[Test] December KC News

2 messages

Avi <burg@gsi.gov.il> Fri, Dec 8, 2023 at 11:29 AM
Reply-To: us21-5a8cd27e0a-9badd8248e@inbound.mailchimp.com
To: "<< Test First Name >> << Test Last Name >>" <aviburg@gmail.com>

Karst Commission

In this issue

December 2023 NEWS

Chairs: Peter Malik (Europe/Africa, 9/21 - 12/22); Avi Burg (Asia/Oceania, 1/23 - 4/24); Benjamin Tobin (Americas), 5/24 - 8/25)

Note from the chairs

A few days left to submit an abstract for EUROKARST in Rome 2024…hurry up!!! See below for more details. We also remind you that the annual meeting of the KC Group will be held during this conference.

Christmas and the New Year are almost here, we, the three chairmen of the KC, take the opportunity to wish our Christian members a Merry Christmas and wish all of us, wherever you are, a great 2024. May it be a year of peace, good health, joy, great scientific achievements, and successful social gatherings, and we pray that all our desires and ambitions will come true.
We hope to see as many of you as possible in Rome and Davos.

As the current chairman, I am especially excited to send this blessing from the holy city of Jerusalem

UPCOMING KC EVENTS

==========

Eurokarst 2024

The EUROKARST 2024 will be held in the main campus of Sapienza University, central Rome, between June 10 and 14, 2024. The abstract submission is still open until the **15th of December**. We warmly invite you to contribute to the conference by submitting your work, and by sharing this information among your network. Each author may submit only one abstract as a corresponding author (but she/he may appear as a co-author in other abstracts).

For abstract submission, please use the following link:
https://eurokarst2024.sciencesconf.org/
Guidelines for authors are available at:
http://www.eurokarst.org/authors-guidelines-2022/
You can find out more details at: http://www.eurokarst.org

eurokarst

Rome, June 10th-14th 2024

The IAH World Groundwater Congress 2024

The Swiss Society of Hydrogeology (SSH) and the Centre for Hydrogeology and Geothermics of the University of Neuchâtel (CHYN) welcome you to Davos in the Swiss Alps for a stimulating IAH World Groundwater Congress 2024.
The IAH World Groundwater Congress 2024 will be held from 8 to 13 September 2024 at the renowned Davos Congress Centre, Switzerland. The conference is organized around four main topics: (1) Hydrogeological systems and processes, (2) Groundwater as a resource, (3) Groundwater and society in a changing world, and

(4) Emerging field and computational approaches.
3 sessions focusing on different aspects of karst studies were proposed to the organizers and accepted:

- Karst hydrogeology I: Flow systems and modeling approaches
  (led by P.-Y. Jeannin, H. Jourde, L. Gill)
- Karst Hydrogeology II: Water supply and engineering solutions
  (led by Z. Stevanovic, P. Malik)
- Karst Hydrogeology III: Water quality, sustainability and ecosystems
  (led by A. Burg, N. Goldscheider)

When the plan is finalized, we will ask you to send abstracts to these sessions.
For more preliminary details look at: www.iah2024davos.org

Water In Sensitive and Protected Areas (WSPA2024) - Pula, Croatia, April 10 - 13, 2024

The 4th International Conference WATER IN SENSITIVE AND PROTECTED AREAS (WSPA2024 Conference) will be held in Pula, Croatia on April 10-13, 2024.
On the conference website www.wspa2024.org, a SECOND NOTICE about the conference has been published, which provides potential authors and conference participants with relevant information about the conference, including information about: the conference program; thematic areas and conference topics; invited speakers by topic; preparation and submission of abstracts and full papers; opportunities for publication of full papers in international IWA journals (in English) as well as in the journal Hrvatske vode (in Croatian); workshop and round tables that will take place during the conference and post conference tours (excursions).
Submission of Abstracts has already ended!
For more details see: www.wspa2024.org.

Characterization and Engineering of Karst Aquifers – CEKA

The international course “Characterization and Engineering of Karst Aquifers – CEKA” will be held in Trebinje, Bosnia and Herzegovina from May 26 to June 1, 2024.

This international course includes theoretical lectures on the basic concepts of karst hydrogeology and a few practical demonstrations and field trips within the territories of the Dinaric karst. The course will be organized by The Centre for Karst Hydrogeology of the University of Belgrade, supported by UNESCO-IHP and several other institutions. The course is open to all but is especially devoted to younger and talented karst researchers. Attendance is free of charge.

Preliminary application form for CEKA 2024 can be found at the links below. Number of participants is limited, so hurry up!
https://www.karst.edu.rs/en/ index.html

Recommended publications

We begin with two references that are not directly related to karst hydrology but may be of interest to all hydrogeologists:

Springs of the World: Distribution, Ecology, and Conservation Status", Lawrence E. Stevens, Editor, Springs Stewardship Institute (SSI), Flagstaff, Arizona, USA, 2023.

Hasan, M.F., Smith, R., Vajedian, S., Pommerenke, R. and Majumdar, S., 2023. Global land subsidence mapping reveals widespread loss of aquifer storage capacity. Nature Communications, 14(1), 6180.

The first publication is a new free e-book and is the result of an international effort organized by the Springs Stewardship Institute (SSI), edited by Lawrence E. Stevens and 66 co-authors, several of whom are KC members. The contributing authors are from various scientific disciplines (hydrogeologists, biologists, environmentalists and ecologists). The impetus of this book was to study the global conservation status of spring ecosystems, and the book presents summaries of the distribution, typology, ecology, anthropogenic uses, and conservation status of >250,000 springs from all continents except Antarctica, and from 75 countries. The book helps to improve the understanding and functionality of spring conservation status and sustainable management. However, it should be emphasized that not all countries are covered and the quality of information is not equal, yet the book can be a useful source of information.
You can download the book from the Springs Stewardship Institute public website:
https://springstewardshipinstitute.org/globalspringsbook
or:
https://docs.springsdata.org/PDF/GlobalSpringsReduced.pdf
or:
https://springstewardshipinstitute.org/

The second publication is a paper with a global perspective based on a developed model that provides a first-order estimate of aquifer storage loss due to consolidation of ~17 km3/year **worldwide** and quantifies key drivers of subsidence. The results show that approximately 73% of the world's mapped subsidence occurs over cropland and urban areas, highlighting the need for sustainable groundwater management practices in these areas.

We also want to draw your attention to this book:

Ezersky, M., Eppelbaum, L.V. and Legchenko, A., 2023. Applied Geophysics for Karst and Sinkhole Investigation: The Dead Sea and other regions, IOP Publishing.

Chapter 1 of this book, titled "General Introduction to the Karst Problem" introduces the global concept of karst based on fundamental works by well-known karst researchers. Since the book is mainly devoted to karstic geophysics, and especially to geophysics in the Dead Sea (DS) sinkholes, the chapter accents those problems that can be geophysically resolved.

The following two publications describe the use of models to improve the understanding of karst hydrology :

Chen, L., Deng, J., Yang, W. and Chen, H., 2023. Hydrological modelling of large-scale karst-dominated basin using a grid-based distributed karst hydrological model. Journal of Hydrology, 130459.

Bailly-Comte, V., Ladouche, B., Charlier, J.B., Hakoun, V. and Maréchal, J.C., 2023. XLKarst, an Excel tool for time series analysis, spring recession curve analysis and classification of karst aquifers. Hydrogeology Journal, 1-15.

The paper of Chen et al. (2023) describes a new Grid-based Distributed Karst Hydrological Model (GDKHM) that attempts to reveal the characteristics of hydrological response and the inertia of karst systems affected by the spatial heterogeneity of the degree of karstification. The model simulated a streamflow in Li River Basin (LRB), Southwest China, which is a typical large-scale karst-dominated basin. The authors summarise that the model can characterize the spatial variability of karst system inertia in large karst basins, and has the potential to successfully support flood forecasting in large-scale karst-dominated basins.
The paper by Bailly-Comte et al. (2023) presents the XLKarst, which was developed to provide a simple and easy-to-use tool to process a selection of proven methods that characterize the functioning of karst systems. This tool allows (i) time series analysis based on correlation and spectral analysis and, for flow measurements, the use of other statistics and base flow separation, (ii) calculation of the cumulative distribution function to build a spring flow probability plot, and (iii) analysis of spring flow recession and expression of the results in a karst system classification scheme. The article presents the various functionalities of this tool with application to the Fontaine de Nimes karst system, southern France.

We conclude our recommendation with two publications on local karst issues in which members of the KC are involved:

Filipović, M., Frangen, T., Terzić, J., & Lukač Reberski, J., 2023. Hydrogeology of a complex karst catchment in Southern Dalmatia (Croatia) and Western Herzegovina (Bosnia and Herzegovina). Journal of Maps, 19(1), 2112775.

Bonacci, O., Roje-Bonacci, T. and Vrsalović, A., 2022. Different groundwater behaviour in deep karst boreholes: the case of Jadro spring basin (Dinaric karst, Croatia). Acque Sotterranee-Italian Journal of Groundwater.

Members who are interested in recommending a new relevant publication (their own or of their friends) are welcomed to send a link to one of the co-chairs.

IAH Karst Commission

Newsletter sent to members and friends of the IAH Karst Commission

Avi <burg@gsi.gov.il> Fri, Dec 8, 2023 at 11:39 AM
Reply-To: Avi <burg@gsi.gov.il>
To: Aviburg@gmail.com

[Quoted text hidden]