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# DEPARTMENT OF LAND AND WATER RESOURCES MANAGEMENT

Head of Department

Prof. Ing. Viliam Macura, PhD.

Tel.: +421 2 592 74 279

Fax: +421 2 529 23 575

E-mail: viliam.macura@stuba.sk

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## 1. EDUCATION

### 1.1 Graduate study

#### Obligatory subjects

Hydrology

Landscape Ecology

Landscape Ecology and Bioecology

Meteorology and Hydrology

Landscape Engineering

Engineering Structures in a Landscape

River Training

Pedology

River Restoration

Integrated River Basin Management

Water Management

Hydrological Field Measurements

CAD Systems in Landscape Engineering

Water Regime of a Landscape

Irrigation and Drainage

GIS in Water Management

#### Optional subjects

Project 1 – Sustainable Landscape Development

Basics of the Design of Landscape Structures

CAD Systems in Water Management

Project Work

Computer Modelling in Water Management

Design of Small Water Reservoirs

Revitalization of Wetlands

CAD Systems in Environmental Engineering

### 1.2 Postgraduate courses

Hydrology

Hydrology of Surface Waters

Hydrology of Sub-Surface Waters

Hydrodynamics of Porous Media

Methods of Field and Laboratory Experiments in Hydrology

Mathematical Modelling of Hydrological and Hydraulic Processes

Simulation Methods, Algorithms and Programming

Evaluation of the Risk of Extreme Hydrological Processes

Geoinformatics

Methods and Models of Hydrological Balance

Methods of Hydrological Forecasting

Deterministic and Stochastic Models of Hydrological Processes

Landscape Planning

Revitalization of Rivers

Soil Water Regime

Hydrochemistry and Hydrobiology

## 2. THESES

### 2.1 Bachelor theses

There were 12 works.

### 2.2 Graduate theses

Batnuur, A.: Proposed Measures to Eliminate Migration Barriers and Improve Flood Protection on the River Bečva in the Municipality of Zubří  
Supervisor: Macura, V.

Derzsiová, A.: The Assessment of the Meteorological Elements in Selected Regions of Slovakia.  
Supervisor: Danáčková, M.

Dobranský, M.: Proposed Restorative Measures for the Zolná Brook in Lieskovec Near Zvolen.  
Supervisor: Škrinár, A.

Doláková, G.: Characteristics of a Drought in Terms of the Hydropedological Conditions in the Záhorská Lowland.  
Supervisor: Čistý, M.

Hangoniová, S.: Analysis of Temporal Changes in Floods on Slovak Rivers.  
Supervisor: Kohnová, S.

Häusler, F.: River Training Design for the Štiavnička River  
Supervisor: Macura, V.

Horváth, M.: Proposed Restorative Measures for the Stankovský Potok Brook in Čierne Near Čadca.  
Supervisor: Škrinár, A.

Iszóf, A.: Design of an Irrigation System for Orchards  
Supervisor: Bajtek, Z.

Kemény, R.: Proposed Landscale Engineering Measures and Soil Erosion Control for a Selected River Basin.  
Supervisor: Hlavčová, K.

Klečková, N.: Changes in a Soil Water Regime Due to Climate Change.  
Supervisor: Skalová, J.

Knotek, A.: Analysis of the Water Regime of a Wetland Ecosystem.  
Supervisor: Skalová, J.

Lábodiová, D.: Analysis of Irrigation Requirements Using Statistical and Simulation Methods.  
Supervisor: Čistý, M.

Látková, T.: Forecasting Changes in the Water Storage of Soils for Different Kinds of Vegetation.  
Supervisor: Skalová, J.

Masárová, L.: Analysis of Temporal Changes in the Extreme Runoff Regime of the Vah River Basin.  
Supervisor: Kohnová, S.

Piovarči, M.: Analysis of an Irrigation System in Changed Operating Conditions.  
Supervisor: Čistý, M.

Vidová, R.: Proposed Landscale Engineering Measures and Soil Erosion Control for a Selected River Basin.  
Supervisor: Hlavčová, K.

## 2.3 Doctoral theses

Karabová, B.: Analysis of the Parameters of the SCS-CN Method in the Conditions of Slovakia  
Supervisor: Kohnová, S.

Hamar Zsideková, B.: Analysis of Changes in Hydrological Balance Elements Using Rainfall-Runoff Modelling.  
Supervisor: Kohnová, S.

Jariabková, J.: Evaluation of the Quality of Aquatic Habitats Using Bioindications.  
Supervisor: Macura, V.

Valent, P.: Rainfall-Runoff Modelling for Frequency Analyses of Discharges.  
Supervisor: Szolgay, J.

## 3. RESEARCH

### 3.1 Research projects

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

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

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

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

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

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 (RE CARE). (2013-2018, 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

## 4. PUBLICATIONS

### Books

Čistý, M. – Becová, A. – Čelár, L.: *Handling Data in Environmental Engineering*. 1. ed. Bratislava: Slovak University of Technology in Bratislava, 2014. 136 pp. ISBN 978-80-227-4293-1 (in Slovak)

Skalová, J. – Juráková, M. – Pásztorová, M.: *Impact of Climate Change on the Water Regime of Wetlands*. 1. ed. Bratislava: Slovak University of Technology in Bratislava, 2014. 124 pp. ISBN 978-80-227-4126-2 (in Slovak)

Zsideková, B.: *Analysis of Changes of Water Balance Characteristics Using Rainfall Runoff Modelling*. 1. ed. Bratislava: Slovak University of Technology in Bratislava, 2014. 120 pp. ISBN 978-80-227-4310-5 (in Slovak)

### Journals

Banasik, K. – Rutkowska, A. – Kohnová, S.: *Retention and Curve Number Variability in a Small Agricultural Catchment: The Probabilistic Approach*. In: *Water*. Vol. 6, No. 5 (2014), pp. 1118-1133. ISSN 2073-4441 (in English)

Čistý, M. – Becová, A. – Čelár, L.: *Contribution to a Multi-Dimensional Analysis of Irrigation Demands*. In: *Acta Hydrologica Slovaca*. Vol. 15, No. 2 (2014), pp. 346-360. ISSN 1335-6291 (in Slovak)

Danáčková, M. – Papinčáková, L. – Szolgay, J.: *Comparison of Changes in Flood Wave Transformations Using a Multilinear Routing Model on the Danube River*. In: *Acta Hydrologica Slovaca*. Vol. 15, (2014), pp. 42-53. ISSN 1335-6291 (in Slovak)

Gaál, L. – Molnár, P. – Szolgay, J.: *Selection of Intense Rainfall Events Based on Intensity Thresholds and Lightning Data in Switzerland*. In: *Hydrology and Earth System Sciences*. Vol. 18, No. 5 (2014), pp. 1561-1573. ISSN 1027-5606 (in English)

Gaál, L. – Beranová, R. – Hlavčová, K. – Kyselý, J.: *Climate Change Scenarios of Precipitation Extremes in the Carpathian Region Based on an Ensemble of Regional Climate Models*. In: *Advances in Meteorology*. 2014, (2014), 14 pp. ISSN 1687-9309 (print) (in English)

Hall, J. W. – Arheimer, B. – Borga, M. – Brázdil, R. – Kiss, A. – Kjeldsen, T. R. – Kriaučiunienė, J. – Kundzewicz, Z. W. – Lang, M. – Llasat, M. C. – Macdonald, N. – Mcintyre, N. – Merz, B. – Merz, R. – Molnar, P. – Montanari, A. – Neuhold, C. – Parajka, J. – Perdigao, R. A P – Plavcová, L. – Rogger, M. – Salinas, J. L. – Sauquet, E. – Schär, C. M. – Szolgay, J. – Viglione, A. – Blöschl, G.: *Understanding Flood Regime Changes in Europe: a State-of-the-Art Assessment*. In: *Hydrology and Earth System Sciences*. Vol. 18, No. 7 (2014), pp. 2735-2772. ISSN 1027-5606 (in English)

Jarabíková, M. – Pásztorová, M. – Minarič, P. – Skalová, J.: *Impact of Climate Change on Evapotranspiration in the Area of Poipie*. In: *Acta Hydrologica Slovaca*. Vol. 15, No. 1 (2014), pp. 3-14. ISSN 1335-6291 (in Slovak)

Jeneiová, K. – Sabo, M. – Kohnová, S.: *Detection of Trends in Long-Term Maximum Annual Discharges in the Catchments of Slovakia*. In: *Acta Hydrologica Slovaca*. Vol. 15, No. 1 (2014), pp. 161-170. ISSN 1335-6291 (in Slovak)

Jeneiová, K. – Kohnová, S. – Sabo, M.: *Detecting Trends in the Annual Maximum Discharges in the Vah River Basin, Slovakia*. In: *Acta Silvatica et Lignaria Hungarica*. Vol. 10, No. 2 (2014), pp. 133-144. ISSN 1787-064X (in English)

Juričeková, K. – Hlavčová, K.: *Evaluation of the Accuracy of MODIS Satellite Images on the Upper Hron River Basin*. In: *Acta Hydrologica Slovaca*. Vol. 15, No. 1 (2014), pp. 143-150. ISSN 1335-6291 (in Slovak)

Karabová, B.: *Testing the Possibility of the Regionalization of the SCS-CN Method Parameters for the Lowland Areas of Slovakia*. In: *Acta Hydrologica Slovaca*. Vol. 15, No. 1 (2014), pp. 194-203. ISSN 1335-6291 (in Slovak)

Kjeldsen, T. R. – Macdonald, N. – Lang, M. – Mediero, L. – Albuquerque, T. – Bogdanowicz, E. – Brázdil, R. – Castellari, A. – David, V. – Fleig, A. K. – Gül, G. O. – Kriaučiunienė, J. – Kohnová, S. – Merz, B. – Nicholson, O. – Roald, L. A. – Salinas, J. L. – Šarauskiene, D. – Šraj, M. – Strupczewski, W. G. – Szolgay, J. – Toumazis, A. D. – Vanneville, W. – Vejjalainen, N. – Wilson, D.: *Documentary Evidence of Past Floods in Europe and Their Utility in Flood Frequency Estimation*. In: *Journal of Hydrology*. Vol. 517 (2014), pp. 963-973. ISSN 0022-1694 (in English)

Kotříková, K. – Hlavčová, K. – Fencík, R.: *Changes in Snow Storage in the Upper Hron River Basin (Slovakia)*. In: *Acta Silvatica et Lignaria Hungarica*. Vol. 10, No. 2 (2014), pp. 145-459. ISSN 1787-064X (in English)

- Látková, T. – Skalová, J. – Pásztorová, M.: Assessment of the Impact of Climate Change on Soil Water Storage for Selected Crops in the Area of Poiplie. In: *Acta Hydrologica Slovaca*. Vol. 15, No. 2 (2014), pp. 338-345. ISSN 1335-6291 (in Slovak)
- Molnar, P. – Faticchi, S. – Berger, C. – Ismail, I. – Gaál, L. – Szolgay, J. – Burlando, P.: Little Evidence for Super Clausius–Clapeyron Scaling of Intense Rainstorm Properties with Air Temperature. In: *Hydrology and Earth System Sciences Discussions*. Vol. 11, No. 7 (2014), pp. 8923-8948. ISSN 1812-2108 (in English)
- Rončák, P. – Hlavčová, K. – Štefunková, Z.: Transfer of Parameters in a Distributed Rainfall-Runoff Model. In: *Acta Hydrologica Slovaca*. Vol. 15, No. 1 (2014), pp. 186-196. ISSN 1335-6291 (in Slovak)
- Salinas, J. L. – Castellarin, A. – Kohnová, S. – Kjeldsen, T. R.: Regional Parent Flood Frequency Distributions in Europe – Part 2: Climate and Scale Controls. In: *Hydrology and Earth System Sciences*. Vol. 18, No. 11 (2014), pp. 4391-4401. ISSN 1027-5606 (in English)
- Salinas, J. L. – Castellarin, A. – Viglione, A. – Kohnová, S. – Kjeldsen, T. R.: Regional Parent Flood Frequency Distributions in Europe – Part 1: Is the GEV Model Suitable as a Pan-European Parent? In: *Hydrology and Earth System Sciences*. Vol. 18, No. 11 (2014), pp. 4381-4389. ISSN 1027-5606 (in English)
- Sleziak, P.: Discharge Time Series Analysis of Selected Slovak Rivers by Wavelet Transform. In: *Acta Hydrologica Slovaca*. Vol. 15, No. 1 (2014), pp. 171-177. ISSN 1335-6291 (in Slovak)
- Sleziak, P.: Analysis of Data Using R Statistical Software. In: *Forum Statisticum Slovacum*. Vol. 10, No. 6 (2014), pp. 159-164. ISSN 1336-7420 (in English)
- Sleziak, P. – Sabo, M.: Gender Differences in the Prevalence of Specific Phobias. In: *Forum Statisticum Slovacum*. Vol. 10, No. 6 (2014), pp. 165-170. ISSN 1336-7420 (in English)
- Stankoci, I. – Jariabková, J. – Macura, V.: Evaluation of the Quality of an Aquatic Habitat on the Drietomica River. In: *Slovak Journal of Civil Engineering*. Vol. 22, No. 1 (2014), pp. 43-48. ISSN 1210-3896 (in English)
- Szolgayová, E. – Arlt, J. – Blöschl, G. – Szolgay, J.: Wavelet Based Deseasonalization for Modelling and Forecasting of Daily Discharge Series Considering Long Range Dependence. In: *Journal of Hydrology and Hydromechanics*. Vol. 62, No. 1 (2014), pp. 24-32. ISSN 0042-790X (in English)
- Štefunková, Z. – Hlavčová, K. – Valent, P.: An Assessment of the Impact of Climate Change on the Upper Hron River Basin Based on the Results of the Simulation of Three Hydrological Models. In: *Acta Hydrologica Slovaca*. Vol. 15, No. 1 (2014), pp. 213-222. ISSN 1335-6291 (in Slovak)
- Valent, P. – Danko, M. – Miklánek, P.: Sensitivity Analysis of a Rainfall-Runoff Model. In: *Acta Hydrologica Slovaca*. Vol. 15, No. 2 (2014), pp. 267-280. ISSN 1335-6291 (in Slovak)
- Valent, P. – Szolgay, J. – Výleta, R.: Alternative Approaches to a Calibration of Rainfall-Runoff Models for a Flood Frequency Analysis. In: *Acta Silvatica et Lignaria Hungarica*. Vol. 10, No. 2 (2014), pp. 161-174. ISSN 1787-064X (in English)
- Vitková, J. – Klečková, N. – Jarabicová, M. – Skalová, J.: Possible Impact of Climate Change on Changes in a Soil Water Regime Using the KNMI and MPI Regional Models at the Zahorska Lowland. In: *Acta Hydrologica Slovaca*. Vol. 15, No. 2 (2014), pp. 332-337. ISSN 1335-6291 (in Slovak)
- Vojtková, J. – Minarič, P. – Kollár, J.: Production-Ecological Analysis of Herb Layer in the Softwood Floodplain Forests Formed After the Gabčíkovo Waterwork Construction and Their Characteristics. In: *Ecology*. Vol. 33, No. 1 (2014), pp. 9-15. ISSN 1335-342X (in English)
- Výleta, R. – Szolgay, J.: Stochastic Simulation of Average Daily Air Temperatures in the River Hron Catchment for the Needs of Flood Frequency Analysis. In: *Acta Hydrologica Slovaca*. Vol. 15, No. 1 (2014), pp. 178-185. ISSN 1335-6291 (in Slovak)
- Výleta, R. – Szolgay, J. – Valent, P.: Disaggregation of Daily Precipitation Amounts to Hourly Data Using a Hybrid Random Cascade Model at the Sliač Station. In: *Acta Hydrologica Slovaca*. Vol. 15, No. 2 (2014), pp. 281-289. ISSN 1335-6291 (in Slovak)
- Zechelová, K. – Kohnová, S.: Analysis of the Impact of the Length of an Observation Period on the Derived Values of Scaling Exponents at Selected Rain Gauge Stations in Slovakia. In: *Acta Hydrologica Slovaca*. Vol. 15, No. 2 (2014), pp. 290-297. ISSN 1335-6291 (in Slovak)
- Zsideková, B. – Kohnová, S. – Hlavčová, K.: Analysis of Time Changes in the Characteristics of the Hydrological Balance of the Laborec Basin. In: *Acta Hydrologica Slovaca*. Vol. 15, No. 1 (2014), pp. 204-212. ISSN 1335-6291 (in Slovak)
- Zsideková, B. – Kohnová, S. – Hlavčová, K.: Temporal Changes in a Simulated Snow Water Equivalent. In: *Acta Hydrologica Slovaca*. Vol. 15, (2014), pp. 54-63. ISSN 1335-6291 (in Slovak)

## Conference Proceedings

- Bajtek, Z. – Čistý, M. – Čelár, L.: Hydraulic Analysis of Irrigation Network. In: 1st South East European Conference on Sustainable Development of Energy, Water and Environment Systems : Digital Proceedings. 1. ed. Zagreb : Faculty of Mechanical Engineering and Naval Architecture, 2014, CD ROM, pp. 92-102. ISSN 1847-7178 (in English)
- Becová, A.: Justification of Water Irrigation Requirements by an Analysis of Hot and Dry Days. In: *Advances in Architectural, Civil and Environmental Engineering : 24rd Annual PhD Student Conference on Architecture and Construction Engineering, Building Materials, Structural Engineering, Water and Environmental Engineering, Transportation Engineering, Surveying, Geodesy, and Applied Mathematics*. 1. ed. Bratislava : Slovak University of Technology in Bratislava, 2014, CD ROM, pp. 248-255. ISBN 978-80-227-4301-3 (in Slovak)
- Bezák, J.: Application of Data-Driven Ensemble Models for Flow Predictions on Reduced Data by Sampling. In: *Juniorstav 2014 : 16th Conference of Doctoral Study*. Brno, CR, 30. 1. 2014. 1. ed. Brno : VUT in Brno, 2014, CD ROM, [7] pp. ISBN 978-80-214-4851-3 (in Slovak)

- Čelár, L.: Analysis for Irrigation. In: *Advances in Architectural, Civil and Environmental Engineering : 24rd Annual PhD Student Conference on Architecture and Construction Engineering, Building Materials, Structural Engineering, Water and Environmental Engineering, Transportation Engineering, Surveying, Geodesy, and Applied Mathematics*. 1. ed. Bratislava : SUT in Bratislava, 2014, CD ROM, pp. 869-875. ISBN 978-80-227-4301-3 (in Slovak)
- Čistý, M. – Čelár, L. – Minarič, P.: Ensemble Modeling in Soil Hydrology. In: *SGEM 2014. GeoConference on Water Resources, Forest, Marine and Ocean Ecosystems : Conference Proceedings*. Vol. I. Sofia : STEF 92, 2014, pp. 239-245. ISSN 1314-2704. ISBN 978-619-7105-13-1 (in English)
- Čistý, M. – Bajtek, Z. – Čelár, L.: Comparison of Demand Driven and Pressure Driven Hydraulic Analysis of the Irrigation Network. In: *SGEM 2014. GeoConference on Water Resources, Forest, Marine and Ocean Ecosystem : Conference Proceedings*. Vol. I. Sofia : STEF 92, 2014, pp. 159-166. ISSN 1314-2704. ISBN 978-619-7105-13-1 (in English)
- Čistý, M. – Doláková, G. – Skalová, J. – Minarič, P.: Transformation of Soil Texture Classifications by Ensemble Modeling. In: *Advances in Environmental Sciences, Development and Chemistry : Proceedings of the EEDS 2014 International conference, GESE 2014, MANASE 2014, WHH 2014, CCE 2014*. 1. ed., 2014, online, pp. 252-257. ISBN 978-1-61804-239-2 (in English)
- Čistý, M. – Bajtek, Z.: Temporal Downscaling of Soil Moisture Data by Random Forests Algorithm. In: *1st South East European Conference on Sustainable Development of Energy, Water and Environment Systems : Digital Proceedings*. 1. ed. Zagreb : Faculty of Mechanical Engineering and Naval Architecture, 2014, CD ROM, pp. 165-173. ISSN 1847-7178 (in English)
- Čistý, M. – Becová, A. – Čelár, L.: Drought Analysis by Multicriterial Methodology. In: *Adolf Patera Workshop 2014 : Extreme Hydrological Processes in River Basins*. 1. ed. Prague : CVUT in Prague, 2014, pp. 39-46. ISBN 978-80-02-02574-0 (in Slovak)
- Čistý, M. – Becová, A. – Čelár, L.: Drought Analysis by Multicriterial Methodology. In: *HydroCarpath Catchment Processes in Regional Hydrology: Confronting Experiments and Modeling in Carpathian Drainage Basins : Proceedings of the International Conference*. 1. ed. Sopron, Hungary : University of West Hungary Press, 2014, CD ROM, [6] p. ISBN 978-963-359-036-2 (in English)
- Danáčová, M. – Papinčáková, L. – Szolgay, J.: Comparison of Changes in the Transformation Flood Waves by Using Multilinear Routing Model on the Danube River. In: *Transport of Water, Chemicals and Energy in the Soil-Vegetation-Atmosphere System. 21st Poster Day*. 1. ed. Bratislava : IH SAS, 2014, CD ROM, pp. 397-398. ISBN 978-80-89139-33-0 (in English)
- Danáčová, M. – Szolgay, J.: Detection of Changes in the Relationship between the Travel Time of Flood Peaks and Discharges by Multilinear Routing. In: *Adolf Patera Workshop 2014: Extreme Hydrological Processes in River Basins*. 1. ed. Prague : CVUT in Prague, 2014, pp. 47-54. ISBN 978-80-02-02574-0 (in Slovak)
- Ivan, P.: Evaluation of the Quality of an Aquatic Habitat on the Nitrica River. In: *Science for the Young 2014 : 9th International Conference of Young Scientists*. Cracow, Poland, 21. – 24. 5. 2014. 1. ed. Nitra : SAU in Nitra, 2014, CD ROM, pp. 103-111. ISBN 978-80-552-1189-3 (in Slovak)
- Ivan, P. – Macura, V.: Assessment of the Quality of Aquatic Habitat for Schneider in Nitrica River. In: *SGEM 2014. GeoConference on Water Resources, Forest, Marine and Ocean Ecosystems: Conference Proceedings*. Vol. I. Sofia : STEF 92, 2014, pp. 97-103. ISSN 1314-2704. ISBN 978-619-7105-13-1 (in English)
- Ivan, P. – Macura, V. – Belčáková, I.: Various Approaches to Evaluation of Ecological Stability. In: *SGEM 2014. GeoConference on Ecology, Economics, Education and Legislation : Conference Proceedings*. Vol. I. Sofia : SGEM, 2014, pp. 799-805. ISBN 978-619-7105-18-6 (in English)
- Ivan, P. – Macura, V. – Majorošová, M.: Calculation of Combined Suitability Factors on the Nitrica River. In: *HydroCarpath Catchment Processes in Regional Hydrology: Confronting Experiments and Modeling in Carpathian Drainage Basins : Proceedings of international conference*. 1. ed. Sopron, Hungary : University of West Hungary Press, 2014, CD ROM, [8] p. ISBN 978-963-359-036-2 (in English)
- Ivan, P.: Biotic and Abiotic Parameters of the Quality of an Aquatic Habitat in the Nitrica River. In: *Young Scientists Conference: 1. ed. Bratislava : FC of SUT, 2014, CD ROM, pp. 49-56. ISBN 978-80-227-4255-9 (in Slovak)*
- Ivan, P.: Assessment of the Quality of Aquatic Habitats for Minnows in the Nitrica River. In: *Advances in Architectural, Civil and Environmental Engineering : 24rd Annual PhD Student Conference on Architecture and Construction Engineering, Building Materials, Structural Engineering, Water and Environmental Engineering, Transportation Engineering, Surveying, Geodesy, and Applied Mathematics*. 1. ed. Bratislava : SUT in Bratislava, 2014, CD ROM, pp. 256-262. ISBN 978-80-227-4301-3 (in Slovak)
- Jarabíková, M. – Pásztorová, M. – Minarič, P. – Skalová, J.: Impact of the Climate Change on Evapotranspiration in the Poiplie Area. In: *Science for the Young 2014 : 9th International Conference of Young Scientists*. Cracow, Poland, 21.-24.5.2014. 1. ed. Nitra : SAU in Nitra, 2014, CD ROM, pp. 112-127. ISBN 978-80-552-1189-3 (in English)
- Jarabíková, M. – Vitková, J. – Klečková, N.: Forecast of the Precipitation and Temperature for the Area of Malacky. In: *26th Conference of Young Hydrologists, 13th Conference of Young Water Managers, Bratislava, SR, 6.11.2014. Bratislava : SHMI, 2014, CD ROM, [14] pp. ISBN 978-80-88907-87-9 (in Slovak)*
- Jarabíková, M. – Vitková, J. – Klečková, N.: Comparison of Changes in Soil Water Storage for Grass and Maize Crops. In: *Transport of Water, Chemicals and Energy in the Soil-Vegetation-Atmosphere System. 21st Poster Day*. 1. ed. Bratislava : IH SAS, 2014, CD ROM, pp. 119-125. ISBN 978-80-89139-33-0 (in Slovak)
- Jarabíková, M.: Climate Developments for the Zahorie Area Through Temperature and Precipitation. In: *Advances in Architectural, Civil and Environmental Engineering : 24rd Annual PhD Student Conference on Architecture and Construction Engineering, Building Materials, Structural Engineering, Water and Environmental Engineering, Transportation Engineering,*



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