

PRELIMINARY PROGRAMME

9th International Workshop on Ice Caves (IWIC-IX)

May 9, 2022 (Monday)

09:00 – 17:00 pre-excursion to the karst of Demänová Valley, Low Tatras (Demänová Ice Cave, Demänová Cave of Liberty, surface karst landforms)

May 10, 2022 (Tuesday)

07:30 – 09:00 registration of participants

09:00 – 09:30 workshop opening

Session 1

Chairman: **Valter Maggi**

09:30 – 09:50	B. P. Onac, A. Perşoiu: Mineralogical and paleoclimatic significance of cave ice deposits: a review
09:50 – 10:10	A. Perşoiu, C. Bădăluță: Stable isotopes in cave ice indicate summer and winter temperatures had different trajectories during the last 1000 years
10:10 – 10:30	R. Milovský, J. Šurka, P. Herich, M. Orvošová, Hong-Chun Li, E. Očkaik, S. Milovská, E. Luhová: 2300 years of ice
10:30 – 10:50	Ch. Spötl, A. Jarosch, G. Koltai, A. Saxer: Ice-damaged speleothems in previously glaciated caves: empirical observations and numerical simulations
10:50 – 11:00	Discussion

11:00 – 11:20 coffee break

Session 2

Chairman: **Bogdan P. Onac**

11:20 – 11:40	V. Maggi, C. Meyer, B. Leoni, V. Nava, F. Maspero, A. Pflitsch: Chemical and physical stratigraphy of Schellenberger Eishole ice core
11:40 – 12:00	Z. Kern, Zs. Ruzkiczay-Rüdiger, A. Perşoiu, S. Merchel, M. Karlik, A. Gärtner, G. Rugel, J. Lachner, P. Steier: Testing cave ice deposits as archives of past atmospheric ¹⁰ Be deposition
12:00 – 12:20	T. Racine, P. Reimer, Ch. Spötl, Ch. Honiat, G. Koltai: Unraveling 2000 years of ice accumulation in caves of the Northern Calcareous Alps (Austria)
12:20 – 12:30	Discussion

12:30 – 14:00 lunch

Session 3

Chairman: **Christoph Spötl**

14:00 – 14:20	B. P. Onac: Evidence for pacific- and monsoon-sourced precipitation variability from ice deposits in lava tubes (New Mexico, USA)
14:20 – 14:40	G. Koltai, Ch. Spötl, C. Honiat, T. Racine, H. Cheng: Cryogenic cave carbonates document much more extensive cave ice and multiple thawing episodes in Eisriesenwelt (Austria) during the last glacial period
14:40 – 15:00	N. Zupan Hajna, J. Ruan, D. Genty, E. Regnier, M. Pierre, E. Pons, F. Gabrovšek: Example of stalagmite growth during and at the end of the Last Glaciation, Slovenian Southern Alps and Dinarides
15:00 – 15:20	A. Securo, E. Forte, D. Martinucci, S. Pillon, R. R. Colucci: Terrestrial Structure from Motion and Ground Penetrating Radar for ice in caves monitoring
15:20 – 15:30	Discussion

15:30 – 15:50 coffee break

Session 4

Chairman: **Aurel Perşoiu**

15:50 – 16:10	C. Haidău, A. Nováková, A. Hillebrand-Voiculescu: Dobšiná and Demänová ice caves: what do their ice blocks reveal?
16:10 – 16:30	N. Raschmanová, E. Kováč, M. Žurovcová, V. Šustr, D. Miklisová, A. Parimuchová: Entrances of ice caves support high local diversity of soil arthropods – Collembola as a model group
16:30 – 16:50	P. Zelinka, J. Zelinka: Longterm influence of external climatic characteristics on the microclimate and ice fill in the Dobšiná Ice Cave
16:50 – 17:10	J. Gašinec, K. Pukanská, K. Bartoš: Geodetical measurements of ice surface changes in the Dobšiná Ice Cave
17:10 – 17:20	Discussion

17:20 – 17:40 coffee break

17:40 – 18:00 **M. Kudla, E. Očkaik:** History of the Dobšiná Ice Cave

18:00 – 18:30 the exhibition about the history of Dobšiná Ice Cave

May 11, 2022 (Wednesday)

08:00 – 19:00 all-day IWIC excursion to the Dobšiná Ice Cave (Slovak Paradise), and Silická Ice Cave (Slovak Karst)

May 12, 2022 (Thursday)

Session 5

Chairman: **Zoltán Kern**

09:00 – 09:20	N. Buzjak, A. Perşoiu, V. Butorac: Microclimate and ice deposits research in Crna ledenica ice cave (Biokovo Nature Park, Croatia) 2016-2019
09:20 – 09:40	M. Wind, T. Racine, F. Obleitner, Ch. Spötl: Analysis of long-term temperature records at Hundalm ice cave (Austria)
09:40 – 10:00	Ch. Meyer, V. Maggi, A. Pflitsch: Testing of a novel measuring methodology – the loggernet experiment
10:00 – 10:20	Z. Hochmuth, J. Šupinský, J. Stankovič, J. Halama, J. Kaňuk: Dynamics of temperature changes in the Silická ľadnica Cave (Silica Ice Cave, Slovak Karst) and its influence on the ice accumulations
10:20 – 10:30	Discussion

10:30 – 10:50 coffee break

Session 6

Chairman: **Gabriela Koltai**

10:50 – 11:10	A. Šefčáková, V. A. Levchenko: Prehistoric charcoal drawings in Silická ľadnica Cave: New AMS radiocarbon dates
11:10 – 11:30	P. Zelinka, J. Zelinka: The influence of external climatic changes on significant loss of ice in Demänová Ice Cave
11:30 – 11:50	M. Jelonek, J. Zelinka, M. Gradziński, J. Madeja: Age and pollen analysis of cave ice, Dobšiná Ice Cave
11:50 – 12:10	A. Perşoiu, P. Bella, M. Roll, T. Nováková, T. Navrátil, J. Rohovec, K. Žák, N. Piotrowska: New radiocarbon data contributing to the spatial distribution of ice ages in the Dobšiná Ice Cave: implications for the ice movement
12:10 – 12:20	Discussion

12:20 – 14:00 lunch

Poster presentation

14:00 – 15:00

Chairman: **Friedrich Oedl**

E. Balko, T. Čeklovský, M. Sabol: Ice age fauna from Demänová Ice Cave (northern Slovakia)
P. Bella: Seasonal ice bulged elevations in the Dobšiná Ice Cave generated by upward expansion of freezing ponded water
C. Haidău, A. Nováková, A. Hillebrand-Voiculescu: Investigation of ice-entrapped microbiome of Dobšiná and Demänová ice caves
C. Haidău, A. Nováková, A. Hillebrand-Voiculescu: Diversity of airborne microbiota from Ascunsă Cave (Romania): a preliminary study
Z. Kern, N. Bočić, T. Bartyik, Gy. Sipos: New radiocarbon ages from the ice block of Vukušić ice cave Velebit Mt., Croatia
E. Luhová, R. Milovský, M. Orvošová, S. Milovská, J. Šurka: Update to mapping of permafrost in cryogenic cave indicators
S. Milovská, M. Orvošová, R. Milovský, T. Mikuš, A. Biron, P. Herich, P. Holúbek, E. Luhová: Fractionation trends in cryogenic calcite
Ch. Pennos, A. Perşoiu, Y. Sotiriadis, S. Zachariadis: Constraints on an eastern Mediterranean ice-cave temperature variability: Chionotrypa cave in Greece
A. Perşoiu, N. Buzjak, Ch. Pennos, Y. Sotiriadis, M. Ionita, S. Zachariadis, J. Košutník, V. Butorac: Accelerated loss of cave ice in SE Europe related to heavy summer rains
M. Roll, A. Perşoiu, T. Nováková, T. Navrátil, J. Rohovec, K. Žák, P. Bella, Á. Bihari, Z. Kern, R. Janovics, N. Piotrowska: Testing cave ice as an archive of historic mercury (Hg) deposition: Dobšiná Ice Cave pilot study
A. Securo, C. del Gobbo, R. R. Colucci: Multi-year evolution of snow and ice deposits in Schachtdolines and Shafts after more than a decade of increased snowfalls in the Julian Alps, Europe
M. Seman, L. Hutárová, D. Haviarová, R. Fláková: Chemotrophic and phototrophic microbiota from two ice caves in Slovakia
N. Schörghofer, B. P. Onac, A. Pflitsch: Ice Caves in Hawaii: early results and potential paleo-climate record
M. Wind, F. Obleitner, T. Racine, Ch. Spötl: Advanced meteorological monitoring of two sag-type ice caves in the Austrian Alps

15:00 – 15:20 coffee break

15:20 – 16:20 meeting of the UIS Commission on Glacier, Firn and Ice Caves

16:30 – 17:30 visit of the Slovak Museum of Nature Protection and Speleology

18:00 workshop closing, dinner and social gathering

May 13, 2022 (Friday)

08:30 – 18:00

Post-excursion to the Havrania Abyss (Ohnište, Low Tatras): field clothes, light, and helmet necessary; 2-hour walk with 0.5 km vertical ascent between the parking and the abyss; vertical descent in the abyss through a ladder (15 m depth)