

DEPARTMENT OF GEOTECHNICS

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II. EQUIPMENT

II.1 Teaching and Research Laboratories

- mechanical laboratory scales
- digital technical scales
- sieve series
- Cassagrande liquid limit apparatus
- dissectors
- odometers
- laboratory ovens
- motorised direct shear machines
- hand-operated laboratory vane tester
- triaxial apparatus
- motorised Proctor compaction machine

II.2 Special Measuring Instruments and Computers

For in-situ measurements:

- underground water flow by tracer methods,
- bearing capacity, stress and strain for special foundations.
- records with guide unit.
- computers with special software for stability, capacity and inflow porous media in connection with the ANSYS network.

III. TEACHING

The Department of Geotechnics is an interdisciplinary department, which teaches all sections of the Civil Engineering Faculty. The main subjects are geology, engineering geology, hydrogeology, soil mechanics, rock mechanics, foundations, underground structures, dams, and reservoirs. The system of eligible subjects makes special preparation possible for the solution of geotechnical problems in the environment as well as in building, underground, transport, and water construction.

III.1 Graduate Study

Subject	Semester	Hours per Week		Lecturer
		Lectures	Seminars	
Geology	1	2	2	Čabalová
Geology	1	2	2	Baliak
Geology	1	2	2	Kopecký
Geology and Geomorphology	1	2	2	Baliak
Soil Mechanics	4	3	2	Kuzma
Soil Mechanics	4	3	2	Kuzma
Soil Mechanics and Foundations	5	2	2	Hulla, Turček
Building Foundations	5	3	2	Turček
Building Foundations and Underground	5	3	2	Hulla

Structures			Klepsatel
Engineering Geology and Rock Mechanics	6	3 - 2	Malgot Klepsatel
Properties of Rocks and Soils	7	2 - 2	Kuzma
Water Reservoirs and Dams	7	3 - 2	Lukáč
Underground Constructions	7	2 - 2	Klepsatel
Plane and Deep Foundations	8	2 - 1	Hulla
Soil Construction	8	2 - 2	Hruštinec
Optional Subjects			
Engineering Geology and Rock Mechanics	8	2 - 2	Klepsatel
Recommended Subjects			
Dam Design	9	2 - 2	Lukáč, Bednárová
Foundation of Water Structures	9	2 - 2	Hulla
Selected Topics in Soil Mechanics	9	2 - 2	Kuzma
Complex Dam Projects	9	0 - 3	Bednárová
Diploma Seminar	9	0 - 3	Kuzma
Special Geology and Hydrogeology Engineering	9	2 - 2	Malgot
Soil Properties	9	2 - 2	Kuzma
Geomechanics	9	2 - 2	Kuzma
Optional Subjects			
Construction Ditches	9	2 - 2	Turček
Water Dams	9	2 - 2	Lukáč, Bednárová
Interaction of Water Structures and the Environment	9	0 - 3	Lukáč
Numerical Modelling in the Design of Water Dams	9	2 - 2	Bednárová, Grambličková
Geotechnical Reconstruction and Remedial Measures	9	2 - 2	Turček Klepsatel

V. RESEARCH PROJECTS

1. Geotechnical Aspects of Increasing the Safety of Embankments (E. Bednárová)
2. Hydrodynamic Processes in Boreholes and Related Heterogeneous Media in the Solution of Stability and Ecological Problems (J. Hulla)
3. Analysis of Subsoil Deformations of Building Structures Depending on Their Mechanical Properties (J. Kuzma)
4. Evaluation of the Effect of a Landslide on an Engineering Structure in Slovakia (J. Malgot)
5. Structural Collapse of Geometrials (M. Masarovičová)
6. Reliability of Geotechnical Structures (P. Turček)

VI. COOPERATION

VI.1. Cooperation in Slovakia

1. Department of Engineering Geology, UK, Bratislava
2. Department of Hydrogeology, UK, Bratislava
3. Department of Geotechnics, ZU, Žilina
4. Institute of Geotechnics, SAV, Košice
5. Department of Geotechnics, TU, Košice

VI.2 International Cooperation

1. CTU Prague, Czech Republic
2. TU Ostrava, Czech Republic
3. TU Brno, Czech Republic
4. Czech Academy of Sciences, Czech Republic
5. UK Prague, Czech Republic
6. TU Budapest, Hungary
7. University of Alberta, Canada
8. University of Freiburg, Germany
9. TU Vienna, Austria
10. TU Graz, Austria
11. TU Innsbruck, Austria
12. ETH, Zürich, Switzerland
13. Mernöki Kamara, Budapest, Hungary
14. BPI Minsk, Belarus

VI.2.1 Visitors to the Department

- Broža, J., CVUT Prague, Czech Republic, 2 days
- Vaniček, I., CVUT Prague, Czech Republic, 2 x 2 days
- Weiglová K., VUT Brno, Czech Republic, 2 days
- Barták, J., CVUT Prague, Czech Republic, 2 days
- Schubert, W., TU Graz, Austria, 2 days
- Bielecky, R., GSTT, Germany, 2 days

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

- Baliak, F.: Czech Republic, 2 x 2 days; Austria, 4 days
- Chabroňová, J.: Czech Republic, 2 x 2 days; Austria, 4 days; Germany, 4 days
- Hruštinec, L: Austria, 2 days
- Hulla, J.: Czech Republic, 2 x 2 days; Austria, 3 days
- Kopecký, M.: Czech Republic, 2 days
- Kuzma, J.: Austria, 2 days
- Masarovičová, M.: Czech Republic, 2 days; Austria 2 days
- Matejčková, M.: Czech Republic, 2 days; France, 4 months
- Ravinger, R.: Czech Republic, 2 x 2 days; Austria, 2+3+1 days
- Turček, P.: Czech Republic, 2 x 2 days; Austria, 3 days; Germany, 4 days

VII. THESES

VII.1. Graduate Theses

No.	Student's Name	Title	Supervisor
1.	Černá, D.	Calculation of the Load-Bearing Capacity of a Spread Foundation.	Kuzma, J.
2.	Eged, R.	Intensification of Ash Desludging Sites of Kappa a. s. Štúrovo.	Masarovičová, M.
3.	El'ko, P.	Design Optimization of a Grouting Curtain in the Subsoil of the Slatinka Dam.	Bednárová, E.
4.	Golian, M.	Design and Reconsideration of the Foundation of a Multifunctional Building on Šancová Street in Bratislava Concerning the Bearing Capacity Limit State and Usage Limit State.	Hruštinec, Ľ.
5.	Hudec, R.	Development of Seepage Through the Subsoil of the Turček Dam.	Hulla, J.
6.	Chropeň, J.	Geoslab on a Weak Foundation.	Turček, P.
7.	Jankeje, A.	Design Optimization of a Small Earthfill Dam at Hliník nad Hronom.	Bednárová, E.
8.	Koval'ková, J.	Geotechnical Aspects of Non-Active Sludge on a Desludging Site in Čifáre.	Masarovičová, M.
9.	Lošák, M.	Alternate Calculations of an Abutment Construction. (Gravity Wall and Geo-Wall GS).	Masarovičová, M.
10.	Šrobová, E.	Design of Calcite Dump Reconstruction in Poddubie.	Slávik, I.

VII.2. Doctoral Dissertation

No.	Student's Name	Title	Supervisor
1.	Drinka, D.	Shear Strength of Reinforcing Soils.	Slivovský, M.
2.	Minárik, M.	Water Pressure Tests as Part of a Dam's Safety.	Bednárová, E.
3.	Tran, X.T.	Stability Problems of Earthfill Dams.	Hulla, J.

VIII. OTHER ACTIVITIES

VIII.1 Special Lectures

- [1] BALIAK, F.: Effect of Landslides on the Environment and Building Structures in Slovakia. Inaugural lecture. VR SvF STU 15.10.2004. VR STU 8.11.2004.
- [2] BALIAK, F.: Landslides in Slovakia. Lecture. Seminar on 4th SvF STU Day. ZA SvF 31.03.2004.
- [3] BEDNÁROVÁ, E.: The Safety of Flood Embankments from the Viewpoint of Structural-Geological Interactions. In: Effect of Anthropogenic Activities of the Water Regime of a Lowland Territory. 5th International Conference. Zemplínska Širava 27.5.2004 (in Slovak)

VIII.2 Commercial Activities for Firms and Institutions

- Special Structure Company, Ltd., Bratislava
- Water Construction, Inc., Bratislava
- SE, Inc., Nuclear Power Station, Jaslovské Bohunice
- Slovak National Bank, Inc., Bratislava
- VÚIS, Ltd., Bratislava
- VÁHOSTAV, Inc., Žilina
- Váh River Basin Authority, Piešťany
- RENOS, Inc., Bratislava
- KERAMOPROJEKT, Inc., Bratislava
- SOLHYDRO, Ltd., Bratislava
- Slovak Institute of Technical Normalisation, Bratislava
- GEOS, Inc., Bratislava
- Bodrog and Hornád River Basin Authority, Košice
- ENVI-GEO, Ltd., Banská Bystrica
- Hydrotechnology, Ltd., Bratislava
- HYDROCONSULT, Inc., Bratislava
- Slovak Geological Service, Bratislava
- HIGRAPOŠ, Ltd., Pezinok
- INGEO, Inc., Žilina
- INGEO - IGHP, Ltd., Žilina
- HYDRO G.E.R., Ltd., Banská Bystrica
- SE, Inc., Electric Generating Station, Zemianske Kostol'any
- SE, Inc., Nuclear Power Station, Mochovce
- STAVOSPOL, Ltd., Brno
- DVORAK – Geotechnics, Ltd., Bratislava
- DOPRASTAV, Inc., Bratislava
- TERRAPROJEKT, Inc., Bratislava
- SVP, Inc., Banská Bystrica, Banská Štiavnica, Košice
- Hydraulic Power Plant, Inc., Trenčín

- [1] BALIAK, F., et al.: Evaluation of the Effectiveness of the Investigation and Treatment of Landslides in Various Geological Structures of Slovakia.
- [2] BEDNÁROVÁ, E. - GRAMBLIČKOVÁ, D.: Optimization of the Depth of a Cut-Off Wall in the Weak Parts of the Left Side Flood Embankment of Latorica at km 6.3 – 16.3.
- [3] BEDNÁROVÁ, E., et al.: Seepage Mode Analysis in the Body and Subsoil of the Southeast Embankment of Zemplínska Šírava – Expert Review.
- [4] BEDNÁROVÁ, E., et al.: Analysis of the Development of Seepage Flow Parameters in the Body and Subsoil of the Starina Dam – Expert Review.
- [5] BEDNÁROVÁ, E., et al.: Analysis of the Development of Seepage Flow Parameters in the Body and Subsoil of the Veľká Domaša Dam – Expert Review.
- [6] HULLA, J., et al.: Seepage Analysis during Reduced Water Levels at the Liptovská Mara Reservoir.
- [7] HULLA, J., et al.: Seepage Analysis of the Subsoil of the Nosice Dam.
- [8] HULLA, J., et al.: Review of the Static Calculations for the Construction of Navigation Locks at Gabčíkovo.

- [9] HULLA, J., et al.: Consultation on the Treatment Work on the Subsoil of the Right Navigation Locks at Gabčíkovo.
- [10] KOPECKÝ, M.: R4 Lodomírová – Hunkovce.
- [11] KOPECKÝ, M.: Highway D1 Studenec – Behárovce.
- [12] KOPECKÝ, M.: Monitoring the Veľkomarský Landslide.
- [13] MALGOT, J., et al.: Atlas of the Slope Stability in Slovakia at M=1:50,000, List Nos. 36-13, 26-49, 36-14.
- [14] MALGOT, J. et al.: Atlas of the Slope Stability in Slovakia at M=1:50,000, List Nos. 27-41, 27-42, 27-23, 27-24.
- [15] MASAROVÍČOVÁ, M., et al.: Analysis of the Future Operation of the Čifáre Desludging Site.
- [16] MASAROVÍČOVÁ, M., et al.: Geotechnic Review of the Enlargement of the Waste Disposal Site at Prievidza – Ploštiny
- [17] MASAROVÍČOVÁ, M. – SLÁVIK, I.: Ash Desludging Site – Handlová, geotechnical review for actualizing operating regulations.
- [18] MASAROVÍČOVÁ, M. – SLÁVIK, I.: Review of Selected Geotechnic Properties of Soils for Raising the KAPPA a.s. Štúrovo Desludging Site.
- [19] MASAROVÍČOVÁ, M., et al.: Reevaluation of the Geotechnic Investigation and Slope Stability Calculations of the Embankment of the Čifáre Desludging Site.
- [20] MASAROVÍČOVÁ, M., et al.: Temporary Desludging Site SE a.s., Factory ENO: Innovative Geotechnical Aspects.
- [21] MASAROVÍČOVÁ, M., et al.: Final Chalmová SE a.s. Desludging Site, Factory ENO: Innovative Geotechnical Aspects.
- [22] MASAROVÍČOVÁ, M., et al.: Soil Compaction from the Raising of the Embankment of the KAPPA a.s. Štúrovo Ash Desludging Site.
- [23] MASAROVÍČOVÁ, M. – SLÁVIK, I.: Comment on Insurance Event No. PZ 0001031117 of Štrkopiesky Sedín a.s.
- [24] MASAROVÍČOVÁ, M., et al.: Complex Monitoring of Desludging Sites (2nd part).
- [25] RAVINGER, R., et al.: Study of the Possible Impacts of Seismic Responses and Design of the Technical Treatment for Their Elimination – Hronček Water Reservoir on Kamenistý Creek.
- [26] RAVINGER, R., et al.: Long Term Monitoring and Reference for Usage of HOPZ Vyšné Nemecké Structure.
- [27] SLÁVIK, I. – MASAROVÍČOVÁ, M.: Additional Geotechnical Investigation for Review of Mining Class of Soils in a Family House's Pit Excavation, Klenová St. Bratislava.
- [28] TURČEK, P., et al.: Analysis of the Stability of Slopes of the Ipeľ Water Pumping Power Station. Expert Review.
- [29] TURČEK, P.: Causes of Damage to Family House on Senecka Street No. 17 in Pezinok. Expert Review.
- [30] TURČEK, P.: Damage to Family House of J. Klčo. Expert Review.

IX. PUBLICATIONS

IX.1 Journals

Scientific Papers in Slovak Journals:

- [1] HULLA, et al.: Ageing of the Observation Structures for Groundwater Investigations. In: J. Hydrol. Hydromech. Vol. 52, No. 1, 2004, pp. 61-72 (in Slovak)
- [2] PIPÍK, R. – BALIAK, F. – MALGOT, J. – BARTÓK, J.: Engineering-Geological Characteristics of Devin Castle's Rock Massif and Its Effect on the Stability of Historical Buildings. Mineralia Slovaca, Vol. 36, 2004, No. 1, pp. 29-34 (in Slovak)
- [3] RAVINGER, R.: Construction in Cities and Geotechnical Factors. Stavba. Vol. VII., No. 4, 2004, pp. 48-51 (in Slovak)

Scientific Papers Abroad (Other Journals):

- [1] KOPECKÝ, M.: Possibilities of Forecasting the Origin of Landslides in Slovakia Based on Climatic and Hydrogeologic Conditions. Proceedings of VŠB - Technical University Ostrava, No. 2, Vol. L, Mining and Geological Series, pp. 63-71 (in Slovak)

Contributions to Proceedings in Slovak:

- [1] BALIAK, F. – MALGOT, J. – SOLČIANSKY, R.: Effect of Slope Failures on Constructions. In: Proceedings of 9th GEOTECHNIKA – GEOTECHNICS International Conference. High Tatras – Štrbské Pleso, Orgware Slovakia, 22.-24.09.2004, pp. 115-120 (in Slovak)
- [2] BEDNÁROVÁ, E. – GRAMBLIČKOVÁ, D.: The Safety of Flood Embankments from the Viewpoint of Structural-Geologic Interactions. In: Proceedings of Effects of Anthropogenic Activities of the Water Regime of a Lowland Territory. 5th International Conference. Zemplínska Šírava 27.5.2004 (in Slovak)
- [3] FEDA, J. – MASAROVIČOVÁ, M.: Mathematical and Physical Model of Soil Behaviour. In: Proceedings of 9th GEOTECHNIKA – GEOTECHNICS International Conference. High Tatras – Štrbské Pleso, Orgware Slovakia, 22.-24.09.2004, pp. 17-22 (in Czech)
- [4] GRAMBLIČKOVÁ, D. – BEDNÁROVÁ, E.: Numerical Methods and the Safety of Embankments. In: Proceedings of Effects of Anthropogenic Activities of a Water Regime of a Lowland Territory. 5th International Conference. Zemplínska Šírava 27.5.2004 (in Slovak)
- [5] HRIC S. – DRINKA D.: New Possibilities of Use of Modern Building Materials. In: Proceedings of 9th GEOTECHNIKA – GEOTECHNICS International Conference. High Tatras – Štrbské Pleso, Orgware Slovakia, 22.-24.09.2004, pp. 159-164 (in Slovak)
- [6] HULLA, J.: Underground Line Structures and Groundwater. In: Proceedings of 9th GEOTECHNIKA – GEOTECHNICS International Conference. High Tatras – Štrbské Pleso, Orgware Slovakia, 22.-24.09.2004, pp. 241-246 (in Slovak)
- [7] HULLA, J.: Loading Tests of Piles. In: Proceedings of Foundations 2004. Stará Lesná, SKSI, 2004. pp. 55-60 (in Slovak)

- [8] HULLA, J.: Contribution of Geoexperts Company on Solving Serious Problems of Slovak Geotechnics. In: Proceedings of Monitoring and Modelling in Geotechnics. Žilina, Geoexperts 2004, pp. 11-19 (in Slovak)
- [9] CHABROŇOVÁ, J.: Application of TBM with 14.2 m Diameter in Construction FRG and Russia. In: Proceedings of Importance of Tunnels in Transport, Podbanské – High Tatras, June 2004, pp. 225-229 (in Slovak)
- [10] CHABROŇOVÁ, J.: Application of Optical Sensors Concerning Tunnel Safety. In: Proceedings of Importance of Tunnels in Transport, Podbanské – High Tatras, June 2004, pp. 327 – 332 (in Slovak)
- [11] KOPECKÝ, M. – ILKANOVICH, A.: Geological Engineering Investigation for Waste Disposal in Landslide Area near the Village of Višňové. Geology and the Environment. In: Proceedings of Celebration of 80th Birthday of Prof. M. Matula. ŠGÚDŠ, SAIG, Comenius University Bratislava, pp. 167-170 (in Slovak)
- [12] LUKÁČ, M.: A Reservoir and Environmental Interaction – Effects and Impacts. Integrated Management of River Basins and Implementation of EU Directive Concerning Water. Bratislava, 2004, pp. 73-85 (in Slovak)
- [13] LUKÁČ, M.: Technical Specifics of Uhorná Dam from an Historical Aspect. In: Proceedings of Seminar on Uhorná Historical Dam, Smolník, 2004 (in Slovak)
- [14] MALGOT, J. – BALIAK, F.: Effect of Geodynamic Processes on the Environment of Horná Nitra. In: Proceedings of Celebration of 80th Birthday of Prof. M. Matula. ŠGÚDŠ, SAIG, Comenius University Bratislava, pp. 121-124 (in Slovak)
- [15] MASAROVICHOVÁ, M. – SLÁVIK, I. – JESENÁK, J.: Stability of Desludging Sites of Heating Plants. In: 9th GEOTECHNIKA – GEOTECHNICS International Conference. High Tatras – Štrbské Pleso, Orgware Slovakia, 22.-24.09.2004, pp. 217-222 (in Slovak)
- [16] MATEJČEKOVÁ, M. – SÚLOVSKÁ, M.: Application of Different Methods for Analysis of Slope Stability. In: Proceedings of 9th GEOTECHNIKA – GEOTECHNICS International Conference. High Tatras – Štrbské Pleso, Orgware Slovakia, 22.-24.09.2004, pp. 103-108 (in Slovak)
- [17] RAVINGER, R. – TURČEK, P.: Effect of Scours on the Foundation of Bridge Piers. In: Proceedings of 9th GEOTECHNIKA – GEOTECHNICS International Conference. High Tatras – Štrbské Pleso, Orgware Slovakia, 22.-24.09.2004, pp. 175-180 (in Slovak)
- [18] RAVINGER, R.: Investigation of Geotechnical Factors for Construction of Halls. In: Proceedings of Foundations 2004. Stará Lesná, SSS, 2004, pp. 43-53 (in Slovak)
- [19] RAVINGER, J. – RAVINGER, R.: Diagnosis of Defects at Karácsony Palace. In: Proceedings of Defects of Load-Bearing Constructions 2004, Piešťany. pp. 35 – 40 (in Slovak)
- [20] RAVINGER, R. – ŠTEFANEK, J.: Analysis of Effects on Slope Stability. In: Proceedings of Celebration of 80th Birthday of Prof. M. Matula. ŠGÚDŠ, SAIG, Comenius University Bratislava, pp. 55-57 (in Slovak)
- [21] SLIVOVSKÝ M. – DRINKA D.: Shear Strength of Reinforcing Soil in Construction of a Rail Base. In: Proceedings of Ground Communications and Railways – Construction of Herľany Rail Base, September 2004, pp. 97 – 102 (in Slovak)
- [22] TURČEK, P.: Interaction between Engineering Geology and Geotechnics. In: Proceedings of Geology and the Environment. ŠGÚDŠ, Bratislava, 2004, pp. 15 - 17 (in Slovak)

- [23] TURČEK, P.: Design of Very Heavy Load Floors. In: Proceedings of 9th GEOTECHNIKA – GEOTECHNICS International Conference. High Tatras – Štrbské Pleso, Orgware Slovakia, 22.-24.09.2004, pp. 165 – 170 (in Slovak)
- [24] TURČEK, P.: Foundations of Halls - Routine or Problem? In: Foundations - Foundation of Halls. Stará Lesná, SSS, 2004. pp. 7-17 (in Slovak)

Contributions to Proceedings Abroad:

- [1] BALIAK, F. – MALGOT, J. – SOLČIANSKY, R.: Landslides on the Left Bank of the Váh River between Hlohovec and Sered'. In: Proceedings of 4th Water Management Conference. VUT Brno, 2004, pp. 16-19 (in Slovak)
- [2] BEDNÁROVÁ, E. – GRAMBLIČKOVÁ, D.: Selected Problems in the Optimisation of Flood Embankment Treatments. In: Proceedings of Water Days Conference. České Budějovice 2004, pp. 17 – 22 (in Slovak)
- [3] DRINKA D.: A Large-Sized Shear Apparatus and Its Possibilities for Testing Reinforcing Geosynthetics. In: Proceedings of NODIG International Conference, Hamburg, November 2004 (in English)
- [4] GRAMBLIČKOVÁ, D. – BEDNÁROVÁ, E.: Application of FEM Methods in Review of Safety of Flood Embankments. In: Proceedings of Water Days Conference. České Budějovice 2004, pp. 63 – 68 (in Slovak)
- [5] HRUŠTINEC, Ľ. – KUZMA, J. – LUKÁČ, M.: Building-Up of a Rockfill Dam with Bitumen-Concrete Sealing on Low Compression Subsoil. In: Proceedings of International Foundations 2004 Conference. Brno 2004, pp. 228 - 233 (in Slovak)
- [6] HRUŠTINEC, Ľ. – KUZMA, J.: Effect of Selected Factors on the Bearing Capacity of a Spread Foundation's Subsoil. In: Proceedings of Conference on Geotechnical Field Methods. Ústí nad Labem 2004, pp. 47 – 52 (in Slovak)
- [7] HULLA, J.: Properties of Some Waste Materials. In: Proceedings of International Foundations 2004 Conference. Brno 2004, pp. 94-99 (in Slovak)
- [8] HULLA, J., et al: Hydrodynamic Processes in Boreholes Using Controlling Grouting Curtains. In: Proceedings of Hardening, Tightening and Anchoring of a Rock Mass and Structures. Ostrava, TU, 2004, pp. 99-103 (in Slovak)
- [9] HULLA, J. – HUMMEL, J. – VADKERTI, Š.: Large Navigation Locks at Gabčíkovo after Two Stages of Sealing Dilatation Joints. In: Proceedings of Water Days Conference. České Budějovice 2004, pp. 69-74 (in Slovak)
- [10] CHABROŇOVÁ, J.: Tunnels and Underground Water. In: Proceedings of Field Geotechnical Methods. ČKAI, Ústí nad Labem, 2004, pp. 59 - 64 (in Slovak)
- [11] CHLAPÍK, D. – LUKÁČ, M.: Experience Gained from Some MVN Operations. In: Proceedings of Water Days Conference. České Budějovice 2004, pp. 134-140 (in Slovak)
- [12] KOPECKÝ, M.: Effect of Global Change on the Origin and Reactivation of Landslides in Slovakia. Proceeding of 16th Bodenseetagung. Bregenz 2004. pp. 13-17 (in German)
- [13] KUZMA, J. – HRUŠTINEC, Ľ.: Foundation of a Bridge in Complex Engineering Geological Conditions in Dunajuváros. In: Proceedings of International Foundations 2004 Conference. Brno 2004, pp. 222 - 227 (in Slovak)

- [14] KUZMA, J. – HRUŠTINEC, Ľ.: Effect of the Monitoring of Foundations and Their Safety and Reliability. In: Proceedings of Conference on Geotechnical Field Methods. Ústí nad Labem 2004, pp. 77 – 82 (in Slovak)
- [15] LÍŠKA, V. – LUKÁČ, M.: Special Bulletin to 21st ICOLD Congress in Montreal. Montreal, chap. 3: Q.83, 2004, pp. 84-114 (in Slovak)
- [16] LUKÁČ, M. – KUZMA, J. – HRUŠTINEC, Ľ.: Failure of a Dam and Some Examples of Technologies of Its Reconstruction, Including Construction of a New Dam in the Existing Dam Profile. In: Proceedings of International Foundations 2004 Conference. Brno 2004, pp. 147 - 152 (in Slovak)
- [17] LUKÁČ, M. – KUZMA, J. – HRUŠTINEC, Ľ.: Using Mathematical Simulations for Dam Design and Reconstruction. In: Proceedings of Water Days Conference. České Budějovice 2004, pp. 87 – 93 (in Slovak)
- [18] MALGOT, J. – BALIAK, F.: Effect of Geodynamic Processes on the Environment of Horná Nitra. In: Proceedings of 1st Regional IAEG Conference. Liege 2004, 5 pp. (in English)
- [19] MALGOT, J. – BALIAK, F.: Effect of Underground and Coal Mining on the Environment at the Horná Nitra Deposits in Slovakia. In: Proceedings of International Foundations 2004 Conference. Brno 2004, pp. 37-41 (in Slovak)
- [20] MASAROVIČOVÁ, M. – SLÁVIK, I. – JESENÁK, J.: Introductory Engineering and Geological Research and Evaluation of a Dump in an Undermined Area. In: Proceedings of International Foundations 2004 Conference. Brno 2004, 6 pp. (in Slovak)
- [21] MASAROVIČOVÁ, M. – SLÁVIK, I. – JESENÁK, J.: Geotechnical Monitoring of Desludging Sites. In: Proceedings of Field Geotechnical Methods. ČKAI, Ústí nad Labem, 2004, pp. 94-99 (in Slovak)
- [22] MATEJČEKOVÁ, M. – TURČEK, P.: FEM Application in the Modelling of a Short Pile with a Large Diameter. In: Proceedings of International Foundations 2004 Conference. Brno 2004, pp. 159-164 (in Slovak)
- [23] MATEJČEKOVÁ, M.: Application of Non-Destructive Methods for Determining the Length of Installed Soil Nails. In: Proceedings of Field Geotechnical Methods. ČKAI, Ústí nad Labem, 2004, pp. 100-105 (in Slovak)
- [24] MATEJČEKOVÁ, M.: Wedge Analysis of Failure of Reinforced Slope. In: Proceedings of JUNIORSTAV 2004, VUT Brno (in Slovak)
- [25] MATEJČEKOVÁ, M.: Different Types of Soil Nail Wall Failures. In: Proceedings of JUNIORSTAV 2004, VUT Brno (in Slovak)
- [26] MINÁRIK, M.: New Approaches for Evaluating the Results of a Pressure Test. In: Proceedings of 16th European Young Geotechnical Engineers Conference EYGEC. Vienna, Austria 2004, pp. 261-270 (in English)
- [27] MINÁRIK, M.: Revaluation of the Methods for Estimating Permeability on Selected Slovak Dams. In: Proceedings of Water Days Conference. České Budějovice 2004, pp. 105-110 (in Slovak)
- [28] RAVINGER, R.: Construction Verification and Valuation with Regard to Geotechnic Factors. In: Proceedings of 32nd Foundations Conference, Sekurkon Brno, 2004, pp. 29-34 (in Slovak)

- [29] TRAN X. Tho: Stability Problems of an Earthfill Dam. In: Proceedings of 6th PhD Student Conference, Brno University of Technology, Brno, Czech Republic, 6 pp. (in English)
- [30] TRAN X. Tho: Effect of a Sealing Element on Seepage Through an Earthfill Dam. In: Proceedings of 2nd PhD. CivilExpo Conference. Budapest, University of Technology and Economics, 2004, 6 pp. (in English)
- [31] TRAN X. Tho: Seepage Analysis of an Earthfill Dam. In: Proceedings of 15th Southeast Asian Geotechnical Conference – SEAGC 15. Thailand, Bangkok 2004, 6 pp. (in English)
- [32] TURČEK, P. – MATEJČEKOVÁ, M.: Monitoring of Nail Slopes. In: Proceedings of Field Geotechnical Methods. ČKAI, Ústí nad Labem, 2004, pp. 138 - 143 (in Slovak)
- [33] VANTRUBA, M.: Problems Involving Observation Structures for Monitoring Groundwater Flow. In: Proceedings of Hydrochemistry 2004, Ostrava, TU 2004, pp. 133-126 (in Slovak)

IX.2 Books and Textbooks

- [1] ČABALOVÁ, D. – BALIAK, F. – KOPECKÝ, M.: Geology. Bratislava, STU Publishing House, 2nd Issue, 2004, 211 pp.
- [2] LUKÁČ, M.: Seismic Aspects of Dams. České Budějovice, Povodie Vltavy Publishing house, Prague ČVP, 2004, Q 83, 35 pp.
- [3] TURČEK, P. – HULLA, J.: Foundations. JAGA, Bratislava, 2004, 360 pp. (in Slovak)

IX.3 Conferences

- [1] BALIAK, F.: XI. International Geotechnika – Geotechnics Conference 2004, Gliwice-Ustroň, 2004, Organising Committee.
- [2] BALIAK, F.: Member of the scientific committee of the 9th Geotechnika – Geotechnics International Conference 2004. Štrbské pleso, High Tatras, ORGWARE Slovakia.
- [3] BALIAK, F.: Member of the scientific committee of the 4th Geology and the Environment International Conference, Bratislava. ŠGUDŠ, SAIG, PvF UK, June 2004.
- [4] HULLA, J.: Member of the organising committee of the 32nd Zakládání – Foundations – Grundbau 2004 International Conference, Sekurkon Brno.
- [5] HULLA, J.: Member of the scientific committee of the 9th Geotechnika – Geotechnics International Conference 2004. Štrbské pleso, High Tatras, ORGWARE Slovakia.
- [6] TURČEK, P.: Member of the organising committee of the 32nd Zakládání – Foundation – Grundbau 2004 International Conference, Sekurkon Brno.
- [7] TURČEK, P.: Member of the scientific committee of the 23rd Field Geotechnical Methods International Conference, Ústí nad Labem.