

# **Catchment and river processes in regional hydrology: coupling field experiments and data assimilation into process understanding and modelling in Carpathian basins**

International conference, 26 November 2021

## **ORGANIZERS:**

Slovak University of Technology in Bratislava, Slovakia (SUT)  
University of Sopron, Hungary (UoS)  
Vienna University of Technology, Austria (TUW)  
Vienna Doctoral Programme on Water Resource Systems  
University of Natural Resources and Life Sciences, Vienna, Austria (BOKU)

## **VENUE:**

Karlsplatz 13/222, Vienna  
Böcklsaal, 1<sup>st</sup> floor

## **CONFERENCE CHAIRS**

Ján Szolgay	Slovak University of Technology in Bratislava, Bratislava, Slovakia
Zoltán Gribovszki	University of Sopron, Sopron, Hungary
Günter Blöschl	Vienna University of Technology, Vienna, Austria
Karsten Schulz	University of Natural Resources and Life Sciences, Vienna, Austria

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Csaba Mátyás	University of Sopron, Sopron, Hungary
Gábor Keve	University of Public Service, Hungary
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Abstract submission deadline: 30<sup>th</sup> October 2021

Conference: 26th November 2021

Conference papers: 05th December 2021

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## PROGRAMME OVERVIEW:

### Böcklsaal, 1<sup>st</sup> floor

Date	Time	Programme
26 November 2021	08:30-09:15	Registration
	09:15-09:30	Opening: Günter Blöschl, Jan Szolgay, Zoltán Gribovszki
	09:30-10:45	1st Oral Block (5 lectures) Chairman: Silvia Kohnová and Péter Kalicz
	10:45-11:00	Coffee Break
	11:00-12:00	2nd Oral Block (4 lectures) Chairman: Zoltán Gribovszki and Gábor Keve
	12:15-12:45	Lunch break
	12:45-14:15	Poster presentations (2 - 3 min time slots/per poster) and Chairman: Kamila Hlavčová and Borbála Széles
14:15-14:30	Closure	

## Detailed Programme, 26 November 2021

### Böcklsaal, 1<sup>st</sup> floor

#### 9:30-10:45 1st Oral Block

Chairman: Silvia Kohnová and Péter Kalicz

<i>Nr.</i>	<i>Author</i>	<i>Title</i>
1	Valent Peter (TUW/SUT) (15 min)	HORA- National flood risk mapping in Austria
2	Nagy Eszter Dóra, Szilágyi József (UoS) (15 min)	Assessment of Dimension-Reduction and Grouping Methods for Catchment Response Time Estimation
3	Keve Gábor (UPS) (15 min)	The comparative analysis of discharge measurement methods
4	Lun David (TUW) (15 min)	Characteristics and process controls of statistical flood moments in Europe - a data-based analysis
5	Németova Zuzana (SUT) (15 min)	The impact of rainfall events on the development of degradation processes from the past to the present, case study: Zagozdonka catchment, Poland

#### 10:45-11:00 Coffee Break

#### 11:00-12:00 2nd Oral Block

Chairman: Zoltán Gribovszki and Gábor Keve

<i>Nr.</i>	<i>Author</i>	<i>Title</i>
6	Tamás Enikő Anna (UPS) (15 min)	Preparations and preliminary results of flood modeling of the Völgységi-creek
7	Tamás Gábor Pálffy, Péter Kalicz, Zoltán Gribovszki (UoS) (15 min)	Design-support in Panda for the supplementary treatment of nitrate in treatment plant effluents
8	Cyril Siman (SUT/ SHMI) (15 min)	Influence of catchment parameters on water quality indicators in selected profile of surface stream

9 Ficsor Johanna  
(UPS) (15 min)

The morphological examination of the Drava river

## 12:00-12:45 Lunch

## 12:45-14:15 Poster presentations (2- 3 min time slots/per poster) and discussion

Chairman: Kamila Hlavčová and Borbála Széles

Nr.	Author	Title
P1	Calli Suleyman Selim (TUW)	Validation of the sca routine on Austrian alps, Hochschwab, Rax, Schneeberg and Schneealp Karst catchments
P2	Kubáň Martin and Brziak Adam (SUT)	The value of ASCAT data for the calibration of a conceptual hydrological model
P3	Bertola Miriam et al. (TUW)	Modelling snow water equivalent storage and snowmelt across Europe with a simple degree-day model
P4	Sabová Zuzana and Kohnová Silvia (SUT)	Analysis of changes in daily discharge characteristics using the MPI and KNMI climate scenarios until 2100 in selected river basins in Slovakia
P5	Rattayová Viera et al. (SUT)	Design of the characteristics of control flood waves in conditions of changes in a hydrological regime
P6	Széles Borbála et al. (TUW)	Isotopic hydrograph separation in the Hydrological Open-Air Laboratory, Austria
P7	Tomaščík Matúš (SUT)	Analysis of the impact of soil erosion model parameters on a final evaluation of soil erosion processes
P8	Szóke Előd (UoS)	Impact of the water supply on the soil moisture and groundwater of a woody pasture near Kószeg (Hungary)
P9	Botková Natália and Vitková Justína (IH SAS)	Changes in a plant's available water capacity due to the application of biochar
P10	Nevezi Csenge et al. (UoS)	Comparison of a forest and a neighbouring meadow surface soil moisture in a valley location
P11	Pálfy Tamás Gábor et al. (UoS)	Design support in Panda for the supplementary treatment of nitrates in treatment plant effluents

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| P1<br>2 | Szabó András et al.<br>(UoS)                     | How significant the hydrological impact of forests in Hungarian sandy dryland Kiskunság?                      |
| P1<br>3 | Varga Adrián and<br>Velísková Yvetta<br>(SUA)    | Evaluation of hydro-meteorological data change at the Turček water reservoir locality                         |
| P1<br>4 | Doláková Gréta<br>(SUT)                          | Hydromorphological evaluation of the ecological potential of natural and heavily modified water bodies        |
| P1<br>5 | Petrová Timea et al.<br>(SUT)                    | Possibilities of using structural substrate with a biochar component in blue-green infrastructure planning    |
| P1<br>6 | Tyukosová Viktória and<br>Timea Petrová<br>(SUT) | Changes in the composition and morphology of floodplain forests resulting from management of the Danube basin |
| P1<br>7 | Ermilov Alexander<br>Anatol et al.<br>(EMK BME)  | Mapping riverbed material with Deep Learning – a field study from the Danube                                  |

**14:15-14:30** Closure