

In this issue

- Note from the current chair
- New members of the KC group

 Tanveer Ali Dar

 Moses Souta
- Special request from the IAH
- Mikas project update
- Upcoming KC events
- Recommended publications

October 2023 NEWS

<u>Chairs:</u> 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 current chair

The IAH Worldwide Groundwater Congress was recently held in Capetown, South Africa. We know it was an interesting conference. At the last minute and due to a family emergency, I as the current chair of the KC, canceled my participation in the conference and therefore I cannot send you my impression and conclusions from the meeting.

New members of the KC group

We are pleased to welcome two young researchers - Tanveer Ali Dar from India and Moses Souta from Zimbabwe, as new associate members of the KC Group. Here is what they wrote about themselves:

Tanveer Ali Dar

Email: tdar@es.iitr.ac.in

I am Tanveer Ali Dar, originally from the beautiful region of Jammu and Kashmir, India. I recently completed my Ph.D. in the field of hydrogeology and isotope

hydrology in the Department of Earth Sciences at the Indian Institute of Technology (IIT) Roorkee, where my academic journey kindled my fascination with karst landscapes and their intricate hydrogeological systems. Currently, I am affiliated with the Department of Earth Sciences at IIT Roorkee. My research interests revolve around SW-GW interactions, particularly in the Himalayan region. My last publication was in Groundwater Journal: Distinguishing Mountain Front and Mountain Block Recharge in an Intermontane Basin of the Himalayan Region (Groundwater, V. 60(4): 488-495, 2022). The study focused on an intermontane basin in the Kashmir Himalayas. The results indicate that karst springs (KS) and deep groundwater (DGW) recharge are dominated by snowmelt, which is considered MBR (mountain block recharge). In contrast, shallow groundwater (SGW) recharge is identified as MFR (mountain front recharge), primarily from local meteoric water with significant evaporation effects. Throughout my academic and professional journey, I have had the privilege of working in diverse terrains in the Himalayan region. These experiences have equipped me with a variety of skills, from hydrogeochemical surveys to isotope hydrology studies, which I believe would be valuable contributions to the Commission's activities.

I am excited to collaborate with fellow Commission members and contribute to the advancement of karst hydrogeology.



Moses Souta

Email: msouta6@gmail.com

My name is Moses Souta, and I am from Harare, Zimbabwe. I am a first-year Ph.D. student at the University of Zimbabwe and am also co-hosted by the Helmholtz Centre for Environmental Research – UFZ, Germany. This Ph.D. fellowship is funded by the International Atomic Energy Agency (IAEA) as part of the RAF7021-Enhancing, Planning, Management and Sustainable Utilization of Water Resources (AFRA) in Africa. The title of the research is: "Groundwater Vulnerability Assessment of the Lomagundi Dolomite Aquifer for sustainable groundwater management in a changing climate". The work I will carry out involves the use of multi-isotopic approaches in assessing groundwater vulnerability to pollution of the Lomagundi Dolomite aquifer for the sustainable management of groundwater resources in Zimbabwe. The Lomagundi Dolomite aquifer is a karstic aquifer located in the northwestern part of Chinhoyi in the Mashonaland West Province of Zimbabwe.



Special request from the IAH

See the attached request from the IAH secretariat team:

IAH is exploring the idea of hosting a series of monthly, 1-hour long webinars, run by and/or for IAH members. The webinars would be live-streamed, and the recordings would also be made available to view afterward. We are currently gathering expressions of interest. If you would like to propose a webinar on behalf of your group, can you please complete this form with details of your suggested webinar topic and speaker - https://www.surveymonkey.co.uk/r/IAH-webinar-Eol. We will be back in touch with further details about the webinar series once we have received and collated the responses.

Many thanks,

Emma Clare; eclare@iah.org

An update from Zoran Stevanović regarding Mikas (Most Important Karst Aquifer's Springs) International project

MIKAS, the international project of the Karst Commission, aims to establish the first complete list of the most important karstic springs at a global level (based on historical, aesthetic, and scientific values), promote them, and create a Code of Practice for them. The project is led by our very active friend Zoran Stevanović and was first described in the April 2023 KC News. Below is an update on the progress of the project written by Zoran as well as a request for further cooperation:

MIKAS, the international project of the Karst Commission is progressing well. The project's Advisory Board (AB) completed three rounds of evaluation of data received from employed national experts. We currently have a preliminary list of 60 evaluated springs from 11 countries (Albania, Austria, Bosnia & Herzegovina, Estonia, Greece, Israel, Lithuania, New Zealand, Poland, Slovenia, and the USA), out of which there are 34 MIKAS (globally important) and 26 NIKAS (nationally important) springs. The final MIKAS list will be proclaimed at the end of the project when data from all "karst countries" will be submitted and cross-checked. Proposals for NIKAS list are not

questionable and are regularly accepted by the AB.

The project is currently run by almost 100 national experts who accepted to voluntarily work on the project, but we are still searching for collaborators and participants, especially from Central Asia, Western and Central Africa, Caribbeans, and Oceania. If you know some experts from these parts of the world, or you have knowledge about springs in these regions from your previous expertise, do not hesitate to contact Zoran Stevanović (zstev 2000@yahoo.co.uk).

UPCOMING KC EVENTS

Eurokarst 2024

See below an important message from the organizers of the EUROKARST 2024 that will be held in the main campus of Sapienza University, central Rome, between June 10 and 14, 2024:

We have the pleasure to announce that the call for abstracts for the congress EUROKARST 2024 is now open and you can proceed in submitting your abstract. Please note that the deadline for abstract submission is November 30, 2023, and that 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/

Looking forward to receiving your abstracts, and we send our best regards.

The EUROKARST 2024 Chairmen: Francesco Fiorillo, Mario Parise, Marco Petitta.

You can find out more details at: http://www.eurokarst.org



Rome, June 10th-14th 2024

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

Our friend Zoran Stevanović delivered a message from Drazen Vouk - President of the "Scientific Committee of the WSPA2024 conference" regarding the forthcoming WSPA conference in Croatia:

As a member of the Scientific Committee of the 4th International Conference WATER IN SENSITIVE AND PROTECTED AREAS (WSPA2024 Conference), which will be held in Pula between April 10-13, 2024, I would like to present to you the main activities in preparation for the conference.

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). On the conference website, in the menu: Conference program, you can find: titles of presentations, abstracts, keywords, and a short biographical description of the invited speakers to the conference.

Abstracts submission has been extended till Oct 31, 2023.

I would also like to take this opportunity to ask you to forward information about the conference to your colleagues whom you think might be interested in it, as well as to your other professional contacts. The Second Announcement can be downloaded from the conference website (www.wspa2024.org) as a PDF file, and I ask you to forward it to your contacts.

In order to secure your accommodations in a timely manner, I strongly recommend that you register and book your accommodations early. Please note that only a limited number of hotel rooms are available at special rates. Therefore, I recommend that you make a reservation well in advance to avoid higher costs or difficulties in finding suitable accommodation, either at the conference venue or in the surrounding area. You may reserve the first hotel rooms for the conference dates (April 10-13). Later changes can be made without affecting the agreed rates. Abstract submission and attendee registration is online at the conference website: www.wspa2024.org.

Best wishes,

President of the Scientific Committee of the WSPA2024 conference
Drazen Vouk, PhD, Dipl.Ing.Civ.Eng., Associate professor, University of Zagreb,
Faculty of Civil Engineering, Water Research Department, Kaciceva 26 10000
Zagreb

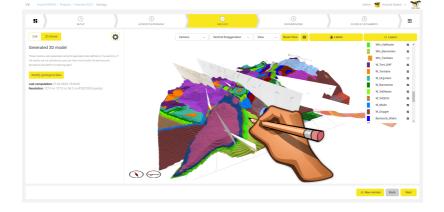
Tel. +385 1 4639 213 Fax. +385 1 4639 238 e-mail: dvouk@grad.hr

UPCOMING KC EVENTS

Visual KARSYS GeoModelling Course N6: 5-6 December 2023

The next GeoModelling course N6 will be organized in two sessions. Dates for the course are:

Tuesday, December 05th, 2023 - from 1 PM to 4 PM*
Wednesday, December 06th, 2023 - from 1 PM to 4 PM*
*(GMT+00:00 Time zone)



This course is dedicated to learning the construction of 3D geological models with the implicit approach. Participants will be briefly introduced to the theoretical aspects of 3D geoModelling and will be guided through the construction of a 3D geological model in a folded/eroded/thrusted environment by using different geological data (maps, cross-sections, drillholes, galleries, faults, etc.). The course is dedicated to geologists/hydrogeologists working in complex areas.

Course fee: employees CHF 180 / students CHF 130

Contact for registration / questions: info@visualkarsys.com

For the program of the course go to: https://www.visualkarsys.com/courses



Recommended publications

Our active friend Nico Goldscheider drew our attention to two relevant articles for the karst hydrogeology community:

Siegel, L., Goldscheider, N., Petitta, M., Xanke, J., Andreo, B., Bakalowicz, M., ... & Stevanović, Z. (2023). Distribution, threats and protection of selected karst groundwater-dependent ecosystems in the Mediterranean region. Hydrogeology Journal, 1-19.; https://doi.org/10.1007/s10040-023-02711-9

Fan, X., Goeppert, N. and Goldscheider, N., 2023. Quantifying the historic and future response of karst spring discharge to climate variability and change at a snow-influenced temperate catchment in central Europe. Hydrogeology Journal, 1-17; https://doi.org/10.1007/s10040-023-02703-9

The first article describes Karst groundwater-dependent ecosystems (KGDEs) throughout the Mediterranean region. For this study, the eco-hydrological characteristics, threats, and protection status of 112 selected KGDEs around the

Mediterranean Sea, including caves, springs, rivers, and wetlands, were assessed, based on local expert knowledge and scientific literature. The most common threats identified among the selected sites are direct human disturbances, such as mass tourism or overfishing, water-quality deterioration, and water shortage due to aquifer overdraft and/or climate change.

The second article focuses on the responses of karst discharge to historical and future climatic changes and shows the prolonged impact of climate change and variability on the floods and droughts at the springs in central Europe, and may imply water scarcity risks in similar climatic and geologic settings worldwide.

See below the brief article by Blackeagle et al., 2023 serving as a short introduction to a special edition of the Geological Society of America that summarizes the multi-disciplinary nature of the study of any karst terrain research.

BlackEagle, C., Harmon, R. and Denton, R., 2023. Foreword for E&EG Karst Special Edition. Environmental & Engineering Geoscience, V. 29(3), 155-156.

Attached below is a list of new articles presenting variable aspects of karst issues:

Shi, J., Jiang, G., Sun, Z., Liu, F. and Wang, Q., 2023. The migration and transformation processes of dissolved organic matter in rainwater-drip water-phreatic water of a typical karst spring catchment, in South China. Journal of Hydrology 625, 130077.

Hao, Z., Gao, Y., Yang, Y., and Zhang, Q., 2023. Determining nitrogen fate by hydrological pathways and impact on carbonate weathering in an agricultural karst watershed. International Soil and Water Conservation Research, 11(2): 327-338.

Musgrove, M., Jurgens, B.C. and Opsahl, S.P., 2023. Karst groundwater vulnerability determined by modeled age and residence time tracers. Geophysical Research Letters, V. 50(18), e2023GL102853.

Bonacci, O., Roje-Bonacci, T., Vrsalović, A. and Kuk, K., 2023. What happened to the karst spring Ombla water temperature?. Carbonates and Evaporites, V. 38(4), 68.

Li, Y., Shu, L., Wu, P., Zou, Z., Zhou, T. and Huang, L., 2023. Rainfall events-spring flow relationship and karst flow component analysis in a conduit-matrix coupled system. Hydrological Processes, V. 37(9), e14990.

Al Khoury, I., Boithias, L., Bailey, R. T., Ollivier, C., Sivelle, V. and Labat, D., 2023. Impact of land-use change on karst spring response by integration of surface processes in karst hydrology: the ISPEEKH model. Journal of Hydrology, 130300.

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.







Copyright © 2023 IAH karst Commission, All rights reserved. You are receiving this email because you opted in via our website.

IAH Karst Commission

Newsletter sent to members and friends of the IAH Karst Commission

This email was sent to Aviburg@gmail.com

why did I get this? unsubscribe from this list update subscription preferences

Avi burg · GSI · Jerusalem 9692100 · Israel

