optional subjects

Building-Physical Construction
Computer Graphics
Computer Graphics and Visualization
Computer Graphics and Visualization I
Information Technologies
Building Design

1.2 Postgraduate courses

Aerodynamics and Hydrodynamics of Buildings
Buildings and Energy
Buildings and Urban Acoustics
Building Climatology
Building Constructions – Selected Essays
Building Simulations
2. THESES

2.1 Bachelor theses

There were 188 works.

2.2 Graduate theses

Bab, L.: Pastoral Center
Supervisor: Jakeš, E.

Bajnok, M.: Automobile Centre
Supervisor: Hanuliak, P.

Baláži, P.: Museum
Supervisor: Oláh, J.

Drozdá, L.: An Airport Terminal Building
Supervisor: Dlhý, D.

Dubocký, M.: Bus Station
Supervisor: Mikdósová, T.

Galatová, K.: Office Building
Supervisor: Mikdósová, T.

Galba, J.: Chhtenica Manor House – Monument Restoration of a Building
Supervisor: Vargová, A.

Hudeková, L.: A Library
Supervisor: Puškár, A.

Hulák, T.: Mountain Hotel
Supervisor: Minarovičová, K.

Jahodník, M.: Administrative Center
Supervisor: Hraška, J.

Kašík, M.: Parking Garage
Supervisor: Držka, M.

Kevély, J.: Boathouse
Supervisor: Žilinský, J.

Klamová, L.: A Shopping and Business Centre
Supervisor: Buday, P.

Kosorínová, L.: A White Mill
Supervisor: Jakeš, E.

Kovaľ, P.: Tourist Apartment
Supervisor: Gieciová, M.

Kuchár, D.: College Dormitory
Supervisor: Hraška, J.

Mihál, M.: University Dormitory with Increased Demands for Energy Efficiency
Supervisor: Palková, A.

Pastorková, Z.: Family Farm – Horse Breeding and Hypotherapy
Supervisor: Mikolai, I.

Pofačko, M.: Multifunctional High-Rise Building
Supervisor: Chmúrny, I.

Randuška, M.: Theater for Small Theatrical Forms
Supervisor: Tomašovič, P.

Rišová, K.: Multi-Purpose Sports Hall
Supervisor: Puškár, A.

Roman, D.: Warehouse for Fruits and Vegetables
Supervisor: Jamnický, M.

Sarka, M.: Administrative Building with Double-Skin Facade
Supervisor: Bielek, B.

Sekerák, E.: Logistics Centre
Supervisor: Jamnický, M.

Szekler, L.: A Cable Car Station and Restaurant
Supervisor: Žilinský, J.

Szijártóová, M.: City Hotel
Supervisor: Dlhý, D.

Szusztor, T.: Restaurant with Accommodations
Supervisor: Ingeli, R.

Šedivý, M.: Hotel
Supervisor: Vavrovič, B.

Šimončíková, A.: Main Integrated County Fire and Rescue Station in Trnava
Supervisor: Olbrímek, J.

Šlepecký, P.: Bus Station
Supervisor: Pernišová, A.

Štefánsky, M.: Modernization of an Office Building
Supervisor: Rabenseifler, R.

Supervisor: Palko, M.

Vida, P.: Ultra Low-Energy Apartment Building
Supervisor: Mendfán, R.
2.3 Doctoral theses

Doležel, M.: Thermal Barriers in Wall Construction
Supervisor: Chmúrny, I.

Fabian, M.: Daylight Standard Conditions in Bratislava
Supervisor: Darula, S.

Jurdík, J.: Fire Stations and Modelling the Deployment of Fire Houses in a Selected Area of the Slovak Republic, District of Považská Bystrica and Púchov
Supervisor: Mikolai, I.

Leuck, R.: Entwicklung eines mathematischen Modells zur dreidimensionalen Darstellung der Wirtschaftlichkeit von energieeffizienten Gebäuden (in Germany)
Supervisor: Puškár, A.

Supervisor: Puškár, A.

Michálek, V.: Multiple Glazing for Nearly Zero Energy Buildings
Supervisor: Chmúrny, I.

Mikulášik, M.: Thermal Properties of Earthen Building Walls
Supervisor: Žilinský, J.

Šida, M.: Contribution to Snow Protection Solutions for Pitched Roofs
Supervisor: Oláh, J.

Urbán, D.: Sound Propagation within Double Transparent Constructions
Supervisor: Tomašovič, P.

3. RESEARCH

3.1 Research projects


Simulation of Daylight in an Artificial Sky (2013-2016, Hanuliak, P.) APW-0118-12

Contribution to the Solution of Selected Problems of Building Roofs (2013-2016, Oláh, J.) VEGA 1/0710/13


Pipe System of Active Thermal Protection into External Walls (2015, Puškár, A.) MH SR Voucher PP 61

Application of Basalt Fibre for Improving Rheology Properties of the Concrete and Enhancement of Strength of the Concrete in Building Production (2015, Puškár, A.) MH SR Voucher PP 62

Mobility Between Higher Education Institutions. EEA Scholarship Programme Slovakia (2015-2016 Rabenseifer, R.), EHP-26/SK06-II-01-004/2015


H2020 MSCA – 690970

3.2 International cooperation

Cooperating institutions

TU Vienna, Austria
Wolfin 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 Kharcow, Ukraine
University of Strathclyde, United Kingdom
Chungnam National University, Daejeon, Korea
Membership in international professional organizations

Chmelík, V.; YAN – Young Acoustician Network – representative of the Slovak Republic

Čhmúrny, I.: ISO TC 163 Thermal Insulation, CEN TC 89 Thermal Performance of Buildings – representative of the Slovak Republic (SÚTN BA)


Rychtáriková, M., Chmelík, V.: EAA – European Acoustic Association

Rychtáriková, M.: ICA International Commission on Acoustics (ICA)

4. PUBLICATIONS

Books


Textbooks


Journals


Conference Proceedings


1. EDUCATION

1.1 Graduate study

Obligatory subjects
- Load-Bearing Metal Elements
- Load-Bearing Steel Systems
- Timber Elements and Structures
- Load-Bearing Metal and Timber Elements
- Load-Bearing Steel and Timber Systems
- Structural Metal Design
- Metal and Timber Structures
- Steel, Timber and Glass in Architecture
- Steel Structures and Bridges
- Special Problems of Steel Structures
- Metal Bridges
- Metal and Timber in Civil Engineering
- High-Rise and Long-Span Structures
- Bridge Design
- Composite Structures
- Stability and Plasticity of Steel and Timber Structures
- Experimental Verification

Obligatory elective subjects
- Timber Structures
- High-Rise and Long-Span Structures
- Metal and Timber Structures and Bridges
- Repair of Metal and Timber Structures
- Metal and Timber Structures II
- Steel, Timber and Glass in Architecture
- Metal and Timber Structures
- Structures of Environmental Steel and Timber Buildings
- Repair and Recycling of Steel Buildings
- Load-Bearing Steel and Timber Systems
- Steel Structures of Water Works

2. THESES

2.1 Bachelor theses

There were 2 works.

2.2 Graduate theses

Bednár, T.: An Auditorium
Supervisor: Sógel, K.

Cabadaj, M.: Design of a Double Track Railway Bridge over the Váh River in Trenčín
Supervisor: Ároch, R.

Čahoj, M.: The SEC Hall in Nitra
Supervisor: Brodniansky, J.

Ďurejová, J.: A Multifunctional Sports Hall
Supervisor: Slivanský, M.

Fehérová, E.: A Sports Hall in Prievidza
Supervisor: Sandanus, J.

Ferenc, J.: A Footbridge for Pedestrians and Cyclists in Záhorská Ves
Supervisor: Sandanus, J.

Harmady, D.: A Footbridge over the Váh River in Vrútky
Supervisor: Sandanus, J.

Janovič, M.: A Sports Hall in Malacky
Supervisor: Sandanus, J.

Jakubička, M.: Design of a Multi-Storey Building of a Bio-Incubator, Taking into Account the Effects of Fire
Supervisor: Štujberová, M.

Kováčik, J.: A Railway Bridge over Rožňavská Street at the 6,139 km
Supervisor: Živner, T.

Kramár, R.: An Ice Stadium
Supervisor: Silvanský, M.

Kutarňa, P.: The Urpín Sightseeing Tower
Supervisor: Sandanus, J.
3. RESEARCH

3.1 Research projects

Resistance of Metal Cross-Sections and Members under Combination of Internal Forces and Moments. (2015-2017, Baláž, I.), VEGA 1/0819/15


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
Brandenburg University of Technology, Cottbus, Germany

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 Evolution Group for EN 1993-1-1 Design of Buildings
Baláž, I.: Member of SC3 Evolution Group for EN 1993-1-3 Design of Cold-Formed Members and Sheeting
4. PUBLICATIONS

Books


Journals


Conference Proceedings


Book Review


1. EDUCATION

1.1 Graduate study

Obligatory subjects
- Descriptive Geometry
- Mathematics I
- Mathematics II
- Mathematics III
- Mathematics IV
- Informatics
- 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
- 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)
- Applied Statistics
- Projection Methods
- Applied Mathematics

Optional subjects
- Architectural Mathematics
- Foundations of Mathematics

Recommended subjects
- Informatics and Statistics
- Mathematical Statistics
- Numerical and Stochastic Methods

1.2 Postgraduate courses

- Aggregation Functions
- Decision Theory
- Discrete Mathematics
- Dynamic and Stochastic Optimisation
- Graph Theory
- Linear Models of Time Series
- Mathematical Basis of the Finite Element Method I
- Mathematical Basis of the Finite Element Method II
- Mathematical Methods in Fluid Flow, Diffusion and Heat Transfer
- Mathematical Models of Fluid Dynamics
- Mathematics
- Multicriteria Decision Support
- Multidimensional Statistics
- Nonlinear Models of Time Series
- Numerical Methods in Fluid Flow, Diffusion and Heat Transfer
- Probability and Statistical Estimation
- Proposed Experiment in Optimization
- Statistical Methods in Geodesy
- Stochastic Processes I
- Time Series Analysis in Civil Engineering

2. THESES

2.1 Bachelor theses

There were 12 works.
2.2 Graduate theses

Daniel, P.: Reconstruction of 3D Objects from Point Clouds Using Surface Evolution
Supervisor: Remešíková, M.

Jasaň, P.: Processing of Data Obtained by Automatic Segmentation Algorithms
Supervisor: Špir, R.

Supervisor: Minárová, M.

Klimeková, Z.: Influence of the Character of a Territory on the Distortion in a Cartographic Projection
Supervisor: Vajsáblová, M.

Kósa, B.: 3D Point Cloud Surface Reconstruction by Using Level Set Methods
Supervisor: Mikula, K.

Supervisor: Stupňanová, A.

Petrovič, P.: Toolkit to Process and Analyze Satellite Radar Data Based on Adaptive Algorithms
Supervisor: Krivá, Z.

Škabla, P: Semi-Implicit High Order Accurate Methods for Advection Equations
Supervisor: Frolkovič, P.

2.3 Doctoral theses

Szatmári, D.: Design and Optimization of Cartographic Projections
Supervisor: Vajsáblová, M.

Supervisor: Mikula, K.

Smišek, M.: Analysis of 3D and 4D Images of Organisms in Embryogenesis
Supervisor: Mikula, K.


Graphs as Network Models with Given Metric Properties and a Given Level of Symmetry (2013-2017, ŠIRÁŇ, J.), APVV 0136-12

Modern Methods of Information Aggregation and Applications (2015-2018, MESIAR, R.), VEGA 1/0420/15


Numerical Modeling in Geodesy (2012-2015, MIKULA, K.), APVV 0072-11

Semi-Implicit Methods for the Solution of Partial Differential Equations (FROLKOVIČ, P.), VEGA 1/0728/15

Symmetric Maps (2014-2016, ŠIRÁŇ, J.), VEGA 1/0007/14

Uncertainty from the Point of View of Probability Theory, Algebra, Self-Adjoint Operators and Quantum Structures (2012-2015, JENČA, G.), APVV-0178-11

3.2 International cooperation

Cooperating institutions

AVL LIST GmbH Graz, Austria
Beijing Institute of Technology, China
CINECA – Supercomputing Centre, Bologna, Italy
CNRS, Paris, France
Communication University of China, Beijing, China
Complutense University, Madrid, Spain
Czech Academy of Sciences, Czech Republic
Czech Technical University in Prague, Czech Republic
Faculty of Information Studies, Novo Mesto, Slovenia
Goethe Center for Scientific Computing, University of Frankfurt, Germany
Goethe University, Frankfurt, Germany
Charles University in Prague, Czech Republic
ICS, Paris, France
Karadeniz Technical University in Trabzon, Turkey
La Sapienza University, Rome, Italy
Open UNI London, Great Britain
Pohang University of Science and Technology, South Korea
The Open University, Milton Keynes, United Kingdom
TU Budapest, Hungary
TU Cracow, Poland
Universita Autonoma, Mexico City, Queretaro, Mexico
Universidad Nacional Autónoma de México, Mexico City, Distrito Federal, Mexico
Universitat Polytechnica e Catalunya in Barcelona, Spain
Universita de Roma, Italy
University of Auckland, New Zealand
University of Bologna, Italy
University of Bremen, Germany
University of Catania, Italy
University of Dortmund, Germany
University of Freiburg, Germany
University of Ghent, Belgium
University of Gröningen, The Netherlands
University of Haifa, Israel
University of Heidelberg, Germany
University of Latvia, Latvia
University of LLeida, Spain
University of Liberec, Czech Republic
University of Linz, Austria
University of Ljubljana, Slovenia
University of Newcastle, Australia
University of Novi Sad, Serbia
University of Ostrava, Czech Republic
University of Pamplona, Spain
University of Sannio, Benevento, Italy
University of the Balearic Islands, Palma de Mallorca, Spain
University of Waterloo, Canada
UPC University in Barcelona, Spain
WB University, Plzeň, Czech Republic
Weierstrass Institute for Applied Analysis and Stochastics, Berlin, Germany
Western Australia University, Perth, Australia
Western Washington University, Bellingham, WA, USA

Membership in international professional organizations
Jenča, G.: International Quantum Structures Association (IQSA)
Kalina, M.: International Quantum Structures Association (IQSA)
Kalina, M.: European Society for Fuzzy Logic and Technology (EUSFLAT)
Komorníková, M.: SEFI Mathematics Working Group
Mesiar, R.: European Society for Fuzzy Logic and Technology (EUSFLAT)
Mikula, K.: European Research Council (ERC)
Mikula, K. – Čunderlík, R.: Joint Study Group 0.7: Computational Methods for High-Resolution Gravity

Field Modelling and Nonlinear Diffusion Filtering within the Inter-Commission on Theory (ICCT) of the International Association of Geodesy (IAG)
Stupčanová, A.: European Society for Fuzzy Logic and Technology (EUSFLAT)
Širáň, J.: London Mathematical Society
Širáň, J.: American Mathematical Society
Ždímalová, M.: European Women in Mathematics
Ždímalová, M.: Indonesian Journal of Combinatorics (Editorial Board)

4. PUBLICATIONS

Books

Parts of Books


Textbooks
Journals


Babakhani, A. – Agahi, H. – Mesiar, R.: A (star, *)-Based Minkowski’s Inequality for Sugeno Integral of Order Alpha > 0. In: Fractional Calculus and Applied Analysis. Vol. 18, No. 4 (2015), ISSN 1311-0454, pp. 862-874 (in English)


Mesiar, R. – Smrek, P.: Choquet-Like Integrals with Respect to Level-Dependent Capacities and Phi-Ordinal Sums of Aggregation Function. In: Kybernetika. Vol. 51, No. 3 (2015), ISSN 0023-5954, pp. 420-432 (in English)


DEPARTMENT OF PHYSICS

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1. EDUCATION

1.1 Graduate study

Obligatory subjects
- Physics I
- Physics II
- Physics (English)
- Engineering Thermodynamics

1.2 Postgraduate courses
- Physical Principles of Measurements
- Special Aspects of Physics
- Heat and Moisture Transport in Building Materials

2. RESEARCH

2.1 Research projects

- Quantification of radiation damage of composite materials for thermonuclear fission reactors (2013–2016) VEGA 1/0402/13

2.2 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 Rennes, France
- Academy of Science of Czech Republic, Prague

Membership in international professional organizations
- Lukovičová, J.: European Society for the Study of Science and Technology
- Kublíha, M.: Scientific Society of Metal Science

3. PUBLICATIONS

Textbook

Journals


Conference Proceedings


Abstracts from international conferences


1. EDUCATION

1.1 Graduate study

Obligatory subjects
- Building Analysis
- Shell Structures
- Special Problems in Dynamics and Statics
- Statics
- Statics (English)
- Structural Analysis
- Structural Dynamics
- Structural Mechanics
- Structural Mechanics (English)
- Theory of Elasticity
- Theory of Elasticity (English)
- Theory of Elasticity and Plasticity

Optional subjects
- Aeroelastics
- Interaction of Structures and Foundations
- Life Span and Reliability of Structures
- Modeling Subgrades
- Non-Linear Mechanics
- Seismic Engineering

Recommended subjects
- Automation in Non-Linear Structural Analysis
- Automation in Structural Dynamics
- Automation in the Statics of Structures
- Elasticity Analysis of Structures
- Stability of Structures
- Structural Modeling Using FEM
- Viscoelasticity of Structural Systems

2. THESSES

2.1 Bachelor theses

There were 16 works.

2.2 Graduate theses

Antal, R.: Effects of Wind upon a Building Having an Irregular Ground Plan
Supervisor: Jendželovský, N.

Drienovská, J.: Static and Dynamic Analysis of a High-Rise Building
Supervisor: Jendželovský, N.

Kostovský, P.: Design of a Foundation below a Turbo Generator Unit
Supervisor: Psotný, M.

Méri, D.: Static and Dynamic Analysis of a High-Rise Building
Supervisor: Ivánková, O.

Mesiar, M.: Effects of Wind upon High-Rise Buildings
Supervisor: Ivánková, O.

Richnavevsky, B.: Static and Dynamic Analysis of a High-Rise Building
Supervisor: Ivánková, O.

2.3 Doctoral theses

Supervisor: Dický, J.

Krchňák, M.: Program for Nonlinear Analysis of RC Frame Structures Considering Shear
Supervisor: Sokol, M.

Štiglic, M.: Design Optimization of Structures with the Consideration of Unilateral Bonds
Supervisor: Dický, J.

3. RESEARCH

3.1 Research projects

Modeling of the Basic Characteristic Quantities of Natural Wind in the BLWT Wind Tunnel STU (2013 – 2015, HUBOVA, O.), VEGA 1/0480/13
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
Bundesformenschung und Prufzentrum, Arsenal, Vienna, Austria
Czech Academy of Sciences, Prague, Czech Republic
Technical University of Ostrava, Czech Republic
Brno University of Technology, Czech Republic
Czech Technical University in Prague, Czech Republic
Budapest University of Technology and Economics, Budapest, Hungary

Membership in international professional organizations

Koleková, Y.: Member of ÖGE Bridges and Building Structures, TU Vienna
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 Technical Committee CEN 250/ SC 8
Sokol, M.: Member of European Society of Biomechanics

4. PUBLICATIONS

Books


Parts of books


Textbooks


Journals

Baláž, I. – Koleková, Y. – Živner, T.: Stability of Timber Cantilever with Doubly Symmetric Profile under Uniform Load q. Interdisciplinarity in Theory and Practice, No. 7 (2015), online, pp. 41-47. ISSN 2344-2409 (in English)

Baláž, I. – Koleková, Y. – Živner, T.: Stability of Timber Cantilever with Doubly Symmetric Profile under Concentrated End Load F. Interdisciplinarity in Theory and Practice, No. 8 (2015), online, pp. 33-38. ISSN 2344-2409 (in English)

Baláž, I. – Koleková, Y.: Effective Areas of Internal and Outstand Elements under Compression Stress Lower than the Yield Strength. Applied Mechanics and Materials, Vol. 769 (2015), pp. 118-125. ISSN 1662-7482 (in English)


Prekop, L.: Bended Pile and the Layered Subsoil. Applied Mechanics and Materials, Vol. 769 (2015), pp. 61-64. ISSN 1662-7482 (in English)


Tvrdá, K.: Foundation Plate Optimization. Applied Mechanics and Materials, Vol. 769 (2015), pp. 81-84. ISSN 1662-7482 (in English)


Conference Proceedings


Tatranská Štrba, Slovakia, May 27-29, 2015. 7 pp. ISBN 978-80-553-2042-7 (in English)

Baláž, I. – Koleková, Y.: Bending, Torsion and Distortion of Thin-Walled Beams. In: Engineering Sciences and Production Management, April 16-17, 2015, Tatranská Štrba, Slovakia, p. 59. ISBN 978-80-971555-4-4 (in English)


Havran, J. – Psotný, M.: Post-Buckling of an Imperfect Plate Loaded in Compression. In: Stability of Structures, 14th Symposium, Zakopane, Poland, June 08-12, 2015, pp. 45-46. ISBN 83-914019-8-7 (in English)

Departments 

Faculty of Civil Engineering – Annual Report 2014


Psotný, M.: Post-Buckling of Imperfect Plate Subjected to Shearing Load. In: Stability of Structures, 14th Symposium, Zakopane, Poland, June 08-12, 2015, pp. 95-96. ISBN 83-914019-8-7 (in English)


1. EDUCATION

1.1 Graduate study

Obligatory subjects

- Technological Project I
- Technological Project II
- Concrete Technology I
- Testing
- Technology of Repairs

1.2 Postgraduate courses

Building Materials
Selected Chapters from Chemistry II

2. THESES

2.1 Bachelor theses

There were 3 works.

2.2 Graduate theses

Gajdošík, P.: Influencing the Shrinkage of Cement Pastes by SRA Admixtures
Supervisor: Štefunková, Z.

Guliš, M.: Influence of Selected Additives on the Plastic Shrinkage of Cement Composites
Supervisor: Štefunková, Z.

Bajus, A.: Verification and Comparison of the Selected Physical-Mechanical Properties of Different Types of Autoclaved Aerated Concrete
Supervisor: Struhárová, A.

Žiačková, A.: The Effect of Moisture Content on the Physical-Mechanical Properties of Autoclaved Aerated Concrete
Supervisor: Struhárová, A.

2.2 Doctoral theses

Janík Branislav: Use of Secondary Raw Materials in the Brick Industry in Order to Improve Thermal Properties of Brick Products for Masonry Structures
Supervisor: Šveda, M.

Supervisor: Pavlík, V.

3. RESEARCH

3.1 Research projects


Reducing the Energy Demand of Buildings during the Use of Secondary Raw Materials from the Chemical and Food Industries in the Manufacture of Brick Products (2015 – 2017 Šveda, M.), VEGA 1/0045/15


3.2 International cooperation

Cooperating institutions

Faculty of Civil Engineering, Brno University of Technology, Czech Republic, Klokoň Institute, ČVUT Prague, Czech Republic

Faculty of Civil Engineering, VŠB – Technical University of Ostrava, Czech Republic
4. PUBLICATIONS

**Journals**


**Conference Proceedings**


1. EDUCATION

1.1 Graduate study

Obligatory subjects
Technology of Construction Processes 1
Costs and Prices in the Building Industry
Technology of Construction Processes 2
Building Technology and Management
Professional Training
Protection of the Environment
Seminar for the Bachelor Thesis
Excursion
Technology of Construction Processes 3
Construction of Buildings
Final Work
Technology Project
Pre-Construction Design
Construction Site Facility
Quality Management in Construction
Thesis
Forensic Activities
Historical Building Technologies

Obligatory elective subjects (optional course)
Civil Engineering in Practice
Construction of Buildings
Forensic Activities
Safety and Protection of Health in the Construction Process
A Manager in the Construction Industry
Construction Engineering in Practice
Technology of Maintenance
Technological Processes in Technical Facilities
Modelling of Construction Processes
Technology of Building Renovation I.
Computer-Aided Preconstruction Design

Financial Management
Technology of Finishing Processes
Pathology of Buildings
Non-Destructive Testing
Technology Project I.
Technology Project II.
Technology of Building Renovation II.
Ethics of an Undertaking
Historical Construction Technologies I.
Costs and Prices

In English
Building Economy (CE)
Building Technology (CE)
Quality Management in CE (CE)
Facility Management (CE)
Financial Management (CE)
Building Planning and Realization (CE)
Technology of Building Renovation (CE)
Building Site Management (CE)

1.2 Postgraduate courses

Dissertation Projects I.- VII.
Dissertation Exam
Pedagogic Activity
Scientific and Publication Activities I. - V.
Dissertation Work

2. THESES

2.1 Bachelor theses

There were 86 works.

2.2 Graduate theses

Annuš, D.: Multifunctional Building on Ružinovská Street, Bratislava.
Supervisor: Somorová, V.
Bača, L.: Residential Building on Zlatovská Street, Trenčín.  
Supervisor: Šubek, M.

Supervisor: Jankovichová, E.

Supervisor: Prokopčáková, K.

Baláž, R.: Multifunctional Building.  
Supervisor: Funtík, T.

Supervisor: Chamulová, B.

Supervisor: Makýš, P.

Supervisor: Antošová, N.

Bodnár, S.: Sewage Clarification Plant in Kežmarok.  
Supervisor: Hulínová, Z.

Borovjak, M.: Residential Complex in “Nový Poprad”.  
Supervisor: Búciová, M.

Supervisor: Makýš, O.

Supervisor: Matušek, R.

Supervisor: Makýš, O.

Supervisor: Chamulová, B.

Supervisor: Somorová, V.

Supervisor: Búciová, M.

Supervisor: Prokopčáková, K.

Figuli, I.: Multifunctional Apartment House.  
Supervisor: Šubek, M.

Supervisor: Somorová, V.

Franta, J.: Turancar BUSPORT – Administrative Building and Service Hall.  
Supervisor: Jankovichová, E.

Gombarček, I.: Selected Parts of the Technological Preparation of a Building Construction: Martin Center of Biomedicine.  
Supervisor: Briatka, P.

Supervisor: Jankovichová, E.

Haršany, F.: Panorama Centrum in Pezinok.  
Supervisor: Búciová, M.

Chrappa, F.: Multifunctional Apartment House.  
Supervisor: Božík, M.

Imriška, V.: Rhenus Depo II.  
Supervisor: Briatka, P.

Jamrich, A.: Slab Residential Building.  
Supervisor: Szalayová, S.

Jančovič, D.: “Púchov - II. Stage” Railway Station Building.  
Supervisor: Antošová, N.

Jurányi, I.: “DINE” Multifunctional Building.  
Supervisor: Jankovichová, E.

Jurövčík, Š.: PERI GmbH Complex.  
Supervisor: Makýš, P.

Supervisor: Hulínová, Z.

Kapičák, D.: Multifunctional Building “At the Crossroads”.  
Supervisor: Petro, M.

Supervisor: Chamulová, B.

Klenovská, L.: Selected Parts of the Construction and Technological Preparation for the Perla Ružinova – II. Stage Construction.  
Supervisor: Juríček, I.

Klesniak, P.: Construction – Technology Project for the Construction of the BYTOVÝ DOM MILESTONES, III. Stage, Banská Bystrica.  
Supervisor: Gašparík, J.

Klinovský, J.: Data Centre.  
Supervisor: Božík, M.

Kobetičová, V.: AXENCE Slovakia Park, Bratislava.  
Supervisor: Prokopčáková, K.
Köszegiová, H.: Multifunctional Building.
Supervisor: Petro, M.

Košlík, A.: Administrative Building of the Railway Station in Púchov – Phase "I".
Supervisor: Antošová, N.

Krajčírovčová, D.: REDING II. Administrative Center, Račianska Street, Bratislava-Rača.
Supervisor: Hulinová, Z.

Supervisor: Jankovichová, E.

Kúsek, P.: Residential Building, Zlaté Moravce.
Supervisor: Szalayová, S.

Kúsek, P.: Residential Complex, Vráble.
Supervisor: Szalayová, S.

Supervisor: Žubek, M.

Supervisor: Matušek, R.

Supervisor: Funtík, T.

Matušek, P.: Silvanium II. Multifunctional Structure
Supervisor: Jankovichová, E.

Maxian, F.: Selected Parts of the Building-Technological Preparation of the Perla Ružinova II. Stage Building.
Supervisor: Briatka, P.

Supervisor: Hulinová, Z.

Miškovči, M.: Multifunctional Building, Dunajská Street, Bratislava.
Supervisor: Hulinová, Z.

Müller, R.: Selected Parts of a Building Technology Project for the Construction of the "F" SLOVAKTUAL Production Hall, Pravenc.
Supervisor: Chamulová, B.

Murín, A.: "Oscar" Residential Complex, Martin.
Supervisor: Matušek, R.

Mydla, J.: Multifunctional House on Rusovská Street.
Supervisor: Prokopčáková, K.

Nagy, J.: Selected Parts of the Site Facility Project for an Industrial Factory Hall and Administration Building.
Supervisor: Juriček, I.


Šiška, M.: Multifunctional Residential Building. Supervisor: Božík, M.

Škandík, J.: Aqua Area I. Supervisor: Božík, M.

Šoltysová, J.: Multifunctional Building. Supervisor: Petro, M.

Šrobárová, V.: Multifunctional Building on Gagarinova Street, Bratislava. Supervisor: Makýš, P.

Trepáč, J.: Multifunctional Apartment House. Supervisor: Božík, M.

Turík, S.: Na Vrátkach Multifunctional Building, Bratislava. Supervisor: Búciová, M.


Vajdík, D.: "PERLA RUŽÍNOVA 2" Multipurpose Center. Supervisor: Řubek, M.

Vuová, B.: Multifunctional Residential Building, Radničné námestie, Rača. Supervisor: Makýš, P.

2.3 Doctoral theses

Lusová, I.: The Selection of the Optimal Method for Determining the Compressive Strength of Concrete. Supervisor: Juríček, I.

2.3.2 International cooperation

Cooperating institutions

CONTEC, Kralupy nad Vltavou, Czech Republic
Czech Technical University (ČVUT), Faculty of Building Engineering, Prague, Czech Republic
District Institute for the Preservation of Cultural Heritage, Brno, Czech Republic
ICCRROM (International Centre of the Study of the Preservation and Restoration of Cultural Property), Rome, Italy
National Institute for the Preservation of a Cultural Heritage, Prague, Czech Republic
Technical University (VUT), Faculty of Building Engineering, Brno, Czech Republic
Department of Building Technology, Brno, Czech Republic

Membership in international professional organizations

Gašparík, J.: International Association for Automation and Robotics in Construction.
Makýš, O.: International Council on Monuments and Sites - Slovak branch, Bratislava, SK.
Makýš, O.: Society for the Technology of the Protection of Monuments, Prague, CZ.

4. PUBLICATIONS

Books


Journals


Conference Proceedings


Other

1. EDUCATION

1.1 Graduate study

Obligatory subjects
- Environmental Technology VHVS
- Environmental Technology
- Water Chemistry and Hydrobiology
- Chemistry of Water, Soil, Air and Waste
- Environmental Hygiene
- Landscape Engineering
- Infrastructure of Urban Regions
- Landscape Eng. and Infrastr. of Urban Regions
- Water Pollution Control
- Sanitary Engineering Structures
- Design and Execution of Water Management Structures
- Water Supplies and Water Treatment
- Public Utility Networks
- Solid Waste Management
- Public Utility Networks and Water Management Structures
- Sewerage and Waste Water Treatment
- In-Situ Training
- Practical Training
- Solid Waste Management
- Urban Hygiene
- Selected 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 14 works

2.2 Graduate theses
- Debnár, M.: Design and Reconstruction of Public Utility Networks
  Supervisor: Božíková, J.
- Bednarčík, T.: Proposed Secondary Disinfection for Indoor and Outdoor Whirlpools in a Thermal Park
  Supervisor: Božíková, J.
Havašová, J.: Impact of Climate Change on Urban Areas  
Supervisor: Holubec, M.

Janíková, K.: Membrane Processes in Water Treatment  
Supervisor: Barloková, D.

Komorníková, L.: LCA WWTP Vráble  
Supervisor: Stanko, Š.

Korbeľa, D.: Use of Statistical Methods and Simulation Programs in the Planning Process of the Rehabilitation and Reconstruction of the WWTP of the Town of Stupava  
Supervisor: Tóthová, K.

Majliš, D.: Solution to an Environmental Burden  
Supervisor: Škultétyová, I.

Novák, P.: Assessment of the Sewage System of the Town of Levice  
Supervisor: Stanko, S.

Vilímek, I.: Design of the Recreational and Sitting Pool on the Grounds of the Patince Thermal Pool  
Supervisor: Kríš, J.

2.3 Doctoral theses

Berta, P.: Extension of Pollution in Surface Waters  
Supervisor: Sokáč, M.

Dubcová, M.: Use of Multi-criteria Analysis for the Sustainability of Water Management Systems

Gregušová, V.: Mathematical Simulation of WWTP Structures  
Supervisor: Stanko, Š.

Hanušová, A.: Possibilities for the Removal of Selected Micropollutants from Components of the Environment  
Supervisor: Ilavský, J.

Hrudka, J.: Dynamic Modelling of WWTP Structures  
Supervisor: Stanko, Š.

Kunštěk, M.: Pharmaceuticals in Water and Possibilities for Their Removal  
Supervisor: Barloková, D.

Molnár, T.: Optimization and Modernization of Technological Processes Used in Water Treatment  
Supervisor: Barloková, D.

Molnárová, I.: Optimization of the Operation of a Sewage System  
Supervisor: Stanko, Š.

Rusnák, D.: Significance of Boundary Conditions in the Hydraulic Assessment of a Sewage Network  
Supervisor: Stanko, Š.

Kapusta, O.: Optimization of the Filtration Process of a Small Surface Water Treatment Plant to Obtain Safe Drinking Water  
Supervisor: Barloková, D.

Štefanec, B.: Effectiveness of the Employment of GIS in the Operation of the Technical Infrastructure of Water Companies  
Supervisor: Sokáč, M.

3. RESEARCH

3.1 Research projects


ANAFAMS - Analysis of Factors for the Frequency of Cleaning Weather Stations. (2015 Rusnák, D.) STU Grant for excellent team of young researchers

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 Częstochowska, Częstochowa, Poland
University of Pavia, Pavia, Italy

Membership in international professional organizations

Barloková, D.: Member of Czechoslovak Association of Water Experts
Ilavský, J.: Member of Czechoslovak Association of Water Experts
4. PUBLICATIONS

Textbooks

Journals

Conference Proceedings


DEPARTMENT OF BUILDING SERVICES

Head of Department

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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
Design IV
Design V
Design VI
Air Conditioning
Sanitary Techniques
Water Delivery and Drainage
Computer Design Systems
Measurement and Control
Energy Supply of Buildings
Excursions
Building Control Systems
Special Seminar
Heating Systems
Industrial Installations
Renewable Energy in the Technical Equipment of Buildings
Ventilation and Air Conditioning Systems I
Fire-Fighting Equipment
Diploma Seminar

Optional Subjects

Technical Equipment
Sanitary-Technical Equipment
Heating Systems
Combustion Theory and Techniques
Ventilation and Air Conditioning Systems

Industrial Air Conditioning Systems II
Sanitation Audit
Heating Audit
Ventilation Audit
Operation of Air Conditioning Systems
Heat Delivery to Buildings
Renovation of Building Services
Indoor Environment of Buildings
Environmental Audit of Buildings

Postgraduate courses

Indoor Environment of Buildings
Energy Audit of Buildings
Ph.D. Project I, II, III
Ph.D. Project IV, V, VI
Teaching I – IV
Sanitary Installations
Heating
Ventilation and Air Conditioning

2. THESES

2.1. Bachelor theses

There were 3 works.

2.2 Graduate theses

Olejka, M.: Decentralised ventilation of storage spaces of logistics center
Supervisor: Straková, Z.

Kiripolszky, Z.: Design of ventilation for administrative buildings and design of heat and cold’s source
Supervisor: Füri, B.

Fricová, L.: Ventilation and cooling of selected areas of the multipurpose building
Supervisor: Straková, Z.

Prno, T.: Ventilation and air conditioning of culture house
Supervisor: Straková, Z.
Števko, T.: Ventilation and fire ventilation of underground garage
Supervisor: Straková, Z.

Križanová, V.: Ventilation and warm air heating of production hall with administrative building
Supervisor: Straková, Z.

Hincová, B.: Ventilation of Audi service station in Bratislava – Dúbravka
Supervisor: Bočo, R.

Olšová, V.: Ventilation of non-residential character’s building
Supervisor: Šabíková, J.

Piskláková, K.: Ventilation of primary school’s part in Piešťany
Supervisor: Bočo, R.

Kalivodová, K.: Ventilation of Lumière cinema in Bratislava
Supervisor: Bočo, R.

Sokolíková, Z.: Kitchen ventilation in the shopping center
Supervisor: Bočo, R.

Augustin, P.: Energy Use of Heat from Communal Waste
Supervisor: Takács, J.

Belovič, L.: Application of Active Thermal Protection for Building Heating and Cooling
Supervisor: Kalúš, D.

Supervisor: Petráš, D.

Bozíková, Z.: Environmental Evaluation of Building Service Operation in an Office Building
Supervisor: Petráš, D.

Czibová, S.: Alternatives for Rain Water Use in a Dwelling
Supervisor: Januška, J.

Fabianovič, M.: Design of Heat Source for a Dwelling – Biomass Base
Supervisor: Kalúš, D.

Juhászová, G.: Selection of Optimization of Energy Saving Measures During Building Renovation
Supervisor: Krajčík, M.

Krčmárová, L.: Passive Cooling from Building Envelope Surface Treatment Point of View
Supervisor: Šabíková, J.

Maršálek, A.: Comparison of Alternatives for Heat Delivery in a Building and Design of Heat Source
Supervisor: Krajčík, M.

Supervisor: Füri, B.

Ondisová, M.: Comparison of Different Heat Sources for a Family House – Biomass Base
Supervisor: Takács, J.

Pašková, Z.: Centralized Heat Production via Biomass Boiler – Kysuce county
Supervisor: Skalík, L.

Straňák, M.: Calculation and Design of Heat Source for a Basic School – Biomass Base
Supervisor: Takács, J.

Úradničková, K.: Ventilation in a Gymnasium
Supervisor: Šabíková, J.

Kaniová, H.: Design of a Drainage System and Wastewater Pre-treatment Systems alternatives in Office Building
Supervisor: Peráčková, J.

Košč, I.: Alternative Gas Supply Systems for a Dwelling House
Supervisor: Peráčková, J.

Majerech, M.: Design of the System for Reusing of Rainwater
Supervisor: Jánošková, T.

Mihel, R.: Design of Automatic Sprinkler System
Supervisor: Jánošková, T.

Kozár, J.: Design of a Sanitary Technology Systems for a Car Showroom
Supervisor: Tonhauzer, I.

Kudiváni, P.: Design of a Sanitary Technology Systems for a Dwelling House for Disabled Peoples
Supervisor: Peráčková, J.

Načevová, L.: Design of a Water Supply System using Local Water Source for a Church Centre
Supervisor: Peráčková, J.

Pálešová, T.: Design of Systems for conveying of Rainwater and Alternative Soakaways from a Hotel
Supervisor: Peráčková, J.

Ruzová, A.: Design of the System for conveying, Reusing and Soakaway System for Rainwater in the Family house
Supervisor: Jánošková, T.

Zvára, M.: Alternative Design of a Progressive Hot Water Preparing System for a Dwelling House
Supervisor: Peráčková,
J. Žumárová, T.: Design of a Water Supply System in a Senior House with reusing of Rainwater  
Supervisor: Peráčková, J.

Barnová, Z.: Utilization of photovoltaic to support the heat pump for heating / cooling in office building  
Supervisor: Kaluš, D.

Halaj, M.: Low temperature heating and high temperature cooling in office building  
Supervisor: Petráš, D.

Hrčková, L.: Design of the heat source for biomass combustion for object of culture house and town hall  
Supervisor: Lulkovičová, O.

Chudá, Z.: Hydraulic balancing of heating system and energy audit of residential building  
Supervisor: Petráš, D.

Ivančíková, L.: Low temperature heating and high temperature cooling in office building  
Supervisor: Kaluš, D.

Kmešo, D.: Heating system of residential building with a biomass heat source and solar energy system for domestic hot water  
Supervisor: Kaluš, D.

Koscelníková, V.: Design of the heating system for manor-house building  
Supervisor: Kurčová, M.

Lisik L.: Design of the combined heat source for a manor house building with services  
Supervisor: Lulkovičová, O.

Lörincz, A.: Calculation and design of biomass heat source for primary school building in Senec  
Supervisor: Takács, J.

Michalec, M.: Hot water floor heating for multifunctional building with heat pump  
Supervisor: Petráš, D.

Miterko, M.: Reconstruction of hot water heating system in primary school in village Báhoň  
Supervisor: Takács, J.

Pál, V.: Analysis of utilization of geothermal energy for greenhouse facility in village Zemné  
Supervisor: Takács, J.

Perdík, J.: Calculation and design of heat source based on heat pump and low temperature heating for office building  
Supervisor: Takács, J.

Pilišanek, M.: Design of combined heat source with use of solar energy for residential building  
Supervisor: Lulkovičová, O.

Povoda, J.: Realization project of heating and cooling for multifunctional building  
Supervisor: Koudelková, D.

Rigas, D.: Hydraulic balancing of heating system in residential building  
Supervisor: Kurčová, M.

Šalátová, S.: Design of various heat sources in residential building  
Supervisor: Lulkovičová, O.

Šimková, A.: Reconstruction of heating system in sacral building  
Supervisor: Koudelková, D.

Šoula, J.: Calculation and design of low temperature heat source based on heat pump for office building  
Supervisor: Takács, J.

Šulek, M.: Design of heat source based on renewable source of energy for kindergarten building  
Supervisor: Lulkovičová, O.

Vozatár, M.: Decentralisation of heating in large space building  
Supervisor: Kaluš, D.

Zavadová, M.: Design of heat source with condensation technique for dormitory building  
Supervisor: Lulkovičová, O.

2.3 Doctoral theses

Supervisor: Takács,

Supervisor: Takács, J.

Supervisor: Takács, J.

Supervisor: Takács, J.

Čermanová, Z.: The Consumption of Hot Water and an Energy Balance of Hot Water’s Preparation in Apartment Houses  
Supervisor: Peráčková, J.

Supervisor: Lulkovičová, O.
4. PUBLICATIONS

Books

Textbooks

Journals


Koudelková, D.: Optimization of the Ventilation System Operation by Air Quality Based Ventilation Control. In: Magyar Épületgépészet. Vol. 64, no. 6 (2015), p. 11-14. ISSN 1215-9913. (in English)


Conference Proceedings


Patents and Standards

Kalúš, D.: Osvedčenie o zápisе patentového vzoru č. E 18881 Tepelnoinzolačný panel pre systémy s aktivným riadením prechodu tepla, Register európskych patentov, 2. 10. 2015.
1. EDUCATION

1.1 Graduate study

Obligatory subjects

- History of Architecture and Civil Engineering
- History of Architecture and Art 1
- Typology 1
- Drawing and Composition
- Design Studio 1
- History of Architecture and Art 2
- Design Studio 2
- Composition and Colour in Architecture
- Typology 2
- Typology 3
- Bachelor’s Work
- Urbanism
- Renovation of Buildings and Preservation of Monuments 1
- Typology 5
- Design Studio 4
- Urbanism 2
- Design Studio 5
- History of Architecture and Art 3
- Restoration and Preservation of Monuments 2
- Design Studio 6
- Urbanism 3
- Interior Design 1
- Design Studio 7
- Design Studio 8
- Design Studio 9
- Special Seminar
- Thesis
- Design Studio 10
- Internship

Optional subjects

- Drawing and Modelling
- Typology 4
- Philosophical, Aesthetic and Compositional Principles in Architectural Design
- History of Urban and Rural Settlements
- History of Drawing and Sketching

Obligatory elective subjects

- Drawing and Modelling
- Typology 4
- Philosophical, Aesthetic and Compositional Principles in Architectural Design
- History of Urban and Rural Settlements
- History of Drawing and Sketching

1.2 Postgraduate courses

Doctoral Degree Study: Theory and Construction of Building Structures

2. THESES

2.1 Bachelor theses

There were 22 works.

2.2 Graduate theses

- Fašungová, Z.: Leisure Time Centre
  Supervisor: Bauer, P.
- Eržiak, M.: A Center of Coffee Culture
  Supervisor: Bauer, P.
- Polakovičová, D.: Swimming Pool
  Supervisor: Bauer, P.
- Weiserová, V.: Multifunctional Object
  Supervisor: Bauer, P.
- Liptáková, S.: Leisure Time Complex
  Supervisor: Borecká, E.
- Jevčík, M.: Municipal Office in Leopoldov
  Supervisor: Gürtler, I.
Viskup, M.: Municipal Office in Leopoldov
Supervisor: Gürtler, I.

Púpala, P.: Municipal Office in Leopoldov
Supervisor: Gürtler, I.

Szilvássy, R.: Municipal Office in Leopoldov
Supervisor: Gürtler, I.

Slavkova, M.: Hotel
Supervisor: Husenicová, J.

Arnoulová, J.: Revitalisation of Petržalka
Supervisor: Kubíšová, M.

Hubová, B.: Revitalisation of Petržalka
Supervisor: Kubíšová, M.

Kaššáková, M.: Revitalisation of Petržalka
Supervisor: Kubíšová, M.

Miklášová, B.: Winter Sports Centre
Supervisor: Kuráňová, J.

Polák, M.: Gallery of Modern Art
Supervisor: Kuráňová, J.

Stano, J.: Residential Complex Astana
Supervisor: Kuráňová, J.

Zavarská, B.: Revitalisation of Industrial Centre
Supervisor: Kuráňová, J.

Pituchová, T.: Cultural Centre in Bardejov
Supervisor: Mudroncík, M.

Belica, P.: Municipal Office in Leopoldov
Supervisor: Mudroncík, M.

Šajgalik, P.: Amphitheatre in Banská Bystrica
Supervisor: Mudroncík, M.

Bojtvová, Z.: Revitalisation of Petržalka
Supervisor: Nádaská, Z.

Bubniaková, J.: Revitalisation of Petržalka
Supervisor: Nádaská, Z.

Bránický, F.: Multifunctional Structure with a Student Dormitory
Supervisor: Paňák, P.

Vargic, L.: Hurban Barracks Area
Supervisor: Paňák, P.

Vass, J.: Winery
Supervisor: Paňák, P.

Rošťák, M.: Dolný Kubín Sport Centre
Supervisor: Šimkovičová, V.

Laciková, S.: Kindergarten
Supervisor: Šimkovičová, V.

2.3 Doctoral theses
Pavle, M.: Housing for Senior Citizens
Supervisor: Mudrončík, M.

Pribylíneč, P.: Behaviour of Hysteresis in Porous Material from the Aspect of Humidity
Supervisor: Mudrončík, M.

Schlesinger, R.: Soft Capping of Historic Walls
Supervisor: Húsenicová, J.

Sivoň, P.: Application Morphology of Traditional Architecture
Supervisor: Mudrončík, M.

3. RESEARCH

3.2 International cooperation

Cooperating institutions

VŠB-TU Ostrava, Faculty of Civil Engineering, Czech Republic

ČVUT–Czech Technical University in Prague, Faculty of Civil Engineering, Czech Republic

4. PUBLICATIONS

Books


Journals


Conference Proceedings


5. ACTIVITY IN THE FIELD OF ART


Pribiš M.: Participation in Exhibition XXIV. Salon Bratislava Gallery SVJ Jan., Febr. 2015


Řehák I.: Design and realisation of memorial 2 € coin 200th Anniversary of the Presidency of Slovakia in the EU. Bratislava, Slovak National Bank, July 2015 (awarded)


Řehák I.: Design of golden 100 € collector’s coin: 275th Anniversary of the Coronation of Maria Theresa. Bratislava, Slovak National Bank, Nov. 2015 / awarded

Bauer, P. – Šántová, G., – Mešina, M.: Coneco 2015 – Architectural and Spatial Concept of the Exhibition of the Faculty of Civil Engineering and Slovak Chamber of Civil Engineers. Bratislava Incheba, 25.-28.3.2015

Dohrianská, E. – curator: Exhibition of the Study Programme B-PSA 2010-2014, Faculty of Civil Engineering, Bratislava, Jan. 2015
INSTITUTE OF FORENSIC ENGINEERING

Head of Department
Assoc. Prof. Zora Petráková, PhD.
Tel.: +421 2 59274 701
E-mail: zora.petrakova@stuba.sk

1. EDUCATION

1.1 Graduate study

Optional subjects
Bases 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 on “Improvement of Experts”

3. RESEARCH

3.2 International cooperation

Cooperating institution
VUT Brno, Czech Republic,
VŠB Ostrava, Czech Republic

4. PUBLICATIONS

Journals


Conference Proceedings


DEPARTMENT OF LANGUAGES

Head of Department
PhDr. Dagmar Špildová
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1. EDUCATION

1.1 Graduate study

- English
- German

1.2 Postgraduate courses

Ph.D. courses in Advanced English

2. RESEARCH

2.1 International cooperation

- British Council, Bratislava, Slovakia
- Institute of Technology, Tralee, Ireland

2.2 Educational project

Lifelong Learning Programme Vocationally Oriented Culture and Language in the Medical Emergency Sector 2014 – 2016 (Špildová, D.), VOCAL – Medical LLP/LdV/TOI/2013/IRL-506

3. PUBLICATIONS

Books


Journals


Conference Proceedings


Reviewing


1. EDUCATION

1.1 Graduate study

Optional Subjects

Aerobics
Basketball
Swimming
Volleyball
Football
Skiing
Water Sports /Kayaking, Canoeing/
Tennis
Squash
Floorball
Hiking
Aquagymnastics
Badminton

2. RESEARCH

Cooperation

The Faculty of Physical Education and Sports, Comenius University,
Bratislava, Slovakia.

3. PUBLICATIONS

Parts of Books

Kvetáková, L.: Body Composition of Flat Water Racers. From Research to
978-80-227-4485-0 (in Slovak)
1. EDUCATION

1.1 Graduate study

Obligatory subjects

Construction and Commercial Law
Construction and Land Law
Construction Law
Basic Law
Entrepreneurship Law
Environmentalism
Geocology
History of Architecture and Civil Engineering
Land Law
Law
Legal Forms of Entrepreneurship
Macroeconomics
Philosophy
Political Science
Sociology

Optional subjects

Commercial Law
Construction Law
Engineering Ethics
Environmental Law
Globalization
Sociology

2. RESEARCH

2.1 International cooperation

Czech Technical University, Prague, Czech Republic

4. PUBLICATIONS

Parts of Books


Textbooks


Conference Proceedings


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