DEPARTMENT OF STRUCTURAL MECHANICS

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I. STAFF

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II. EQUIPMENT

II.1 Teaching and Research Laboratories

Small laboratory for experimental mechanics

II.2 Special Measuring Instruments and Computers

22 PCs connected to a local network
Static/dynamic tensometric equipment
Photoelasticimeter
Helium-neon laser
Memory-oscilloscope for analysis of dynamic processes

III. TEACHING

III.1 Graduate Study

Architecture and Civil Engineering

Subjects	Semester	Hours Per Week Lectures	Seminars	Lecturer
Statics	2	2	2	J. Sumec O. Hubová
Theory of Elasticity	3	3	3	J. Ravinger J. Dický
Structural Mechanics	4	3	2	J. Králik N. Jendželovský
Building Analysis	8	2	2	M. Sokol
Elasticity Theory	7	2	2	J. Sumec
Numerical Method in Structural Mechanics	7	2	2	J. Králik
Structural Dynamics	7	2	2	M. Sokol
Plate and Spatial Structures	8	2	2	J. Sumec
Non-Linear Mechanics	9	2	2	J. Lovíšek
Interaction of Structures and Foundations	9	2	2	N. Jendželovský
Special Problems in Dynamics and Statics	10	2	2	J. Ravinger

Engineering Construction

Subjects	Semester	Hours Per Week Lectures	Seminars	Lecturer
Statics	2	3	3	M. Sokol Y. Koleková Z. Mistríková
Structural Mechanics I	3	3	3	P. Marton J. Dický
Theory of Elasticity I	4	3	2	Y. Koleková J. Dický
Theory of Elasticity II	5	3	2	J. Ravinger

Structural Mechanics II	6	3 - 2	N. Jendželovský
Structural Dynamics	7	3 - 2	P. Marton
Structural Mechanics (In English)	7	2 -2	J. Dický O. Hubová

Optional Subjects

Subjects	Semester	Hours Per Week Lectures Seminars	Lecturer
Stability of Structures	8	2 - 2	J. Ravinger
Plasticity Analysis of Structures	9	2 - 2	J. Králik
Seismic Engineering	10	2 - 2	J. Králik

Recommended Subjects

Subjects	Semester	Hours Per Week Lectures Seminars	Lecturer
Use of Computers in Civil Engineering	5	2 - 2	M. Sokol
Structural Modelling Using FEM	6	2 - 2	J. Ravinger
Automation in the Statics of Structures	7	2 - 2	J. Králik
CAD in the Design of Structures	7	0 - 2	Ľ. Prekop
Automation in Structural Dynamics	8	2 - 2	J. Králik
Viscoelasticity of Structural Systems	8	2 - 2	J. Sumec
Automation in Non-Linear Structural Analysis	9	2 - 2	J. Ravinger
Modelling Subgrades	9	2 - 2	N. Jendželovský

III.2 Postgraduate Study

Selected Aspects of Structural Mechanics
Selected Aspects of Applied Mathematics
Selected Aspects of Applied Physics
Planar and Spatial Structures
Mechanics of Bodies Made from Composite Materials
Finite Element Methods
Stability of Truss and Planar Structures
Structural Dynamics
Optimization of Structures

IV. RESEARCH TARGETS

The research activities of the Department are aimed at problems such as the spatial effects of monolithic and assembled girders, grates, and plates on elastic foundations; the safety and reliability of nuclear power plant buildings under seismic, explosive and impact loads; seismology – the behaviour of building structures in seismic regions; the optimal design of multi-layered two-dimensional structures under static and dynamic loads; limiting the strain and collapse of structures; static and dynamic analyses of post-buckling behaviour of thin-walled structures; using dynamic post-buckling effects for non-destructive testing of thin-walled structures; singular perturbations in optimal control problems applied to non-linear structural

analysis; mechanical responses of intervertebral discs in pathological curvatures of the spine; and the development of computer methods in static, dynamic and non-linear structural analyses.

V. RESEARCH PROJECTS

VEGA, KEGA

1. Optimal Design of Structures Having Unilateral Bonds with Respect to the Non-Linear Behaviour of Materials (2003-2005, J. DICKY, VEGA 1/0322/03)
2. Non-Linear Analysis of the Interaction Between a Civil Construction and Subsoil (2002 - 2004, N. JENDZELOVSKY, VEGA 1/9058/02)
3. Dynamic Structural-Soil Interaction Solution with Non-Linear Parameters. Upgraded Safety and Reliability of Nuclear Power Plant Buildings under Extreme Loads. Seismic Resistant Analysis of Nuclear Power Plant Buildings. Slovak Grant Agency Research Grant (2002-2004, J. KRALIK, VEGA 1/9355/02)
4. Non-Linear Problems of the Dynamic Responses of Building Structures (2002-2004, M. SOKOL, VEGA 1/9360/02)
5. Effective Analysis of Structures with Seismic Loading - Optimization of Numerical Models (2001 - 2003, P. ROSKO, VEGA 1/8326/01)
6. Dynamic Post-Buckling Behaviour of Thin-Walled Structures (2002-2004, J. RAVINGER, VEGA 1/9059/02)
7. Stress-Deformation Analysis of the Human Spine with Regard to Pathological Changes (2002-2004, J. SUMEC, VEGA 1/9361/02)
8. DICKÝ, J. - MISTRÍKOVÁ, Z.: Elasticity and Plasticity in Civil Engineering. Academic Textbook. (2002 – 2004 KEGA 3/004/02)

TEMPUS, SOCRATES

1. DICKÝ, J.: Socrates – Erasmus Thematic Network Project: European Civil Engineering Education and Training (EUCEET). Faculty Coordinator
2. SOKOL, M.: International Ruhr UNI Bochum exchange cooperation with TU Bratislava, Faculty Coordinator (Socrates)
3. KOLEKOVÁ, Y.: Slovak-Greek Bilateral Cooperation Working Programme on Science and Technology

VI. COOPERATION

VI.1 Cooperation in Slovakia

1. Institute of Construction and Architecture of the Slovak Academy of Science
2. Technical University of Košice
3. University of Žilina
4. Slovak Society of Mechanics
5. VUJE, Trnava
6. VUEZ Levice
7. Building Testing and Research Institute, n. p. o. Bratislava
8. Dopravoproject Bratislava
9. Geoconsult Bratislava
10. Nuclear Power Plants, Jaslovské Bohunice

11. ALLMEDIA spol.s.r.o.
12. OBO BETTERMANN, Bratislava

VI.2 International Cooperation

1. Civil Engineering Institute of the Polish Academy of Science, Poland
2. Technical University of Opole, Poland
3. Technical University of Gliwice, Poland
4. Technical University of Cracow, Poland
5. Fakultät der Bauingenieurwesen Ruhr-Universität, Bochum, Germany
6. Bundesformschung und Prufzentrum, Arsenal, Vienna, Austria
7. Czech Academy of Sciences, Prague, Czech Republic
8. Technical University of Ostrava, Czech Republic
9. Brno University of Technology, Czech Republic
10. Czech Technical University in Prague, Czech Republic
11. Budapest University of Technology and Economics, Budapest, Hungary

VI.2.1 Visitors to the Department

1. Dr. Zbigniew Lipski - Silesian University of Technology, Gliwice, Poland
2. Dr. Ryszard Walentyński - Silesian University of Technology, Gliwice, Poland
3. Dr. J. Pilsniak - Silesian University of Technology, Gliwice, Poland
4. Dr. Jan Fedorowicz - Silesian University of Technology, Gliwice, Poland
5. Dr. Lidia Fedorowicz- Silesian University of Technology, Gliwice, Poland
6. Dr. Michal Matheja - Silesian University of Technology, Gliwice, Poland
7. Prof. Jan Kubik - University of Opole, Opole, Poland
8. Assoc Prof. József Györgyi - Budapest University of Technology and Economics, Hungary
9. Prof. Péter Lenkei - Pécs University, Pécs, Hungary
10. Prof. Victor Gioncu - Technical University of Timisoara, Romania
11. Ass. Prof. Mihnea Truta - Technical University of Timisoara, Romania
12. Ass. Prof. Marius Mosoara - Technical University of Timisoara, Romania
13. Szojda Leszek PhD, Eng.- Silesian University of Technology, Gliwice, Poland
14. Wandzik Grzegorz PhD, Eng.- Silesian University of Technology, Gliwice, Poland
15. Prof. Pavel Marek - Czech Academy of Science, Prague, Czech Republic

VI.2.2 Visits of Staff Members and Postgraduate Students to Foreign Institutions

1. Y. Koleková – Faculty of Civil Engineering Sarajevo, Bosnia and Hercegovina, September 2003
2. J. Dický – Technical University of Athens, Greece, February 2003
3. J. Dický – Catholic University of Leuven, Belgium, May 2003
4. J. Sumec – Institute of Fundamental Technological Research, Polish Academy of Sciences, Warsaw, Poland, November 2003
5. J. Sumec – Institute of Computational Methods in Engineering, University of Cracow, Poland, November 2003
6. J. Lovíšek - Carl University in Prague, Czech Republic, 2003
7. J. Lovíšek – Institute of Mathematics, Academy of Sciences of the Czech Republic, 2003

VII. THESES

VII.1 Graduate Theses

No.	Student´s name	Title	Supervisor
1.	Brachtl Stanislav	Sports Hall - Large Span Structure	M. Sokol
2.	Čajka Andrej	Reinforced Concrete Structure of a Building in a Seismically Active Area	M. Sokol
3.	Karetka Róbert	Static and Dynamic Analyses of a High-Rise Office Building	O. Ivánková
4.	Paštéková Petra	Statical Calculation of the Roofing of a Large Span Hall with a Shell Structure	J. Sumec
5.	Polóny Ľudovít	Design of Bearing System of a Dining Room in a Hospital in Košice	P. Marton
6.	Reisenauerová Alena	Static and Dynamic Analyses of a High-Rise Residential Building	O. Ivánková
7.	Schreiber Rastislav	Analysis and Resolution of the Base Structure of a High-Rise Office Building	N. Jendželovský
8.	Šimonovičová Katarína	Walled Structure in a Seismically Active Area	M. Sokol
9.	Šmihula Slavomír	Analysis of the Structure-Subsoil Interaction in a Multifunctional Building in Bratislava	J. Králik
10.	Tines Rastislav	Dynamic Analysis of the POLUS CITY CENTER Building Structure in Bratislava	J. Králik
11.	Varga Tomáš	Fire Resistance of an Operational Building in Mochovce	J. Králik

VII.2 Doctoral Theses

No.	Student´s name	Title	Supervisor
1.	Fajna Pavol	Soil-Structure Interaction Problem Based on Characteristics of Non-Linear Material during Seismic Action	J. Králik
2.	Javorek Tomáš	Non-Linear Problems of Arches and Shell Structures	J. Králik
3.	Kleiman Peter	Vibration of Imperfect Slender Webs	J. Ravinger
4.	Prekop Ľubomír	Interaction of a Wall System with Subsoil, Including the Effect of Material Nonlinearity	N. Jendželovský
5.	Psotný Martin	Nonlinear Buckling Analysis of Thin-Walled Structures	J. Ravinger
6.	Šimonovič Miroslav	Interaction of Structures with Subsoil Using Infinite Elements	J. Králik
7.	Véghová Ivana	New Experimental and Analytical Methods in Verification of Structures Subjected to Dynamic Effects	M. Sokol
8.	Vyskoč Eduard	Non-Linear Analysis of Reinforced Concrete Structures	J. Ravinger
9.	Tvrdá Katarína	Structure-Subsoil Interaction Problem in the Optimal Design of Plates with Unilateral	J. Dický

		Bonds	
10.	Meravý René	Interaction Between Structures and Subsoil under a Dynamic Transport Load	N. Jendželovský
11.	Bekö Adrián	Nonlinear Dynamic Analysis of Structures	M. Sokol
12.	Paštéková Petra	Biomechanical Response of the Human Spine to Stationary Force Effects	J. Sumec
13.	Tínes Radoslav	Nonlinear Dynamic Analysis of Wall-Coupled Systems	J. Králik
14.	Varga Tomáš	Probability Analysis of Reinforced Concrete Structures Under Degradation Processes	J. Králik
15.	Karetka Róbert	Nonlinear Analysis of Construction and Subgrade Interaction	N. Jendželovský
16.	Bondor Pavol	Fire Safety and the Resistance of Steel Structures	J. Králik

VII.3 Habilitation Theses

No.	Name	Title
1.	Hubová Oľga	Wind-Induced Vibrations of Slender Structures
2.	Mistríková Zora	Louvre Plate on an Elastic Foundation with Respect to Unilateral Coupling. Solution and Numerical Analysis.

VIII. OTHER ACTIVITIES

VIII.1 Special Lectures

[1] RAVINGER, J.: Interactive Buckling of a Slender Web Loaded in Shear. Ruhr Universität Bochum, Germany, May 2003

[2] SUMEC, J.: Some Topical Problems in Biomechanics. Institute of Computational Methods in Engineering, University of Cracow, Poland, November 2003

VIII.2 Commercial Activities for Firms and Institutions

1. HUBOVÁ O:,RAVINGER J.: (04-120-3) Temporary work equipment – Part 3: Load testing. Eurocode Translation. SvF STU Bratislava, 2003
2. JENDŽELOVSKÝ, N.: (04-077-03) Analysis of defects in the SISp Bank Building in Poprad. SvF STU Bratislava, 2003
3. KRÁLIK, J.: (04-033-03) Engineering consultation on the design of Building No. 711 "Modernization and Seismic Safety Upgrade of NPP V2". SvF STU Bratislava, 2003
4. KRÁLIK, J.: (04-299-03) Evaluation of the documentation of a building´s seismic resistance. STU Bratislava 2003
5. KRÁLIK, J.: Analysis of damage to Mojš 70 house. Expert Report 15/2003. ÚSZ SvF STU Bratislava.
6. RAVINGER, J.: (04-316-02) Diagnostic measurements during the reinforcement of a R/C ceiling. ZIPP Bratislava, 2003
7. SOKOL, M.: (04-007-03) Brodno Highway Bridge - Seismic Effects and Design Provisions. SvF STU Bratislava, 2003

8. AGÓCS, Z., SOKOL.M.: (04-070-03) Static and dynamic analysis of steel bridge across Danube River. SvF STU Bratislava, 2003
9. KRÁLIK, J.: Probability analysis of the integrity of the NPP containment in the case of LOCA. Methodology for RELKO, a.s. Bratislava and IAEA Vienna.
10. KRÁLIK, J. - KOLEKOVÁ, Y. - VARGA, T.: Seismic analysis of a hospital building in Leoben in accordance with P_EC8-2002 using the nonlinear capacity of Coupled Wall Systems. Methodology. June 2003, SvF STU Bratislava.
11. KRÁLIK, J.: Determination of the principal frequencies for calculating the deagregation of the PSHA EMO design from the point of view of structural and technological seismic resistance. Methodology. May 2003. SvF STU Bratislava.
12. KRÁLIK, J.: Seismic resistance analysis and upgrading the technology of a veneer factory.– Spar-tek Industries, Inc. in Oregon, USA. December 2003. SvF STU Bratislava.
13. RAVINGER, J.: Reconstruction of R/C structures with carbon degradation. 2003, UKF Nitra.
14. KRÁLIK, J.: (04-267-03) Collaboration in the E02.05.01 research project on Aging Management Programme – for a NPP Building. STU Bratislava 2003

VIII.3 Conferences and Workshops Organized

1. Postgraduate Summer School Course on Aeroelastctty and Seismicity, April 7-9, 2003, Kočovce
2. International Conference on New Trends in the Statics and Dynamics of Buildings, October 16-17, 2003, Slovak University of Technology in Bratislava, Slovak Society of Mechanics

IX. PUBLICATIONS

IX.1 Journals

[1] BOCK, I - LOVÍŠEK, J.: On a Reliable Solution to a Volterra Integral Equation in a Hilbert Space. Applications of Mathematics, 48 (2003) No. 6, pp. 401-420

[2] BOCK, I - LOVÍŠEK, J.: On Unilaterally Supported Viscoelastic von Kármán Plates with a Long Memory. Mathematics and Computers in Simulation 61 (2003), pp. 399-407

[3] HLAVÁČEK, I. – LOVÍŠEK, J.: Semi-Coercive Variational Inequalities with Reliable Input Data. Applications to a Shallow Shell. M^3AFS – ITALY, December 2003

[4] HUBOVÁ, O.:Aeroelastic Instabilities of Slender Structures. CTU Reports Vol. 7, No.1, 2003, Prague, ISBN 80-01-02734-1

[5] KRÁLIK, J.: Earthquake Response Analysis of NPP Buildings with the WWER 440 Reactor Including Side Effects. In: CTU Reports, Contributions to Computional and Experimental Investigation of Engineering Materials and Structures, Eds., P. Konvalinka - J. Máca, CTU Prague, 1/2003, Vol. 7, pp. 321-332, ISBN 80-01-02734-1

[6] KRÁLIK,J.- JAVOREK,T.: Seismic Analysis of Bearing Systems of Reinforced Concrete Highrise Buildings, In: CTU Reports, Contributions to Computional and Experimental Investigation of Engineering Materials and Structures, Eds., P. Konvalinka - J. Máca, CTU Prague, 1/2003, Vol. 7, pp. 333-338, ISBN 80-01-02734-1

[7] LOVÍŠEK, J.: Control in an Obstacle Pseudoplate Problem. ZAMM, Z. Angew. Math. Mech. 81(2003), No. 2, pp. 43-51

[8] LOVÍŠEK, J.: Obstacle Control Problem and the Unilateral Eigenvalue Problem of an Elastic Pseudoplate. Control and Cybernetics, Vol. 32 (2003) No. 2, pp. 259-300

[9] LOVÍŠEK, J.: Reliable Solution of Parabolic Obstacle Problems with Respect to Uncertain Data. Applications of Mathematics, 48 (2003) No. 5, pp. 321-351

[10] LOVÍŠEK, J: Optimal Control of a Variational Inequality with Application to the Kirchhoff Plate Having Little Flexural Rigidity. Journal for Analysis and Its Applications, Vol. 18 (2003), No. 4, pp. 895-938

[11] RAVINGER, J. – PSOTNÝ, M.: Slender Web Loaded by Compression. Roczniki Inżynierii budowlanej, Vol. 4, 2003

[12] RAVINGER, J. – KLEIMAN, P.: Load Bearing of Thermo-Steel Panels. Constructions, No. 6, 2003, pp. 18 – 22

[13] SUMEC, J. - VÉGHOVÁ, I.:Visco-Elastic Bending of an R-C Plate by FSM. Roczniki Inzynierii, 4 , 2003

IX.2 Books and Textbooks

[1] HUBOVÁ, O.: Wind-Induced Vibrations of Slender Structures. Scientific works edition, Svf STU Bratislava 2003, 70 pp. (ISBN 80-227-1865-3) (in Slovak)

[2] JUHÁSOVÁ, E. – MARTON, P. – KRÁLIK, J. – SOKOL, M. – JAVOREK, T. – KRIŠTOFOVIČ, V. – HUBOVÁ, O. - RAVINGER, J. – DRŽÍK, M.: Aeroelasticity and Seismicity. KSM SvF STU Bratislava 2003. (ISBN 80-227-1769-2) (in Slovak)

[3] LOVÍŠEK, J. – BOCK, I.: On a Reliable Solution to a Volterra Integral Equation in a Hilbert Space. Slovak University of Technology, Faculty of Electrical Engineering and Information Technology, Department of Mathematics Preprint Series, 47, April 8, 2003, 19 pp.

[4] MISTRÍKOVÁ, Z: A Louvre Plate on a Unilateral Elastic Subgrade. Solution and Numerical Analysis. ES STU Bratislava 2003 (ISBN 80-227-1873-4) (in Slovak)

IX.3 Conferences

[1] BALÁŽ, I. – HÖGLUND, T. – KOLEKOVÁ, Y.: Torsion Constant I_t of Aluminium and Steel Profiles with Non-Parallel Flanges and Fillets. In: Proceedings of International Conference on Static-Structural and Building-Physical Problems in Civil Engineering, Tatranská Lomnica, November 26 –28, 2003. pp.163-172

[2] BALÁŽ, I. – KOLEKOVÁ, Y.: Lines and Influence Lines of the Deformations and Internal Forces of Beams under Torsion and Bending, Considering the Second Order Theory. In: 2d International Conference on New Trends in the Statics and Dynamics of Buildings. October 16-17, 2003, Bratislava (in Slovak)

[3] BEKŐ, A.: Thermal Structural Analysis for Evaluating Structural Response under Fire Conditions. In: New Trends in the Statics and Dynamics of Buildings. Svf STU Bratislava, October 2003, pp. 247-252, ISBN 80-227-1958-7

[4] BOCK, I. – LOVÍŠEK, J.: On a Worst Scenario Problem for a Volterra Integral Equation Modelling Viscoelastic Problems. In: Proceedings of International Conference on Mathematical and Computer Modelling in Science and Engineering in Honour of the 80th Birthday of K. Rektorys. Prague, Czech Republic, January 27-30, 2003, pp. 48-52

[5] HUBOVÁ, O.: Dynamic Analysis of Footbridges. In: New Trends in Statics and Dynamics of Buildings, October 2003, Bratislava, ISBN 80-227-1958-7, pp. 87-92

[6] IVÁNKOVÁ, O. – JAVOREK, T. – KARETKA, R.: Seisimic Load Effects on the Eigenfrequencies of Highrise Buildings In:11th Users Meeting, Znojmo, September 25-26, 2003. SVS FEM Brno, 2003 pp. I-B-4, pp.1-5 (in Slovak)

[7] IVÁNKOVÁ, O.: Static and Dynamic Analysis Use of the Comparative Results of Computing Programmes. In: Proceedings of International Conference on Static-Structural and Building-Physical Problems in Civil Engineering, Tatranská Lomnica, November 26 –28, 2003, pp. 289 - 292 (in Slovak)

[8] IVÁNKOVÁ, O.: Static and Dynamic Analysis of a Ceiling Bearing Structure. In: DYN - WIND 2003, Tále 2003, pp. 222-225 (in Slovak)

[9] IVÁNKOVÁ, O.: Static and Dynamic Analysis of a Ceiling Grid Structure. Modelling in Mechanics. Ostrava - Poruba 2003, pp. 51-56 (in Slovak)

[10] IVÁNKOVÁ, O.: Effects of Seismic Risk Areas upon the Choice of Structural Systems for Highrise Buildings. International Conference on New Trends in the Statics and Dynamics of Buildings, SvF STU Bratislava, October 2003, pp. 233-238 (in Slovak)

[11] IVÁNKOVÁ, O.: Effect of Seismicity on Structural Systems of Highrise Buildings. In: International Conference on Developments and Applications of FEM Systems in Structural Analyses, VÚT Brno, 2003 pp. 17.1-17.6 (in Slovak)

[12] JENDŽELOVSKÝ, N – VYSKOČ, E.: Analysis of Defects of Bank Building. In: Proceedings of International Conference on Static-Structural and Building-Physical Problems in Civil Engineering, Tatranská Lomnica, November 26 –28, 2003, pp 133-138 (in Slovak)

[13] JENDŽELOVSKÝ, N. – SUMEC, J.: Stress-Strain Analysis of Lattice Shell Under an Impact Load. In: Proceedings of the 2d International Conference on Dynamics of Civil Engineering, Transport Structures and Wind Engineering. Tále. May 2003. SvF ŽU Žilina, pp. 317-320. ISBN 80-8070-066-4 (in Slovak)

[14] JENDŽELOVSKÝ, N.: Band Plates on Elastic Subgrades. In: New Trends in the Statics and Dynamics of Buildings. Svf STU Bratislava, October 2003, pp 265-268, ISBN 80-227-1958-7 (in Slovak)

[15] JENDŽELOVSKÝ, N: Circular Plates on Elastic Subgrades. In: 11th ANSYS Users Meeting, Znojmo, September 25 – 26, 2003. SVS FEM Brno, pp. I-B-7, ISBN 80-239-1598-3 (in Slovak)

[16] KRÁLIK, J. - TINES, R.: Determining the Effect of Coefficient q for Spectral Analysis in Accordance with STN P ENV 1998. In: Proceedings of International Conference on Static-Structural and Building-Physical Problems in Civil Engineering, Tatranská Lomnica, November 26 –28, 2003, pp. 297-300. ISBN 80-232-0221-9 (in Slovak)

[17] KRÁLIK, J. - VARGA, T.: Fire Resistance of a Steel Frame According to the Eurocode and Probability Code. In: New Trends in the Statics and Dynamics of Buildings, STU Bratislava, October 16-17, 2003, Bratislava, ISBN 80-227-1958-7, pp. 223-228

[18] KRÁLIK, J.: Analysis of Steel Frame Bracing Systems with Energy-Dissipation Devices. In: DYN-WIND ´2003, SvF ŽU Žilina, Tále, May 19-22, 2003, pp. 214-217, ISBN 80-8070-066-4

[19] KRÁLIK, J.: Nonlinear Analysis of Concrete Containment Considering Cracking of Concrete Due to Loss of Coolant Accident. In: Mechanics Modelling 2003, January 29, 2003, VŠB TU Ostrava-Poruba, pp. 80-87, ISBN 80-248-0253-8

[20] KRÁLIK, J.: Nonlinear Probability Analysis of Reinforced Concrete Containment under High Internal Overpressure. In: New Trends in the Statics and Dynamics of Buildings, STU Bratislava, October 16-17, 2003, Bratislava, ISBN 80-227-1958-7, pp. 223-228

[21] KRÁLIK, J.: Dynamic Impact Analysis and Design of Dumping Device in the Case of a Fallen Container. DYN-WIND ´2003, SvF ŽU Žilina, Tále, May 19 – 22, 2003, pp. 313-316, ISBN 80-8070-066-4

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