

## Opening address

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The historical time interval of the explorations described below can be divided into two basically different periods:

1. The first period includes the time-span from the beginning of exploration till the end of the first World War. This period is characterized by the mining of Au, Ag, Pb, Zn, Cu, Fe, hard coal, soft coal and rock salt flourishing since the time of the Árpád dynasty. The Carpathians offered a rich store of minerals from Selmecbánya across the Szepesség, Gutin-Mountains, and Transsylvania down to the mining area of Krassó-Szörény. An intensive geological exploration began around the middle of the 19th century and was continued with increasing zeal during the second half of the century. Some excellent professors (as e. g.: József SZABÓ, Antal KOCH) and the small, but very talented geological staff of the Hungarian Geological Institute just organized (to mention but a few: Miksa HANTKEN, Károly HOFMANN, János BÖCKH) compiled the basic traits of the geological conditions of Hungary with admirable efficiency, created the terminology of Hungarian geological formations and their stratigraphical division.

The basic geological mapping of the country and the detailed geological mapping of the mining areas joined with some monographical studies began, indicating the principles of further exploration. Such monographies were compiled by the Hungarian geologists about the areas of Dobsina, Nagybánya, Felsőbánya, Erdélyi Érc-hegység (Transylvanian Ore-Mountains) and the mining district in Krassó-Szörény county, outlining the basic principles of mineral exploration valid even still today. All of them were working at their full mental capacity, accepting physical hardships in the sense of „Mente et Malleo” acquiring high reputation for the Hungarian geologists even beyond the borders of the country. Also the Hungarian agrogeological exploration and mapping, started by Béla INKEY during the first decade of the 20th century, won international reputation.

The first promising results, of Hungarian hydrocarbon exploration were obtained by the cooperation between the geologist Hugó BÖCKH, and the physicist Lóránt EÖTVÖS in the area of Kissármás (Transsylvania) and Egbell (Nyitra county). Till the end of the first World War the basic foundations of further mineral deposit exploration laid down in a country extremely rich in mineral resources.

2. The second period begins with 1920. Exploration in the postwar Hungary, robbed from her rich mineral resources by the Trianon peace treaty, began laggishly. Yet some years later an intensive geological exploration and mining activity starts again. Some of the leading geologists of this period were: Pál ROZLOZSNIK, Emil SCHERF, Zoltán SOHRÉTER, Károly TELEGDI-RÓTH, Elemér

VADÁSZ, Aladár VENDL, Gyula VIGH, István VITÁLIS etc. The bulk of explorations was concentrated upon the remaining coal basins. Some new maps were completed and new resources discovered. Detailed agrogeological mapping was continued, covering the Great Hungarian Plain, under the direction of Péter TREITZ.

Special emphasis is laid upon the hydrocarbon exploration yielding some good results. By systematic exploration a small oil field was discovered at Bükkszék (1937). With the help of foreign capital, under the direction of Simon PAPP the significant Budafapuszta oil field was discovered in the same year. Bauxite exploration was started in Transdanubia. Ore exploration began first in the area of Telkibánya (Tokaj-Mountains), and later in the Mátra-Mountain at Recsk and Gyöngyösoroszi. In the area of Urkút (Bakony-Mountains) Mn-ores; in the Rudabánya-Mountain iron ores were explored. The aim of mapping parts of the Tokaj-Mountain is the exploration of fire-clays and kaoline. Several small entrepreneurs are busy with the development of some peat deposits. The agrogeological mapping over the plains is continued successfully aimed at soil improvements.

The first observation wells to control the groundwater level are completed also in this period. After the beginning of the second World War the intensity of bauxite and petroleum production is increased. A big scale geological mapping and exploration begins over the areas rejoined with the country in the Northern Highlands, Transsylvania. All these intensive activities come to a sudden stop when the country comes also overrun by the war.

The recovery from the aftermath of the war and the renewed upswing of geological exploration was demonstrated by the lectures delivered at the scientific session organized on the occasion of the 125th anniversary of the Hungarian Geological Society. All these are parts of the most recent history of Hungarian geological exploration beginning with the end of the second World War.