

I N T R O D U C T I O N

The members of the Hungarian Speleological Society, the Hungarian speleologists, welcome the participants of the 10th International Speleological Congress to Hungary. We believe that the historical traditions and scientific results of Hungarian speleology guarantee the high quality of information provided to cave explorers who visit Hungary from all parts of the world.

Speleology has existed for more than two centuries in Hungary. Brought up on this tradition, at the turn of this century numerous outstanding experts undertook research in cave exploration, in archaeological excavations, in geological, geomorphological, karst hydrological and speleoclimatological investigations and in many other disciplines. These activities were greatly influenced by the achievements of speleological research in Europe. As a consequence, scientific speleological research intensified in Hungary, and in 1910 the Speleological Committee and in 1926 the Hungarian Speleological Society were organized for the purpose of coordinating these efforts.

The most important achievements in almost eight decades of institutional cave research in Hungary are presented here. We maintain close links with almost all of the speleological institutions of the world. The big international meeting of speleologists takes place at a date when the flow of information can hardly be followed and therefore the exchange of information is becoming indispensable. Our congresses have to take an increasingly more active part in this process.

Motivated by restructuring in the global economy and by the progress of the sciences in the final decades of the 20th century, the application of scientific results has accelerated enormously. This also applies to the field of karst research and speleology. The world-wide development of tourism now connects continents and the role of karst objects and caves is spectacular in this. Besides the traditional disciplines, interdisciplinary topics are also gaining importance in speleology.

Among others, one such topic is, the problems of the ecological crisis, deeply affecting speleology. The ecological crisis, mainly secondary to environmental pollution, has expanded to a world-wide phenomenon and it does not bypass karst regions. The permanent growth of air pollution and the acidification of rainwater and soils adversely affects karsts and their natural biota. The problem is even more aggravated by the increasing accumulations of various kinds of waste (including toxic waste). In Hungary alone, the annually produced waste amounts to 100 million tons and a considerable part of it is toxic waste. Although a good part of this quantity is detoxified, the amount that reaches the environment is considerable and creates yet another upset to the natural balance. In karst regions the danger is great as the susceptibility of karst to pollution is very high. With water, pollution penetrates to great depths very easily, even to the most remote points. At the same time, the process of autopurification is a slow one.

The host country of the Congress provides excellent opportunities to discuss these problems not only on theoretical foundations but also practically, getting acquainted with the processes in Budapest or in the broader environs, in the karst regions of Hungary.

This special issue of our journal "Karszt és Barlang" gives an insight into the results of the research covering the 3,000 caves of the karst areas of our country.

Dr. István FODOR
President

