Foreword

Two hundred years ago, on November 3, 1825, Count István SZÉCHENYI donated one year's income from his estates to establish a Hungarian scientific society. This act marks the founding of the Hungarian Academy of Sciences (MTA). Over the past 108 years, the Hungarian Hydrological Society has maintained a close relationship with the Academy in the field of water sciences. With a nationwide network covering all branches of water science, the Society has facilitated connections between researchers and practitioners. Members of the Academy and its various bodies have played a key role in this collaboration. With our cover page, featuring the coat of arms of the Hungarian Academy of Sciences, we honour the 200th anniversary of the founding of this esteemed institution.

We are pleased to present the 2025 English-language edition of the Hungarian Journal of Hydrology (HK), the official periodical of the Hungarian Hydrological Society (MHT).

This volume covers a number of professional topics. In addition to core hydrological themes, this issue also explores topics such as water policy, limestone caves, and peat bogs, reflecting the journal's commitment to professional excellence and innovation. We are confident that both our international and Hungarian readers will find these articles inspiring and thought-provoking.

In her article, "*Assessing the recharge of peat bogs in Northern Germany using various methods*," *Sára MOLNÁR*, a young researcher from the Budapest University of Technology and Economics, investigates groundwater recharge between 2018 and 2023 in two peat bogs in Schleswig-Holstein, Germany, using various simulation models.

The Buda Castle Cave, a natural limestone formation with over 800 years of history as man-made cellars, is the subject of the study by *Fanni GAZDA, Dávid FARKAS, Géza HAJNAL and Dénes SZIEBERTH: "Quantitative Drip Water Measurements in the Buda Castle Cave Using Classical and Modern Methods".* This research focuses on measuring drip water volumes and identifying changes compared to earlier data. It also explores the relationship between drip locations, water flow, and precipitation.

Bálint RÓZSA's article, "*The Role of Bilateral Memoranda of Understanding in Hungarian Water Diplomacy*", discusses how Memoranda of Understanding (MoUs) help foster professional cooperation between Hungarian institutions – such as the General Directorate of Water Management – and foreign partners, especially in countries that do not share transboundary water resources with Hungary. Since 2013, more than 50 such agreements have been signed.

The Hungarian Journal of Hydrology is committed to supporting the next generation of water professionals. In line with this mission, the YOUTH CORNER section offers high school students an opportunity to publish their research. We invite readers to support their efforts with respect and encouragement. The featured study, prepared for the 2024 Hungarian competition of the Stockholm Junior Water Prize, is by *Benedek SANTA, Márton FREI, and Zoltán BAROCSAI: "Improving the Water Retention Properties of Our Soils".* The article explores how different soil mixtures affect water retention capacity.

In the HISTORICAL SNAPSHOT section, *Gábor ALBERT* recalls the "heroic age" of Hungarian water management, associated with Imre Dégen, who served as President of the National Water Office. This period began 70 years ago and ended 50 years ago, offering a fitting moment to review Dégen's policy achievements and their lasting impact. The overview is based on bibliographic sources, archival materials, and personal recollections of his contemporaries.

The BOOK REVIEW section presents the book: "*Life from, for and to Water*" by *János J. Bogardi*, recommended by Springer as:

- A history of water quantity and quality for preserving healthy ecosystems,
- An inspiring personal account of various water resource projects,
- Motivation for those seeking a future profession or beginning a "water career".

In that section also featured is the book "*Hydrogeology of the Pannonian Basin"* by *István Almási and János Szanyi*, part of the "*Important Aquifer Systems of the World"* series by The Groundwater Project. The Pannonian Basin, shared by nine countries, is one of the world's most complex sedimentary aquifer systems.

We extend our thanks to the authors, reviewers, and editorial board for their dedication and support in bringing this English-language issue to life. Welcome to the English edition of the Hungarian Journal of Hydrology.

Veronika MAJOR
Editor-in-Chief