Foreword



It is with great pleasure that we present the first English volume of the Journal of Hungarian Hydrology (HK), the official periodical of the Hungarian Hydrological Society (MHT). This English volume marks significant milestone in the history of our journal. Since

its inception, the Journal of Hungarian Hydrology has been a vital platform for disseminating water related research and findings, primarily within the Hungarian scientific community. Today, as we extend our reach to the global stage, we reaffirm our commitment to fostering international collaboration and knowledge exchange in water management. The front page of the first English volume shows the path that HK took from 1921 to the first regular English Edition.

Water related sciences transcend geographical boundaries, influencing ecosystems, water resources management, and environmental sustainability worldwide. In an era marked by climate change and enhancing water-related challenges, we must share our insights and innovations beyond linguistic boundaries. By publishing in English, we aim to bridge gaps, connect researchers from diverse backgrounds, and contribute to a more comprehensive understanding of water phenomena on a global scale.

This issue features a selection of papers that reflect the breadth and depth of contemporary urban and regional water management research. From cutting-edge studies on water cycle dynamics to practical applications in water resource management, these articles embody the professional exaction and innovative spirit that the Journal of Hungarian Hydrology stands for. We are confident that our international and Hungarian audience will find these articles both informative and inspiring.

The articles in volume 104/1/ENG cover a wide professional field.

The context of Landscape-Soundscape-Waterscape is recommended to serve as a conceptual model of dialogues to set consensus. This is the message of *János BOGARDI*'s article, entitled "Landscape – Soundscape – Waterscape; Concept for an inter- and transdisciplinary framework for regional integrated water and land management and the water-, energy- and food security nexus".

How can we manage water-induced and mediated climate impacts, as well as the socio-economic factors that aggravate them? *Tamás PÁLVÖLGYI* answers this question in his work titled "Perspectives of integrated climate change and water policies in Hungary".

Is it possible that we can gain a better understanding of the essence of law through system analysis? The publication of *Sándor FÜLÖP* "System behavior of water and environmental law" gives the answer to the question through two examples.

The discourse of *Tamás KLOKNICER*, *Dániel Benjámin SÁNDOR* and *Anita SZABÓ* entitled "New containerized wastewater treatment technology: system description and evaluation of treatment capacity of a highly efficient MBBR system" presents an innovative biofilm microcarrier developed by Inno-Water Inc., which is significantly smaller in size than conventional carriers. The examined biofilm layer has an ideal thickness and a slightly low colonization rate.

The article of *Mohammad Ali KHODABANDEH*, *Katalin KOPECSKÓ*, and *Gábor NAGY* entitled "The effect of expanded perlite and metakaolin on the physicochemical properties of collapsible soils" shows, that the expanded perlite and metakaolin were examined as soil stabilizing agents. The results demonstrate that soil improvement with expanded perlite and metakaolin can improve soil engineering characteristics in any construction application. However, expanded perlite is a more cost-effective material than metakaolin.

In our LIFE PATH section, Professor Hans WESSEL is greeted, because Professor WESSEL received the honorary foreign membership award of Hungarian Hydrological Society (MHT) in 2024. With this acknowledgment, the MHT expresses its honor and thanks for what Professor WESSEL has done to promote the international and European integration of water management both in Hungary and all over the world.

We extend our heartfelt gratitude to our authors, reviewers, and editorial board for their unwavering dedication and support in making this inaugural English issue possible. As we embark on this new era, we look forward to the continued growth and evolution of the Journal of Hungarian Hydrology, and to the vibrant exchange of ideas that will undoubtedly enrich our understanding of the world's water systems.

Welcome to the first English edition of the Journal of Hungarian Hydrology. We hope that our readers will also enjoy journey with us.

> Veronika MAJOR Editor-in-Chief