

**ÖAW**

AUSTRIAN  
ACADEMY OF  
SCIENCES

NOVEMBER 11-12, 2022  
FESTSAAL, OEAW  
DR. IGNAZ SEIPEL-PLATZ 2  
1010 VIENNA



SYMPOSIUM

# HIGHLIGHTS OF GEOSCIENTIFIC CAVE RESEARCH



# PROGRAM

FRIDAY, NOVEMBER 11

## OVERVIEW PRESENTATIONS OF KEY ASPECTS

- 13:00–13:15 *Opening*  
**Christian Köberl** | Commission for Geosciences  
**Christoph Spötl** | Commission for Geosciences
- 13:15–13:45 **Jo de Waele** | University of Bologna, Italy  
*A tale of raindrops, soluble rocks, and the creation of caves*
- 13:45–14:15 **Nico Goldscheider** | Karlsruhe Institute of Technology, Karlsruhe, Germany  
*Karst and water*
- 14:15–14:45 **Stacy Carolin** | Cambridge University, Cambridge, UK  
*Rainfall and temperature change captured in speleothem layers: field highlights and future outlook*
- 14:45–15:15 **Victor Polyak** | University of New Mexico, Albuquerque, USA  
*The contribution of speleogenesis to the history of Grand Canyon*
- 15:15–15:45 BREAK
- 15:45–16:15 **Darryl E. Granger** | Purdue University, West Lafayette, USA  
*Cosmogenic nuclide burial dating of cave sediment: applications to speleogenesis, landscape evolution, and human evolution*
- 16:15–16:45 **Fabrizio Antonioli** | Istituto Nazionale di Geofisica e Vulcanologia, Rome, Italy  
*Caves and past sea-level fluctuations*
- 16:45–17:15 **Jacek Szczygiel** | University of Silesia, Sosnowiec, Poland  
*Moving walls: neotectonic and paleoseismic studies in caves*
- 17:15–17:45 **Dirk Hofmann** | University of Göttingen, Germany  
*Cave canvas – Palaeolithic cave art research*
- 17:45 REFRESHMENTS



**SATURDAY, NOVEMBER 12**

**HYPOGENE SPELEOGENESIS**

- 8:30–9:00** **Alexander Klimchouk** | National Academy of Sciences of Ukraine, Kiev, Ukraine  
*Hypogene karst: principal features and implications to geosciences*
- 9:00–9:30** **Ilenia D'Angeli** | University of Padua, Italy  
*Multidisciplinary approaches to determine sulfuric acid speleogenesis*
- 9:30–10:00** **Stephan Kempe** | Technical University of Darmstadt, Germany  
*Hypogene speleogenesis in the Harz Mountains (Germany)*
- 10:00–10:30** BREAK
- 10:30–11:00** **Marjan Temovski** | Isotope Climatology and Environmental Research Centre, Debrecen, Hungary  
*Stable isotopes in hydrothermal carbonic speleogenesis*
- 11:00–11:30** **Yuri Dublyansky** | University of Innsbruck, Austria  
*Hypogene karst and uranium mineralisation in Kyrgyzstan*
- 11:30–12:00** **Philippe Audra** | University of Nice Sophia-Antipolis, Nice, France  
*Hypogene speleogenesis - Origin of caves through deep water rising*

Caves provided shelter to our ancestors in prehistoric times, allow access to drinking water resources for about 2 billion people, and attract millions of tourists around the world. The International Year of Caves and Karst (2021–2022) has shone a spotlight on these lightless worlds hidden in the mountains and beneath our feet in order to raise public awareness of their unique importance to society.

Following a successful symposium on the exploration of caves in 2021, this second two-day symposium provides an overview of the latest developments and highlights in the geoscientific study of caves and karst. International experts from various disciplines in the geosciences and related fields will give keynote lectures aimed at a broad audience. The second half day of this event will focus on an emerging research topic in cave science, the origin of hypogene caves — cavities which have developed from rising groundwater.

## ORGANISERS

Christoph Spötl, Commission for Geosciences, Austrian Academy of Sciences  
Lukas Plan, Natural History Museum Vienna  
Yuri Dublyansky & Gabriella Koltai, University of Innsbruck

## CONTACT

Viktor Bruckman  
Commission for Geosciences  
Austrian Academy of Sciences  
Dr. Ignaz Seipel-Platz 2, 1010 Vienna, Austria  
T: +43 1 51581-3200  
viktor.bruckman@oeaw.ac.at

## REGISTRATION

<https://www.oeaw.ac.at/geok/detail/event/highlights-of-geoscientific-cave-research>

## INFORMATION

Please note that photographs may be taken throughout the event. These will be used by the organizing institution in publications, online and in social media. Please contact the event organizer if you have any concerns or if you wish to be exempted from this activity.

**Cover image:** Calcite crystals - partly back-lit - cover the walls of Surprise cave in Kyrgyzstan.

© Christoph Spötl