



Karst Commission

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October 2021 NEWS

Chairs: Peter Malik (Europe/Africa), Avi Burg (Asia/Oceania), Benjamin Tobin (Americas)

Thank you to the outgoing Co-chairs

Elected at Karst Commission meeting in Dubrovnik 2017 (taking place together with 44th IAH Congress), chairmen trio of Zhang Cheng (Asia/Oceania), Augusto Auler (Americas) and Zoran Stevanović (Europe/Africa) started its successful mandate. During their tenure, they kept many the long-lasting tradition of KC activities and expanded into new activities. They maintained the regular email newsletter of the Karst Commission, updated the web site, awarded the “young karst researcher prize”, organized seminars, conferences and revived the Karst Commission Geotrips. They continued the tradition of cooperation with many karst research groups around the world. They successfully commemorated the KC 50th anniversary by editing a special issue of Hydrogeology Journal “Karst hydrogeology issue.” They were able to do all of this while also navigating the challenges of a global pandemic and keeping our community connected. All this has left a benchmark that will not be easily overcome by the newly elected team. They deserve thanks for all the work done. We intend to thank this amazing trio face to face in Malaga 2022.



Past Chairs (L—R) Augusto Auler, Zoran Stevanović, Zhang Cheng

Brief professional background of the new co-chairs:

In July 2021, the new co-chair trio of the Karst Commission was elected: Peter Malik (Europe/Africa), Avi Burg (Asia/Oceania), and Ben Tobin (Americas). Their four year mandate started on 01 September 2021 and will last until 31 August 2025. Here is a brief introduction to the new chairs.



Dr. Peter Malik, age 63, has served as the Head of the Department of Hydrogeology and Geothermal Energy at the Geological Survey of the Slovak Republic (Štátny geologický ústav Dionýza Štúra) for 27 years. Since graduation, he has specialized in hydrogeological mapping and estimation of groundwater resources, recession curve analysis, and environmental isotopes in groundwater. He has been a member of IAH since 1994 and the Karst Commission since 1997. He has participated in many karst groundwater projects in the Slovak Republic and internationally. He has also been in charge of creating the hydrogeological maps, at 1:50,000 scale, for the entire Slovak Republic.

Currently, Peter is serving as the Karst Commission liaison officer in charge.

Dr. Avihu (Avi) Burg, age 62, is a senior researcher at the Geological Survey of Israel. His scientific interests focus in two main fields: quantitative and applied hydrogeology and high-T, low-P metamorphism. His research uses a range of tools from geochemistry to hydrological modelling and hands-on field work. During his twenty-two years of service at the Geological Survey, he also trained graduate students, mainly in the field of hydrogeology and geochemistry. He has been a member of the IAH since 2017.



Dr. Benjamin (Ben) Tobin, age 41, is a Research Geologist at the Kentucky Geological Survey at the University of Kentucky in the United States. Prior to this, he worked as a Hydrologist and Cave Resource Specialist for the United States National Park Service for 10 years. His research interests focus on applying natural and artificial tracers to understand karst groundwater systems. More details on his work can be found: <https://www.researchgate.net/profile/Benjamin-Tobin>

KC Initiatives

Water tracing initiative

While tracing techniques and technologies are in constant evolution, some apparent discrepancies (different schools) still exist among hydrogeologists. To cope with this and other current aspects of implementing tracer tests, an initiative was set by Karst Commission member Philippe Meus to connect specialists related to water tracing. The first meeting is intended to happen in Malaga Eurokarst 2022. If feeling a need to communicate in advance, send your comments, suggestions or questions directly to Philippe (European Water tracing Services & Aquapôle University of Liège; ewts@skynet.be)

Karst Modelling Challenge is comparing different modelling approaches on one single system using the same data set. Results of thirteen approaches including neural networks, reservoir models, semi-distributed models and fully distributed groundwater models were compared in the paper at <https://doi.org/10.1016/j.hydroa.2021.100001>, but the challenge continues! Ask Pierre-Yves Jeannin (pyjeannin@bgu.tum.de) for more...

ROCKAT modelling project

The ROCKAT (ROBust Conceptualisation of KARst Transport) project, funded by the German Research Foundation (DFG), aims at overcoming research gaps, hypothesizing that a parallelized robust conceptualization of discharge and transport significantly improves the representation of hydrological processes in the different karst compartments, i.e. soil-epikarst, matrix and conduit systems. The final goal in ROCKAT is to validate the developed transport models for multiple karst systems, what will require a joint initiative of all colleagues and friends interested in collaborating on testing and validating the tools developed in ROCKAT. Find more on <https://www.bgu.tum.de/en/hydrologie/research/current-projects/rockat> or ask directly Daniel Bittner (daniel.bittner@tum.de) for more details.

In search for potential sponsors

The Karst Commission has recognized the challenges facing many young karst groundwater researchers attempting to enter the field from developing countries. To help reduce these challenges, we aim to build the funding to help support young karst scientists in attending conferences and seminars. If you are able to donate or know someone that can, please contact the Karst Commission: karstcommissioniah70@gmail.com or directly the chairmen (peter.malik@geology.sk)

In search for Karst Geotrip organizer(s)

IAH Karst Commission geotrips have been independently organized to bring together karst professionals from around the world, as well as young scientists and students. These geotrips provide a great opportunity to visit karst regions and exchange ideas in an informal setting. The recent revival of geotrips was interrupted by COVID-19 pandemic (Yellowstone, May 2020), but we hope for better future and looking for volunteers to organize these fantastic events to their karst landscapes. Please, contact the Karst Commission if interested.

Educational activities

One of the important parts of the mission of the KC Commission is to help educate the world on living in karst. Do you think there a need for more karst education activities and materials? Do you have educational tools, activities, or materials that you would like to share more broadly? Please, don't hesitate to contact us!

Upcoming KC Events

The International Year of Caves and Karst continues into 2022 and there are numerous activities. However many of these have gone virtual. The KC meeting that was planned to take place in Málaga this year, has been postponed to Málaga Eurokarst Conference 2022:



EUROKARST (The European Conference on karst Hydrogeology and Carbonate Reservoirs) will take place as the continuation of the EUROKARST conference series on 22 – 25 June 2022 in Malaga, Spain. More details can be found on the conferences website: <http://www.eurokarst.org/>

Deadline for abstracts is October 15, 2021 !!!

Visiting some Spanish karst areas is notified on 25 June 2022 fieldtrip.

The annual Karst Commission meeting will be held as part of this conference. More details will be posted later this year.

HYDROKARST — a training course on hydrogeological research methods applied in karst / carbonate aquifers will be organised in Malaga Conference.

Málaga Conference includes also meeting of the European **KARMA** project (Karst Aquifer Resources availability and quality in the Mediterranean Area – see also <http://karma-project.org>)

SOON in October !!!

Visual KARSYS online course by Swiss ISSKA/SISKA, designed for understanding and modelling aquifers in 3D for geologists and hydrogeologists (engineers, academic, students) working in complex hydrogeological environments such as karst will take place on 20-21 October 2021. See <https://www.visualkarsys.com/courses> or contact Arnaud Malard (info@visualkarsys.com)

Karst Commission of the International Association of Hydrogeologists

Newsletter sent to members and friends of the IAH Karst Commission



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