## The 1<sup>st</sup> National Scientific and Technical Conference "Hydroengineering, Hydromorphology, and Water and Sewage Management"



The 1<sup>st</sup> National Scientific and Technical Conference on "Hydroengineering, Hydromorphology, and Water and Sewage Management" was held in Dobczyce on June 15–17, 2023. The conference was a joint venture of the Faculty of Environmental Engineering and Energy of the Tadeusz Kościuszko Cracow University of Technology (CUT), the Regional Water Management Board in Krakow and the Krakow Waterworks.

The honorary patron of the conference was the Rector of the CUT, Professor Andrzej Białkiewicz.

The conference focused on developing a water management strategy. The discussed topics included: new ways of using surface and groundwater resources, reduction of flood and drought risks, and monitoring of the impact of water on both hydrotechnical and geological structures. Since climate change affects water management in multiple ways, these issues are becoming increasingly important in terms of the global economy and water security. The concerns dealing with both safe drinking water security and sewage disposal were the main topics of the conference. The reminiscence session was dedicated to the memory of three outstanding specialists: Jerzy Ratomski, Jan Ziętara, and Antoni Gronko.

During the discussion panel "Water resources and the risk of floods and droughts", the following topics were discussed:(1) problems with impending stormwater discharge due to flood polder retention in the Vistula valley and mitigation of the biological risk in aquatic ecosystems during periods of drought (the ecological disaster on the Odra River), (2) the effects of climate change and their further development in relation to intensive urbanization; these changes have a significant negative impact on the quality and load of solids washed/flushed with stormwater, (3) the most eagerly anticipated and recently developed technologies for a comprehensive strategy for implementing a circular economy in the Polish water sector, (4) strategic and management priorities applicable in mitigating the risk associated with a breach of the security of the water supply system in the Krakow Waterworks.

The conference brought together 114 participants from various Polish universities, research institutes, municipalities, and state-owned utilities, with the most interesting presentations published in several journals. The topics of articles published in this issue of Geology, Geophysics and Environment include: water management in Poland vs. climate change, the challenges for wastewater management as a result of the amended Wastewater Directive, the sustainable management of rainwater, the restoration of ecological continuity in the aquatic environment, research on hydrogeological conditions, reliability and safety of water supplies and wastewater disposal systems, modeling in water and wastewater management and the organization, monitoring, and control systems in water and wastewater management.

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