PREFACE

Ten years ago, on October 4, 1989 the US and Hungarian governments signed a new agreement on scientific and technological cooperation, in which the two countries agreed to contribute equal amounts of financial support annually for establishing a joint fund.

The bilateral agreement stipulates the purpose of the US-Hungarian Science and Technology Joint Fund to encourage and support a wide range of scientific and technological cooperation between the two countries, based on the principles of equality, reciprocity, and mutual benefit. International science and technology cooperation, the agreement states, would strengthen the bonds of friendship and understanding between the US and Hungarian scientific communities and would advance the state of science and technology to the benefit of both countries, as well as mankind generally.

Within the scope of the bilateral program, US and Hungarian scientists may receive support from the Fund for (1) cooperative research projects, (2) bilateral scientific symposia and (3) project development visits. Researchers from US and Hungarian governmental agencies, scientific institutes and societies, universities, and other national research and development centers are eligible to apply for Joint Fund support. Applications to the Joint Fund must propose collaborative US-Hungarian scientific research and/or technological development activity, involving researchers from both countries. All projects must contribute to the advancement of mutually beneficial scientific knowledge. Research results must be publishable in open source journals.

The resources of the Joint Fund has been allocated among mutually agreed priority areas as follows:

Basic Sciences	20%
Environmental Protection	20%
Biomedical Sciences	14%
Agriculture	14%
Engineering	14%
Energy and Natural Resources	14%
Others	4%

Total number of the supported projects is nearly 300, while the amount of the distributed grant payments between 1990 and 1998 comes to almost 550 million HUF and more than 5 million USD, respectively.

Earth sciences (geology and geophysics) were represented between 1990 and 1998 by 19 projects with a financial support of about 28 million HUF and 370,000 USD. The cooperating institutions have been the following: Eötvös Loránd Geophysical Institute, Eötvös Loránd University, Geological Institute of Hungary, Hungarian Academy of Sciences, Hungarian Geological Survey, National Oil and Gas Company Ltd. from Hungary, and Defense Mapping Agency, Halliburton Logging Services, Howard University, Ohio State University, United States Bureau of Mines, United States Geological Survey, University of Wisconsin, Virginia Polytechnic Institute, from the USA. The number of the participating investigators from both side amounts to 100. The investigations cover a broad range of topics, including sedimentology, stratigraphy, geochemistry, mineral exploration, deposit modeling, hydrogeology, ecology and environment, gravimetry, geomagnetism, well logging and geographical information system.

The Geological Institute of Hungary and the United States Geological Survey have played a decisive role in the cooperation. A great part of the projects above were carried out by researchers of both institutions and two of those are the subject of the present volume. The Joint Fund Project 415 entitled "Deposit modeling, assessment of

mineral resources and mining-induced environmental risks" integrates both the results of quantitative assessment for undiscovered ore deposits in NE Hungary, and at the same time the ways to predict and prevent the environmental effects and risks induced by mining. The Carlin gold project ("Potential for Carlin-type gold deposit in Hungary, Joint Fund Project No. 435") summarizes how can the experiences and results of US researchers be applied in the exploration of unknown and undiscovered gold deposits in Hungary.

This special issue is a milestone in the history of the US-Hungarian Joint Fund. As a first publication supported by the Joint Fund it commemorates worthily the 10th anniversary of its establishment.

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