DEPARTMENT OF STEEL AND TIMBER STRUCTURES

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I. STAFF

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II. EQUIPMENT

II. 1 Teaching and Research Laboratories

The Department performs educational activities in the field of steel and timber structures and bridges at the Faculty of Civil Engineering. The main part of its teaching is aimed at the branches of Civil Engineering and Architecture, Structural Engineering and Water

Management. Courses are offered in the theory, design, construction, erection and experimental investigation of building structures, bridges, and special engineering constructions with steel, timber and composite load-bearing systems.
The Department has a mechanical workshop for metal and timber work, a welding shop, and testing equipment for materials, as well as plane and spatial structural models, members and connections. The laboratory is equipped to perform experiments with loads up to 2500 kN.

II. 2 Special Measuring Instruments and Computers

Strain gauge instrumentation - Hottinger Baldwin Messtechnik, connected with computer-aided analyses of experimental results.
Mechanical and hydraulic testing machines for tension and compression static loads up to 1000 kN and in torsion up to 2 kNm.

III. TEACHING

III. 1 Graduate Study

Obligatory subjects

Subject	Semester	Hours per Week		Lecturer
		Lectures	Seminars	
Steel and Timber Structures	5	4	2	J. Brodniansky F. Draškovič
Steel Members	5	4	2	I. Baláž
Steel Members	5	2	2	I. Baláž J. Brodniansky
Steel Structures	6	2	2	Z. Agócs J. Brodniansky
Steel Structures	6	3	2	Z. Agócs
Timber Structures I.	7	2	2	F. Draškovič
Timber Systems	7	2	2	F. Draškovič
Timber Systems	7	2	1	F. Draškovič
Construction Project	7	0	4	J. Čierna J. Sandanus
Timber Systems	8	2	1	F. Draškovič
High-Rise and Long-Span Steel Structures	8	2	1	Z. Agócs J. Brodniansky
Steel Bridges I.	8	3	2	J. Lapos
Composite Structures	8	2	2	J. Lapos
Stability and Plasticity of Steel Structures	9	2	2	I. Baláž J. Lapos
Steel Bridges II.	9	2	2	J. Lapos
High-Rise and Long-Span Steel Structures	9	2	2	Z. Agócs J. Brodniansky
Special Seminar	9	0	3	Z. Agócs I. Baláž J. Brodniansky J. Čierna

			F. Draškovič V. Kalousek J. Lapos J. Sandanus
Design Studio	9	0 - 5	Z. Agócs J. Brodniansky
Diagnosis and Reconstruction of Steel and Timber Structures	10	2 - 1	Z. Agócs F. Draškovič
Timber Structures II.	10	3 - 2	F. Draškovič
Diagnosis and Reconstruction of Steel and Timber Structures	10	3 - 2	Z. Agócs F. Draškovič
Thin-Walled Steel Structures	10	3 - 2	I. Baláž
Advanced Steel and Timber Structures	10	3 - 2	Z. Agócs F. Draškovič
Special Seminar	10	0 - 5	Z. Agócs I. Baláž J. Brodniansky J. Čierna F. Draškovič V. Kalousek J. Lapos J. Sandanus
Design Studio	10	0 - 5	Z. Agócs J. Brodniansky

Optional Subjects

Subject	**Semester**	**Hours per Week**		**Lecturer**
		Lectures	**Seminars**	
Advanced Timber Structures	8	2 - 2		F. Draškovič
Advanced Steel Structures	9	2 - 2		Z. Agócs V. Kalousek
Hydrotechnical Steel Structures	9	2 - 1		J. Lapos
Special Timber Structures	9	2 - 1		F. Draškovič
Technological Steel Structures	10	2 - 2		V. Kalousek
Experimental Verification of Building Structures	10	1 - 3		V. Kalousek

IV. RESEARCH TARGETS

The research activity of the Department is devoted to problems involving:
- materials and connections (wood rheology, glued timber connections, protection of materials),
- stability of columns and frames, stability of plates, thin-walled systems (shear-lag, torsion, distortion),
- new types of construction design and their behaviour (cable structures, space trusses, crane runways, composite structures, glued timber structures),
- glass structures,
- diagnosis, reconstruction and strengthening of structures,

- computers in the research and design of structures.

V. RESEARCH PROJECTS

1. VEGA 1/0309/03 Analysis and Development of New Load-Bearing Systems Made from Steel, Glass, Membranes and Cables. Development of Methods of Reconstruction and Diagnoses for Important Structures and Pipeline Ducts, Taking Into Account the Protection of the Environment (Prof. Agócs)
2. VEGA 1/0325/03 Thin-Walled Metal Crane Runway Girders (Prof. Baláž)
3. VEGA 1/0326/03 Development of the Possibilities of the Usage of Timber, Its Composites and Combinations, for Load-Bearing Structures (Assoc. Prof. Draškovič)

VI. COOPERATION

VI. 1 Cooperation in Slovakia

1. Alu Global, Bratislava
2. Bratislavská vodárenská spoločnosť, a.s.
3. Dopravoprojekt Bratislava
4. Ing. Bojmír Stanislav, PhD., Žilina
5. Ing. Gáťa Andrej GPG
6. Ing. Nádaský Pavol, PhD, Trnava
7. Ing. Recký Jozef, Bratislava
8. Ingsteel Bratislava
9. Mestská časť Bratislava – Nové mesto
10. Ministerstvo výstavby a regionálneho rozvoja SR
11. Monsta Hlohovec
12. Občianske združenie pre obnovu Ipeľských mostov
13. Orange, Bratislava
14. Prematrade, s.r.o., Trnava
15. ŠDVÚ Bratislava
16. SHMÚ Bratislava
17. SPP, a.s., divízia Transit Nitra
18. SPP, a.s., divízia Transit Senica
19. Stavokov, Trenčín
20. SÚTN Bratislava
21. Výskumný ústav zváračský, Bratislava

VI. 2 International Cooperation

1. Academy of Steel Construction, Sheffield, UK
2. Application Centre for Mixed Building Technology, Innsbruck, Austria
3. Aristotle University of Thessaloniki, Greece
4. ASTRON Building Systems, Luxembourg and the Czech Republic
5. Bauhaus Universität, Weimar, Germany
6. Centre Information Acier, Brussels, Belgium
7. ČVUT Prague, Czech Republic
8. ECCS, Brussels, Belgium

9. Eformút Kft., Tárczy László, Budapest, Hungary
10. Epistemics Ltd, Sheffield, UK
11. EXCON, a.s, Prague, Czech Republic
12. Faculty of Civil Engineering, VUT Brno, Czech Republic
13. Főmterv Budapest, Hungary
14. Foundation University of Oviedo, Spain
15. HTWS, Zittau, Germany
16. Institute of Continuing Training and Education for the Members of TCG, Athens, Greece
17. Politechnika Gdansk, Poland
18. Politechnika Szczeczinska, Poland
19. Politehnica Timisoara, Romania
20. Steel Construction Institute, Ascot, UK
21. Technical Chamber of Greece, Athens, Greece
22. Technische Universität, Cottbus, Germany
23. Technische Universität, Graz, Austria
24. Technische Universität, Munich, Germany
25. Technische Universität, Vienna, Austria
26. TU Budapest, Hungary
27. University of Liège, Belgium
28. University of Miskolc, Hungary
29. University of Stuttgart, Germany

International Projects

1. Leonardo da Vinci: A New and Flexible Approach to Training for Engineers in Construction – NFATEC
2. Slovak-Greek Bilateral Cooperation Working Programme on Science and Technology: Analysis, Design and Manufacturing Recommendations for Glass-Aluminium Facades with Improved Strength Properties According to Eurocode 9

VI. 2. 1 Visitors to the Department

1. Edith Müller, TU Stuttgart, Germany
2. Prof. C. C. Baniotopoulos, Aristotle University, Thessaloniki, Greece
3. Dr. A. Horváth, Főmterv, Budapest, Hungary
4. Dr. Zs. Nagy, Főmterv, Budapest, Hungary
5. Dr. Schardt, TU Darmstadt, Germany
6. Dr. V. Janata, Excon, Prague, Czech Republic
7. Prof. I. Burgess, Sheffield University, UK

VI. 2. 2 Visits of Staff Members and Postgraduate Students to Foreign Institutions

1. R. Ároch, Barcelona, Spain, Jan. 9 – 12, 2004
2. Z. Agócs, Prague, Czech Republic, Jan. 19 – 20, 2004
3. A. Benková, Brno, Czech Republic, Jan. 20, 2004
4. Z. Agócs, Budapest, Hungary, Jan. 21, 2004
5. J. Brodniansky, Budapest, Hungary, Jan. 21, 2004
6. R. Ároch, Budapest, Hungary, Jan. 21, 2004
7. I. Baláž, Thessaloniki, Greece, Jan. 30 – Feb. 3, 2004
8. Z. Agócs, Budapest, Hungary, Feb. 2, 2004

9. J. Brodniansky, Budapest, Hungary, Feb. 2, 2004
10. Z. Agócs, Budapest, Hungary, Feb. 26, 2004
11. R. Ároch, Budapest, Hungary, Feb. 26, 2004
12. E. Chladný, Budapest, Hungary, Feb. 26, 2004
13. Z. Agócs, Budapest, Hungary, March 3, 2004
14. Z. Agócs, Budapest, Hungary, March 12, 2004
15. R. Ároch, Budapest, Hungary, March 12, 2004
16. E. Chladný, Budapest, Hungary, March 12, 2004
17. R. Ároch, Bruges, Belgium, March 18 – 21, 2004
18. M. Chladná, Bruges, Belgium, March 18 – 21, 2004
19. Z. Agócs, Budapest, Hungary, March 31, 2004
20. Z. Agócs, Budapest, Hungary, April 19, 2004
21. R. Ároch, Budapest, Hungary, April 19, 2004
22. E. Chladný, Budapest, Hungary, April 19, 2004
23. Z. Agócs, Cracow, Poland, April 21 – 23, 2004
24. Z. Agócs, Budapest, Hungary, April 29, 2004
25. R. Ároch, Budapest, Hungary, April 29, 2004
26. J. Brodniansky, Budapest, Hungary, April 29, 2004
27. Z. Agócs, Budapest, Hungary, May 25 - 26, 2004
28. Z. Agócs, Linz, Austria, June 4, 2004
29. J. Brodniansky, Linz, Austria, June 4, 2004
30. R. Ároch, Linz, Austria, June 4, 2004
31. I. Baláž, Lappeenranta, Finland, June 3 – 6, 2004
32. Z. Agócs, Novi Sad, Serbia, June 23 – 26, 2004
33. Z. Agócs, Budapest, Hungary, July 9, 2004
34. J. Brodniansky, Budapest, Hungary, July 9, 2004
35. Z. Agócs, Budapest, Hungary, July 13, 2004
36. R. Ároch, Budapest, Hungary, July 13, 2004
37. K. Sógel, Budapest, Hungary, July 13, 2004
38. R. Ároch, Cambridge, UK, July 22 - 25, 2004
39. M. Chladná, Cambridge, UK, July 22 - 25, 2004
40. J. Brodniansky, Budapest, Hungary, Sept. 2, 2004
41. M. Slivanský, Budapest, Hungary, Sept. 2, 2004
42. R. Ároch, Chania, Greece, Sept. 10 - 14, 2004
43. M. Chladná, Chania, Greece, Sept. 10 - 14, 2004
44. J. Brodniansky, Montpellier, France, Sept. 17 – 24, 2004
45. Z. Agócs, Montpellier, France, Sept. 17 – 24, 2004
46. J. Brodniansky, Budapest, Hungary, Sept. 30, 2004
47. Z. Agócs, Budapest, Hungary, Sept. 30, 2004
48. J. Brodniansky, Brno, Czech Republic, Oct. 14 – 15, 2004
49. M. Chladná, Brno, Czech Republic, Oct. 14, 2004
50. P. Tatarko, Brno, Czech Republic, Oct. 14, 2004
51. Z. Agócs, Budapest, Hungary, Oct. 27, 2004
52. J. Brodniansky, Budapest, Hungary, Oct. 27, 2004
53. R. Ároch, Delft, The Netherlands, Oct. 28 – 31, 2004
54. I. Baláž, Brussels, Belgium, Nov. 19 – 21, 2004
55. J. Brodniansky, Budapest, Hungary, Nov. 26, 2004
56. Z. Agócs, Budapest, Hungary, Nov. 26, 2004
57. Z. Agócs, Hustopeče, Czech Republic, Dec. 2, 2004
58. J. Brodniansky, Hustopeče, Czech Republic, Dec. 2, 2004

59. A. Benková, Hustopeče, Czech Republic, Dec. 2, 2004
60. I. Baláž, Hustopeče, Czech Republic, Dec. 2, 2004
61. J. Lapos, Hustopeče, Czech Republic, Dec. 2, 2004

VI. 2. 3 Membership in International Associations

1. Agócs, Z.: IASS - International Association for Space Structures, WG 6 – Tension and Membrane Structures
2. Agócs, Z.: IASS - International Association for Space Structures, WG 1 – Pipes and Silos
3. Ároch, R.: ECCS - European Convention for Constructional Steelwork, TWG 7.5 Practical Improvement of Design Guidelines, TC 7 Thin-Walled Structures
4. Baláž, I.: IABSE - International Association for Bridges and Structural Engineering
5. Baláž, I.: ASCE - American Society for Civil Engineering
6. Brodniansky, J.: IASS - International Association for Space Structures, WG 6 – Tension and Membrane Structures
7. Brodniansky, J.: IASS - International Association for Space Structures, WG 1 – Pipes and Silos

VII. THESES

VII. 1 Graduate Theses

No.	Student´s name	Title	Supervisor
1.	Peter Buček	Study of a Danube Bridging in the Location of the Old Bridge across the Danube in Bratislava for a Tram	J. Lapos
2.	Juraj Išky	Comparison of Standards for the Design of Timber Structures STN 73 171 and STN P ENV 1995-1-1	F. Draškovič
3.	Martin Petráš	Reconstruction of a Timber Bridge over Kvačianka at Oblazy	F. Draškovič
4.	Marcel Vanko	Highway Bridging of the Danube in Komárno Region	Z. Agócs
5.	Tomáš Živner	Lateral-Torsional Buckling of Beams with Various Boundary Conditions	I. Baláž
6.	Štefan Dibdiak	Design of a Church with a Timber Roof	F. Draškovič
7.	Michal Fronk	Factory Halls in Bratislava – Rača	J. Brodniansky
8.	Barnabás Gáspár	Multi-Purpose Stadium for Bratislava	Z. Agócs
9.	Roman Jánoška	Exhibition Pavilion in Čadca	F. Draškovič
10.	János Kállay	Design of a Timber Roof over a Rehabilitation Facility	F. Draškovič
11.	Daniel Koch	Roof Structure of the National Tennis Centre in Bratislava	J. Brodniansky
12.	Helena Lelkesová	Design of a Steel Structure of a Multi-Storey Building	Z. Agócs
13.	Ľudovít Nagy	Design of a Steel Structure of a Sport Stadium	Z. Agócs
14.	Miroslav Stolárik	Winter Stadium in Martin	J. Brodniansky

15.	Robert Ujváry	Design of a Steel Structure of a Multi-Storey Building	Z. Agócs
16.	René Varga	Winter Stadium in Púchov	J. Brodniansky

VII. 2 Bachelor Theses

No.	Student´s name	Title	Supervisor
1.	Michaela Abelová	Resistance of Cross-Sections to Bending and Axial Force	I. Baláž
2.	Lenka Malešová	Design of a Composite Beam under Fire Action	M. Chladná
3.	Ján Stillhammer	Analysis of the Flexibility of Semi-Rigid Joints in the Case of an Elastic Frame – Parametric Study	R. Ároch
4.	Peter Vaník	Local Stresses of Plate Girders with Slender Webs. Parametric Study	I. Baláž

VII. 3 Doctoral Dissertations

No.	Student´s name	Title	Supervisor
1.	Stanislav Rendek	Behaviour of Thin-Walled Members Considering Distortion	I. Baláž

VIII. OTHER ACTIVITIES

VIII. 1 Special Lectures

[1] Agócs, Z.: A Bridge – An Engineering Structure or Work of Art?, lecture – Hungarian Academy of Sciences, University for Everybody, Komárno, broadcast by Hungarian TV stations, May 19, 2004 (in Hungarian)

[2] Agócs, Z.: Preliminary Design of a New Danube Highway Bridge. 5th International Conference on Bridges Across the Danube 2004. Novi Sad, June 24 – 26, 2004

[3] Agócs, Z. – Maťaščík, M. — Chladný, E. – Masaryk, I.: New Bridge over the Danube in Bratislava. 5th International Conference on Bridges Across the Danube 2004. Novi Sad, June 24 – 26, 2004

[4] Agócs, Z. – Brodniansky, J.: Reconstruction of Steel Space Structures. IASS 2004 Symposium, Montpellier. Shell and Spatial Structures from Models to Realization. Montpellier, France, Sept. 20 – 24, 2004

[5] Agócs, Z. – Brodniansky, J.: Reconstruction and Renewal of Bridges on the Danube and Ipeľ Rivers, 42nd Conference of Steel Structure Fabricators, Hustopeče, Czech Republic, Dec. 2, 2004 (in Slovak)

[6] Ároch, R.: Demonstration of the NFATEC Web-based Educational Package, Seminar on the international Leonardo da Vinci NFATEC Project for members of the Greek Chamber of Engineers, Chania, Crete, Greece, Sept. 13, 2004

[7] Brodniansky, J.: Experimental Verification of Steel, Cable and Glass Structural Elements, Experiment – An Important Source of Knowledge and Verification of Design Methods of Structures, Czech and Slovak "Experiment 2004" Conference, Brno, Czech Republic, Oct. 14 – 16, 2004 (in Slovak)

[8] Chladná, M.: Fire Experiment of a Multi-Storey Building. Experiment – An Important Source of Knowledge and Verification of Design Methods of Structures, Czech and Slovak "Experiment 2004" Conference, Brno, Czech Republic, Oct. 14 – 16, 2004 (in Slovak)

[9] Tatarko, P. - Lapos, J.: Experimental Verification of the Effect of the Flexibility of the Cross-Girder Connection on the Interaction of a Railway Open Bridge Deck with the Main Girders, Experiment – An Important Source of Knowledge and Verification of Design Methods of Structures, Czech and Slovak "Experiment 2004" Conference, Brno, Czech Republic, Oct. 14 – 16, 2004 (in Slovak)

VIII. 2 Commercial Activities for Firms and Institutions

1. Košická Bridge – Z. Agócs, E. Chladný
2. Diagnostic Check of DSTG Údoč – Hornád Bridgings. Phases 1 and 2 – J. Brodniansky, Z. Agócs, J. Sandanus, M. Slivanský
3. Analysis of Life Expectancy of Trnávka Bridging. Phases 1 and 2 – J. Brodniansky, Z. Agócs, M. Erdei, P. Mališ, M. Slivanský
4. Diagnostic Checks of DSTG Slaná – Blh Bridgings. Phases 1 and 2 – J. Brodniansky, Z. Agócs, J. Sandanus, M. Slivanský
5. Diagnostic Checks of DSTG Ipeľ – Tuhársky potok Bridgings. Phases 1 and 2 – J. Brodniansky, Z. Agócs, M. Chladná, J. Sandanus, M. Slivanský
6. Analysis of the Life Expectancy of Ipeľ Bridging. Phases 1 and 2 – J. Brodniansky, Z. Agócs, M. Edrei, P. Mališ, M. Slivanský
7. Proposed Strain Gauge Measurement System for Ipeľské Uľany. Phases 1 and 2 – J. Brodniansky, Z. Agócs, M. Erdei, P. Mališ, M. Slivanský, R. Voletz
8. Diagnostic Checks of DSTG Sikenica – Malina Bridgings. Phases 1 and 2 – J. Brodniansky, Z. Agócs, M. Chladná, R. Voletz
9. Analysis of Life Expectancy of Dudváh Bridging. Phases 1 and 2 – J. Brodniansky, Z. Agócs, M. Erdei, P. Mališ, R. Voletz
10. Control of the Static Calculations of the Dunaujváros Bridge by an Independent Static Calculation, Expert Consultancy. Phases 1 and 2 - Z. Agócs, E. Chladný, M. Maťaščík, J. Brodniansky, R. Ároch, M. Slivanský, K. Sógel, R. Voletz
11. Repair of Corrosion in the Anchor Block at Side A of Hron I Bridging. Line TP DN 1200. Phases 1, 2 and 3. – J. Brodniansky, Z. Agócs, M. Erdei, P. Mališ, R. Voletz
12. Application of European Standards for the Design of Structures in Slovakia – I. Baláž
13. Repair of Corrosion in the Anchor Block at Side B of Trnávka Bridging. Line TP DN 1200. – J. Brodniansky, P. Turček, R. Ravinger, Z. Agócs, M. Erdei, P. Mališ
14. Appraisal of the Technical Condition of the Old (Railway) Bridge in Bratislava - Z. Agócs, J. Brodniansky, R. Ároch, M. Slivanský, K. Sógel, R. Voletz
15. Project of the Váh Bridging Rectification – J. Brodniansky, Z. Agócs, M. Erdei, P. Mališ, M. Slivanský
16. Control Static Calculation of a Steel Structure. Production Facility of Dry Plaster Mixtures – Hasit Slovakia s.r.o. in Lozorno – J. Sandanus, M. Slivanský, P. Tatarko
17. Reconstruction of the Old Bridge Across the Danube in Bratislava (existing railway bridge) - Z. Agócs, J. Brodniansky, R. Ároch, M. Slivanský, K. Sógel, R. Voletz, K. Kálna

18. Repair of Small Cover of TP2, V. Kapušany. Phases 1 and 2 – J. Brodniansky, M. Erdei, P. Mališ
19. Proposed Measurement System for the Trnávka Bridging. Phases 1 and 2 – J. Brodniansky, Z. Agócs, M. Erdei, P. Mališ
20. Proposed Measurement System of Váh Bridging. Phases 1 and 2 – J. Brodniansky, Z. Agócs, M. Erdei, P. Mališ
21. Static Check of Kalinovo-Hamuliakovo Water Tank with Proposed Repair – J. Brodniansky, Z. Agócs,
22. Static Check of Báhoň Water Tank with Propoed Repair – J. Brodniansky, Z. Agócs
23. Static Check of Zohor Water Tank with Proposed Repair – J. Brodniansky, Z. Agócs
24. Assessment of the Deformation Characteristics of Cone Strip Springs – J. Brodniansky, P. Tatarko, M. Slivanský, K. Sógel
25. Control Static Calculations of the Individual Phases of the Disassembly of the Laborec Bridge– J. Brodniansky, M. Slivanský
26. Arrangement of the 6th Symposium (with international participation) on Timber in Building Structures, Bratislava - Kočovce, Oct. 28 – 29, 2004 – F. Draškovič, J. Čierna, J. Sandanus, M. Chladná, K. Sógel
27. Expert's Opinion on the Steel Structures and Foundations of the Bratislava – Kamzík Cableway - Z. Agócs, J. Brodniansky, M. Slivanský, K. Sógel
28. Static Check of the Krásna DN 500 Mountain Crossing with Proposed Repair - J. Brodniansky
29. Static Check of a Floor for an Archive – J. Sandanus
30. Foundations for a Steel Silo Structure for Dry Plaster Mixtures – J. Sandanus

IX. PUBLICATIONS

IX. 1 Journals

[1] AGÓCS, Z. – BRODNIANSKY, J.: Diagnoses, Proposed Special Arrangements and Adaptations of Steel Structures of a Transit Pipeline on Slovak Territory. Konstrukce. 4/2004, pp. XVI – XX (in Slovak)

[2] AGÓCS, Z.: Bridges, Bridges - Sculptures. Élet és Tudomány. No. 20, Vol. LIX, May 2004. Budapest, pp. 624 – 628 (in Hungarian)

[3] AGÓCS, Z.: A Bridge is a Great Memorial of a Specific Era. Metro – Budapest. Journal, May 19, 2004 (in Hungarian)

[4] BALÁŽ, I.: Buckling Lengths of Frame Columns According to ČSN 73 1401. Stavební obzor, No.1, 2004, pp. 23 – 28 (in Slovak)

[5] BALÁŽ, I.: Buckling Lengths of Frame Columns According to STN 73 1401. Inžinierske stavby, No. 1, 2004, pp. 4 - 9 (in Slovak)

[6] BALÁŽ, I.: Structural Eurocodes. Stavební ročenka 2004. JAGA, pp. 200 - 204 (in Slovak)

[7] BALÁŽ, I.: Structural Eurocodes. Stavebnícka ročenka 2004. JAGA, pp. 205 - 209 (in Slovak)

[8] BALÁŽ, I.: Modern Buildings of the 21st Century. Eurostav, No. 2, 2004, pp. 74 - 75 (in Slovak)

[9] BALÁŽ, I.: Introduction of European Standards for the Design of Structures in the Slovak Republic. Eurostav, No. 3, 2004, pp. 8 – 9 (in Slovak)

[10] BALÁŽ, I.: ENV Eurocodes. Eurostav, No. 4, 2004, pp. 53 – 55 (in Slovak)

[11] BALÁŽ, I.: EN Eurocodes. Eurostav, No. 6, 2004, pp. 67 – 70 (in Slovak)

[12] BALÁŽ, I.: EN Eurocodes Introduced into the STN Sytem. Eurostav, No. 7, pp. 52 – 53 (in Slovak)

[13] BALÁŽ, I.: Eurocodes. Normalizácia, No. 5, 2004, pp. 2 – 8 (in Slovak)

[14] BALÁŽ, I.: Superstructures of High-Rise Buildings. Eurostav, No. 8, pp. 34 – 38 (in Slovak)

[15] BALÁŽ, I.: Standards for the Execution of Steel and Aluminium Structures. Eurostav, No. 8, pp. 62 – 63 (in Slovak)

[16] DJUBEK, J. – AGÓCS, Z. – MAŤAŠČÍK, M.: Assessment of the Fatigue Life of the Košická – Bratislava Danube Bridge. Building Research Journal. Institute of Construction and Architecture, Slovak Academy of Sciences. Volume 52, 2004, pp. 57 – 69

[17] FAUST, T. – SEELE, R. - SANDANUS, J.: Connecting Devices in Timber and Concrete Structures Using Lightweight Concrete. Materiály pro stavbu, 4/2004, Bertelsmann Springer CZ, Prague, pp. 28 - 29 (in Slovak)

[18] CHLADNÁ, M.: Fire Resistance of Steel and Concrete Composite Columns. Konstrukce, 6/2004, pp. X - XI

[19] KALOUSEK, V.: Structures of Winter Gardens. Urob si sám, June 2004, Bratislava, pp. 4 – 7 (in Slovak)

[20] RENDEK, S. – BALÁŽ, I.: Distortion of Thin-Walled Beams. Thin-Walled Structures. 42(2), 2004, pp. 255 - 277

[21] SANDANUS, J. – UNEGG, F.: Road Bridge in Austria Made of Solid Timber. Materiály pro stavbu, 8/2004, Bertelsmann Springer CZ, Prague, p. 26 (in Slovak)

[22] TATARKO, P.- LAPOS, J. : Effect of the Flexibility of Connections on the Interaction of the Member Bridge Deck with the Main Girders of a Railway Bridge. Inžinierske stavby, Vol. 52, 2004, No. 2, pp. 25 – 29 (in Slovak)

[23] VIROLA, J. – BALÁŽ, I.: Stonecutters, Sutong and Chongming. Konstrukce, No. 3, 2004, p. 29 (in Slovak)

IX. 2 Books and Textbooks

[1] AGÓCS, Z. – BRODNIANSKY, J. – ZIOLKO, J. – VIČAN, J.: Assessment and Refurbishment of Steel Structures, Spon Press. Taylor & Francis Group. London. 2004, 359 pp.

[2] AGÓCS, Z. – BRODNIANSKY, J. – ZIOLKO, J. – VIČAN, J.: Diagnoses and Reconstruction of Steel Structures. STU Bratislava, 2004, 336 pp. (in Slovak)

[3] ÁROCH, R.: Simple Joints, Lecture of the NFATEC Web-Based Educational Package, in the following languages: Slovak, English, Greek, Hungarian, German, Spanish, 2004, www.nfatec.com

[4] BALÁŽ, I.: Thin-Walled Steel Structures. Effect of Torsion in Thin-Walled Bridge Systems. ES STU Bratislava, 2004, pp. 1 – 295

[5] BALÁŽ, I.: Actions on Bridges. Eurocodes 0-1. SvF STU Bratislava. pp. 171 - 190 (in Slovak)

[6] CHLADNÁ, M.: Loading of Structures under Fire, EUROCODES 0-1-2. SvF STU Bratislava, Nov. 10 – 11, 2004, pp. 73 – 84 (in Slovak)

[7] CHLADNÁ, M.: Fire Engineering Design of Composite Structures, Lecture of the NFATEC Web-Based Educational Package, in the following languages: Slovak, English, Greek, Hungarian, German, Spanish, 2004, www.nfatec.com

IX. 3 Conferences

[1] AGÓCS, Z.: Preliminary Design of a New Highway Bridge Across the Danube. Proceedings of the 5th International Conference on Bridges Across the Danube 2004. Novi Sad, June 24 – 26, 2004, Vol. I, pp. 195 – 199

[2] MAŤAŠČÍK, M. – AGÓCS, Z. – CHLADNÝ, E. – MASARYK, I.: A New Bridge over the Danube in Bratislava. Proceedings of the 5th International Conference on Bridges Across the Danube 2004. Novi Sad, June 24 – 26, 2004, Vol. I, pp. 153 – 158

[3] AGÓCS, Z. – BRODNIANSKY, J.: Reconstruction of Steel Space Structures. IASS 2004 Symposium Montpellier. Shell and Spatial Structures from Models to Realization. Extended Abstracts. Montpellier, France. Sept. 20 – 24, 2004, pp. 326 – 327. The full papers are contained in the attached CD – ROM

[4] AGÓCS, Z. – BRODNIANSKY, J.: Reconstruction of Bridges on the Danube and Ipeľ Rivers, Proceedings of the 42nd Conference of Steel Structure Fabricators, Hustopeče, Czech Republic, Dec. 2, 2004, 6 pp. (in Slovak)

[5] BALÁŽ, I.: Bratislava and Vienna Danube Bridges which Served 100 Years Ago. Proceedings of the 5th International Conference on Bridges across the Danube 2004. Novi Sad / Serbia & Montenegro. June 24 – 26, 2004. Bridges in the Danube Basin. Volume I. B. Stipanic (Editor). EuroGardiGroup, pp. 257 - 268

[6] BRODNIANSKY, J.: Experimental Verification of Steel, Cable and Glass Structural Elements, Experiment – An Important Source of Knowledge and Verification of Design Methods of Structures, Czech and Slovak "Experiment 2004" Conference, Brno, Czech Republic, Oct. 14 – 16, 2004, pp. 35 – 40 (in Slovak)

[7] MIELCZAREK, Z. – DRAŠKOVIČ, F. – WASOVICZ, K.: Konstrukcje przestrzenne z drewna średniowymiarowego o przekroju okraglym. Proceedings of the 6th Scientific Conference on Timber and Timber-based Materials in Building Structures, Szczecin - Miedzyzdroje, Poland, 2004, pp. 75 - 82 (in Polish)

[8] WALD, F. – CHLADNÁ, M. – MOORE, D. – SANTIAGO, A. – LENNON, T.: The Temperature Distribution in a Full-Scale Steel Framed Building Subject to a Natural Fire, Proceedings of the Second International Conference on Steel and Composite Structures, Seoul 2004, paper S2F, p. 218, Techno-Press, Seoul 2004, ISBN 89-89693-11-x-98530

[9] WALD, F. – CHLADNÁ, M. – MOORE, M. – SANTIAGO, A. – LENNON, T.: The Temperature Distribution in a Full-Scale Steel Framed Building Subject to a Natural

Fire, Proceedings of the Second International Conference on Steel and Composite Structures, Seoul 2004, 25 pp., Techno-Press, Seoul 2004, ISBN 89-89693-13-6-98530

[10] CHLADNÁ, M. – WALD, F.: Fire Experiment of a Multi-Storey Building. In: EXPERIMENT 04 - Proceedings. Experiment – An Important Source of Knowledge and Verification of Design Methods of Structures. Proceedings of the Czech and Slovak Conference. Brno, Czech Republic, Oct. 14 – 16, 2004, pp. 637 – 642 (in Slovak)

[11] TATARKO, P. - LAPOS, J.: Experimental Verification of the Effect of the Flexibility of the Cross Girder Connection on the Interaction of a Railway Open Bridge Deck. In: EXPERIMENT 04 - Proceedings. Experiment – An Important Source of Knowledge and Verification of Design Methods of Structures. Proceedings of the Czech and Slovak Conference. Brno, Czech Republic, Oct. 14 – 16, 2004, pp. 575 – 580 (in Slovak)

[12] AGÓCS, Z. et al.: New Bridges Across the Danube. In: Proceedings of the 30th Meeting of Experts on Steel Structures: Steel and Composite Structures and Bridges, Malá Lučivná, Oct. 7 – 8, 2004. pp. 73 – 76 (in Slovak)

[13] ÁROCH, R. – CHLADNÁ, M.: Web-Based Education for Structural Engineers, In: Proceedings of the 30th Meeting of Experts on Steel Structures: Steel and Composite Structures and Bridges, Malá Lučivná, Oct. 7 – 8, 2004. pp. 183 – 186 (in Slovak)

[14] BALÁŽ, I. : Experience Gained from the Translation of Eurocodes – European Standards for the Design of Structures. Budmerice, June 4, 2004 (in Slovak)

[15] BALÁŽ, I. : History of the Danube Bridges in Bratislava. In: Proceedings of the 30th Meeting of Experts on Steel Structures: Steel and Composite Structures and Bridges, Malá Lučivná, Oct. 7 – 8, 2004, pp. 57 - 72 (in Slovak)

[16] BALÁŽ, I.: European Standards for the Design of Structures and Their Introduction in the Slovak Republic. In: Proceedings of the Conference on Principles of the European Technical Normalisation in Building and Construction in Slovakia. March 23, 2004. pp. 17- 24 (in Slovak)

[17] BALÁŽ, I. – KOLEKOVÁ, Y.: Factors C1, C2 and C3 for Computing Elastic Critical Moments Mcr. In: Proceedings of the 6th Symposium on Timber in Building Structures (with international participation). Kočovce, Oct. 28 – 29, 2004. pp. 29 - 34

[18] BALÁŽ, I. – KOLEKOVÁ, Y.: Resistance of Timber Beams to Out-of-Plane Buckling. In: Proceedings of the 6th Symposium on Timber in Building Structures (with international participation). Kočovce, Oct. 28 – 29, 2004. pp. 35 - 42

[19] BRODNIANSKY, J. – AGÓCS, Z. – MALIŠ, P. – ERDEI, M.: Experimental Verification of the Stresses to Pipelines During Repairs. In: Proceedings of the 30th Meeting of Experts on Steel Structures: Steel and Composite Structures and Bridges, Malá Lučivná, Oct. 7 – 8, 2004, pp. 133 – 136 (in Slovak)

[20] ČIERNA, J.: Construction of Frame Joints. In: Proceedings of the 6th Symposium on Timber in Building Structures (with international participation). Kočovce, Oct. 28 – 29, 2004. pp. 26 - 28 (in Slovak)

[21] ČIERNA, J. – KALOUSEK, V.: Houseboat – Timber Structure and Reconstruction of a Floating Platform, Anchorage and Footbridge. In: Proceedings of the 6th Symposium on Timber in Building Structures (with international participation). Kočovce, Oct. 28 – 29, 2004. pp. 237 – 242 (in Slovak)

[22] DRAŠKOVIČ, F.: Effect of a Non-Elastic Connection Slip on the Deformation of a Space Member Structure. In: Proceedings of the 6th Symposium on Timber in Building

Structures (with international participation). Kočovce, Oct. 28 – 29, 2004. pp. 61 - 66 (in Slovak)

[23] DRAŠKOVIČ, F.: Strengthening Timber Members by Means of High-Strength Materials. In: Proceedings of the 6th Symposium on Timber in Building Structures (with international participation). Kočovce, Oct. 28 – 29, 2004. pp. 195 – 202 (in Slovak)

[24] CHLADNÁ, M.: Design of Composite Steel and Concrete Structures Considering Fire Action According to STN P ENV 1994-1-2, In. Proceedings (CD-ROM) of Seminar on Fire Resistance of Buildings in the Design of Structures, April 27, 2004, 28 pp. (in Slovak)

[25] CHLADNÁ, M.: Loading of Structures under Fire, In: Proceedings of the Seminar on Common European Standards for the Design of Structures EUROCODES 0-1-2, Nov. 10 – 11, 2004, pp. 73 – 84 (in Slovak)

[26] SANDANUS, J.: Connecting Devices in Composite Timber and Concrete Structures. In: Proceedings of the 30th Meeting of Experts on Steel Structures: Steel and Composite Structures and Bridges, Malá Lučivná, Oct. 7 – 8, 2004, pp. 37 – 42 (in Slovak)

[27] SANDANUS, J.: Flexibilty of Connecting Devices in Composite Timber and Concrete Structures. In: Proceedings of the 6th Symposium on Timber in Building Structures (with international participation). Kočovce, Oct. 28 – 29, 2004. pp. 147 – 150 (in Slovak)