



**BABEȘ-BOLYAI UNIVERSITY
FACULTY OF GEOGRAPHY
DEPARTMENT OF PHYSICAL AND
TECHNICAL GEOGRAPHY
and
AIR AND WATER ASSOCIATION**



in cooperation with

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**THE INTERNATIONAL CONFERENCE
AIR AND WATER - COMPONENTS OF THE ENVIRONMENT**

15th Edition

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17 – 19 March 2023

CLUJ-NAPOCA, ROMANIA

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PROGRAM

Friday, March 17, 2023

- 08.00 – 09.00: *Registration (Hall 43, 1st floor)*
- 09.00 – 10.10: *Opening ceremony (Hall 43, 1st floor)*
- 10.10 – 10.30: *Coffee break (Hall 27, Groundfloor)*
- 10.30 – 12.30: *Plenary session (Hall 43, 1st floor)*
- 12.30 – 12:55: *Poster session (Hall 43 and 46, 1st floor)*
- 13.05 – 14.35: *Lunch (Haşdeu University Restaurant, Petru Friciu Hall)*
- 14.45 – 16.30: *Communication sessions*
- 16.30 – 17.00: *Coffee break (Hall 27, Groundfloor)*
- 17.00 – 18.15: *Communication sessions*
- 18.15 – 18.45: *Conclusions (Hall 43, 1st floor)*
- 19.00 – 22.00: *Official dinner (Haşdeu University Restaurant, Petru Friciu Hall)*

Saturday, March 18, 2023

- 08.30 – 18.30 *Field trip itinerary*
- Cluj-Napoca – Rimetea – Colţeşti – Vălişoarei Gorges – Colţeşti – Rimetea – Cluj-Napoca*

Sunday, March 19, 2023

- 10.00 – 12.00 *Cluj-Napoca city tour*

Friday, March 17, 2023

Opening Ceremony

Hall 43, Amphitheatre „George Vâlsan”, 1st floor

- 09.00 - 09.05:** Organizers welcome
09.05 - 09.15: PhD. Assoc. Prof. Titus MAN - Dean of the Faculty of Geography
09.15 - 09.25: PhD. Dipl. Eng. Călin NEAMȚU - Presentation of ”Someș” Water Company
09.25 - 09.35: Dipl. Eng. Chem. Alexandru FEKETE - Presentation of Someș - Tisa Water Branch Administration
09.35 - 09.45: PhD. Mat. Narcis MAIER - Presentation of ”Transylvania Nord” Regional Meteorological Centre
09.45 - 09.55: PhD. Lect. Răzvan BĂȚINAȘ - World Water Day - 2023
09.55 - 10.05: PhD. Lect. Traian TUDOSE - World Meteorological Day - 2023
10.05 - 10.30: **Coffee break**

Plenary Session

Hall 43, ”George Vâlsan” Amphitheatre, 1st floor

Chairmen: Simona CÎNTĂ-PÎNZARU, Christof LANZERSTORFER

10.30 - 11.00

Ivan ČANJEVAC, Ivan MARTINIĆ, Danijel OREŠIĆ, Mladen MARADIN:
Hydrological Response to Changing Climate in Headwater Streams of the Plitvice Lakes Np, Croatia

11.00 – 11.30

Bartłomiej RZONCA, Anastasiia DERYK, Kinga KOZAK, Maciej ŁAGOS, Michał PAWŁOWSKI, Barbara PEĐRACKA, Janusz SIWEK, Jakub SŁOTWIŃSKI, Patryk WACŁAWCZYK, Aleksandra WIKTOROWICZ, Weronika ZIÓŁKIEWICZ: *High-discharge springs supplied from the flysch rocks of Bieszczady Mountains, Carpathians: water balance and recharge patterns*

11.30 – 12.00

János MIKA, Csaba KÁROSSY, László LAKATOS: *Analysis of Frequency Trends in Amalgamated Peczely Macro-Synoptic Types (1971-2020) Characterising Continental-Scale Circulation Parallel to the Global Warming*

12.00 – 12.30

Ioan-Cristian IOJĂ, Mihai-Răzvan NIȚĂ: *Crossing barriers to implement Nature-based Solutions in Romanian cities*

12.30 – 12:55: *Poster session (Hall 43 and 46, 1st floor)*

13.05 – 14.35: *Lunch (”Petre Friciu” Hall, Hașdeu University Restaurant)*

Session I. Poster session

12.30 – 12.55

Hall 43 1st Floor

Chairmen: Melinda VIGH, Ivan MARTINIĆ, Traian TUDOSE

1. Erika Beata Maria BEILICCI, **Robert Florin BEILICCI**: *Comparison of Different Methods of Modeling the Phenomena of Sediment Transport in Riverbeds*
2. **Robert Florin BEILICCI**, Erika Beata Maria BEILICCI: *Advance Hydraulic Modelling of Excavation Pit, Study Case ISHO Timisoara, Romania*
3. **Oana-Elena CHELARIU**, Corneliu IAȚU, Ionuț MINEA: *Vulnerability of Human Settlements and Economic Activities to Natural Hazards in The North-East Region, Romania*
4. **Csilla MÜLLER MOLNÁR**, Teodora-Diana DRIGLA, Simona CINTĂ PÎNZARU: *Prospects of SERS Technique for Analysis of Salt Lakes Waters*
5. **Teodora-Diana DRIGLA**, Csilla MÜLLER MOLNÁR, Simona CINTĂ PÎNZARU: *Multiparameter Analysis and Spectroscopic Data Correlation in First Monitoring Approach of Salt Water Lakes*
6. **Anca-Paula CIURBA (PASTOR)**, Ionel HAIDU, Cristina AUR: *The Therapeutic Use of Thermal Waters in Rural Locations of the Bihor County*
7. **Marina IOSUB**, Dan LESENCIUC, Iuliana-Gabriela BREABĂN, Adrian URSU: *Quantitative Assessment and Spatial Distribution of Tailing Ponds in Romania. Preliminary Study*
8. Crina RADU, **Valentina-Mariana MĂNOIU**, Katarzyna KUBIAK-WÓJCICKA, Emilia AVRAM, Andreea BETERINGHE, Alexandru-Ioan CRĂCIUN: *Romanian Danube River Hydrocarbon Pollution in 2011-2021*
9. **Ionuț MINEA**, Marina IOSUB, Florin CONSTANTIN MIHAI: *Hydrological Risks and Plastic Pollution Implications in Eastern Carpathians (Romania)*
10. Narcisa MILIAN, **Udo RECKERH**: *Variations of Nivo-Meteorological Parameters During the 2021-2022 Winter*
11. **Ioana-Gabriela TOROIMAC**, Liliana ZAHARIA, Catalina STOICA, Dana CONSTANTIN, Gabriela MOROȘANU, Ionuț ȘANDOR: *Restoring Rivers in Europe: A Project-Based Inventory*
12. **Patryk WACŁAWCZYK**: *Suburbanization and Water Cycle in Small Upland Catchments Around the City of Kraków, Poland*

II. Water Resource Management 1

14.45 - 16.30

Hall 43 1st Floor

Chairmen: Ioana-Gabriela TOROIMAC, Michał MARSZELEWSKI, Ionuț MINEA

14.45 - 15.00

Daniel BOICU: *Time Series Analysis and Prediction in Hydrogeology Using Programming Language*

15.00 - 15.15

Andrei DANILĂ, Cristina BĂLĂCEANU, Oana ORZA, Sabina BOSOC, Mădălin SILION, George SUCIU: *Smart Electronic System for Monitoring Water Quality Parameters in Fish Tanks*

15.15 - 15.30

Michał MARSZELEWSKI, Adam PIASECKI: *Legal and Environmental Conditions of Rainwater Management in Urban Areas in Poland*

15.30 - 15.45

Ionuț MINEA, Oana-Elena CHELARIU, Daniel BOICU, Marina IOSUB: *Assessing the Social Vulnerability Associated to Groundwater Resources in Eastern Romania*

15.45. - 16.00

Gabriela Adina MOROȘANU, Liliana ZAHARIA, Philippe BELLEUDY: *Indicators-Based Methods for Estimating the Sub-Catchments' Contribution to Maximum Flow During Flood Events in the Jiu River Basin*

16.00 - 16.15

Katarzyna KUBIAK-WÓJCICKA, Patrik NAGY, Martina ZELENÁKOVÁ: *Flow Duration Curves (FDC) for Selected Mountain Catchments in Slovakia*

16.15 - 16.30

Ionuț BOBE, Petre BREȚCAN, Daniel DUNEA, Daniel DIACONU, Gheorghe ȘERBAN, Dănuț TANISLAV, Ana-Maria GLOD-LENDVAI: *Groundwater Quality Assessment in the Central Bărăgan Plain Using Synthetic Quality Indicators and GIS Analysis*

16.30 - 17.00 Coffee break

III. Climatic and hydrological hazards & Water Resource Management 2

14.45 - 16.30

Hall 46 1st Floor

Chairmen: Adina-Eliza CROITORU, Lucian SFÎCĂ, Csaba HORVATH

14.45 - 15.00

Răzvan BĂTINAȘ, Bogdan Gabriel PITICARI, Simion NACU: *Spatio-Temporal Analysis of Accidental Water Pollution Events in Romania Between 2017-2022*

15.00 - 15.15

Abdelmoumen BENCHATTOU, Mohamed EL GHACHI: *Modelling of the Floods of Rivers for the Integrated Management of the Risk of Inundation: Case of the Basin Overturning of Toudgha (Southeast of Morocco)*

15.15 - 15.30

Udo RECKERH, Narcisa MILIAN: *Conditions Favorable for the Release of Avalanches in the Winter Season 2021-2022 – Case Study*

15.30 - 15.45

Lucian SFÎCĂ, Andrei BÂRLEA, Daniel CIOBOTU, Claudiu CREȚU, Robert HRIȚAC, Pavel ICHIM: *On the Issue of Absolute Extreme Temperatures in Romania*

15.45 - 16.00

Alexandru COROCĂESCU, Alexandra DIOR, Claudiu-Ștefănel CREȚU, **Pavel ICHIM**, Lucian ȘERBAN, Lucian SFÎCĂ: *Assessment of Climate Characteristics of an Urban Park Using Satellite Imagery and In-Situ Measurements. Study Case of Cancicov Park from Bacău City (Romania)*

16.00 - 16.15

Melinda VIGH, Gabor PANDI: *The Influence of the Hydro-Technical System on the Water Flow of the Sebeș River*

16.15 - 16.30

Jacek BARAŃCZUK, **Katarzyna BARAŃCZUK**, Martina ZELENÁKOVÁ, Hany F. ABD-ELHAMID: *Key Climate-Change Hazards – A Case of Gdańsk*

16.30 - 17.00 Coffee break

IV. Air and water environment monitoring

17.00 – 18.15

Hall 43 1st Floor

Chairmen: Csilla MÜLLER MOLNÁR, Petre BREȚCAN, Răzvan-Horațiu BĂTINAȘ

17.00 - 17.15

Gheorghe ȘERBAN, **Răzvan-Horațiu BĂTINAȘ**, Daniel SABĂU, Estera HADA, Ana-Maria, POP: *Water Quality Assesment in Peatlands from North-Western Romania: Iaz and La Poduri Case Studies*

17.15 - 17.30

Zsuzsanna BORBANDI, Răzvan-Horațiu BĂTINAȘ: *Physico-Chemical Evaluation of Water Bodies Found in the Saline Areas of Transylvania. A Comparative Study: Ocnășoara, Pata and Cojocna*

17.30 - 17.45

Robert STRECHE, Oana ORZA, Sabina BOSOC, Filip OSIAC, Cristina BALACEANU, **Andrei DĂNILĂ**, George SUCIU: *Implementing Blockchain Technology in IoT Vineyard Monitoring System*

17.45 - 18.00

Pavel ICHIM, Lucian SFÎCĂ, Petruț-Ionel BISTRICEAN, Dumitru MIHĂILĂ, Claudiu-Ștefănel CREȚU, Robert HRIȚAC: *A methodological approach for analyzing mobile meteorological measurements in urban areas from North-Eastern Romania*

18.00. - 18.15

Ivan MARTINIĆ, Ivan ČANJEVAC: *The diversity of the Medvednica mountain springs (Croatia)*

18.15 - 18.45 Conclusions (Hall 43, 1st floor)

**V. Climatic changes and their impact & Pollution and protection of
air and water environment**

17.00 – 18.00

Hall 46 1st Floor

Chairmen: Valentina-Mariana MĂNOIU, Janusz SIWEK, Iulian HOLOBĂCĂ

17.00 - 17.15

Csaba HORVATH, Zsolt Magyari-Saska, Adina-Eliza CROITORU: *R and GIS for Climate Extreme Indices. Case Study Sibiu County Frost Days*

17.15 - 17.30

Laura Elena PETRESCU: *The Evolution of the Maximum Extreme Temperatures in the Area of the Romanian Black Sea Coast During 1961 – 2020*

17.30 - 17.45

Christof LANZERSTORFER: *Road Dust and House Dust: Nexus of Metal Concentrations*

17.45 - 18.00

Igor LEŠČEŠEN, Biljana BASARIN, Dragoslav PAVIĆ, Minučer MESAROŠ: *Extreme Precipitation Analysis in Novi Sad, Serbia*

18.15 - 18.45 Conclusions (Hall 43, 1st floor)

VI. Student's Session

14.45 - 16.30

Hall 30, Groundfloor

Chairmen: Weronika ZIÓŁKIEWICZ, Jakub SŁOTWIŃSKI, Dominik TOMIĆ

14.45 - 15.00

Michał PAWŁOWSKI, Anastasiia DERYK, Kinga KOZAK, Maciej ŁAGOS, Barbara PEĐRACKA, Bartłomiej RZONCA, Janusz SIWEK, Jakub SŁOTWIŃSKI, Patryk WACŁAWCZYK, Aleksandra WIKTOROWICZ, Weronika ZIÓŁKIEWICZ: *Spatial Pattern of Stream Recharge Zones in a Small Mountainous Catchment in Western Bieszczady Mountains (Outer Flysch Carpathians)* - poster

15.00 - 15.15

Jakub SŁOTWIŃSKI, Arkadiusz DUDA, Marcelina NAWROT, Barbara PEĐRACKA, Weronika ZIÓŁKIEWICZ: *Meteorological Hazards to Viticulture at the Jagiellonian University Vineyard in Łazy, Polish Western Carpathians* - poster

15.15 - 15.30

Dominik TOMIĆ: *Springs of Urban Stream in City's Hilly Hinterland* - poster

15.30 - 15.45

Aleksandra WIKTOROWICZ, Anastasiia DERYK, Patryk KASPRZYCKI, Mateusz STOLARCZYK: *Hydrological and Soil Conditions of Wild Garlic (*Allium ursinum*) Habitat in Bieszczady National Park (Polish Carpathians)* - poster

15.45 - 16.00

Weronika ZIÓŁKIEWICZ: *Influence of Cultivation Type on the Microclimate of the Agroecosystem* - poster

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16.30 - 17.00 Coffee break

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18.15 - 18.45 Conclusions (Hall 43, 1st floor)

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Tisa**



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