OPENING ADDRESS OF THE WORKSHOP BY TAMÁS BODOKY *

Ladies and gentlemen,

I have the honour to welcome you on behalf of the Association of Hungarian Geophysicists to the third Workshop on magnetic observatory instruments in Tihany.

Since the Meeting of the International Union of Geodesy and Geophysics held in Hamburg in 1983, where the concept of the Workshop originated, a great deal has done in the field of observatory instrumentation and on that of the handling and processing of observatory data. Digital data acquisiton systems have replaced the classical methods and the satellite based INTERMAGNET program has brought a dramatic change in magnetic observatory work, opening new perspectives for the applications of geomagnetic data. But I would think that all of this is much better known by you and will certainly be discussed in detail later. Instead therefore would you allow me to say some words about the place and the institute where we are now.

Tihany has to thank its birth to late tertiary volcanism. Tihany's volcanic hills have been inhabited, as archeological evidence has shown us, since the stone age and, in spite of its apparent tranquility the peninsula has seen some rather restless times. After the peaceful Roman period the region was a transit station of moving peoples of the great migration. For example, Theodoric the Great, the Goth who conquered ancient Italy, was born here. Later, in the years when William the Conqueror crossed the Channel, one of the first Hungarian kings—Endre the First—founded an abbey on the eastern side, from which a chapel can be seen even today under the present church, with the grave of the king. The Latin text of the founding document contains the first written fragments of our language, it is therefore one of our national treasures.

In the thirteenth century a not entirely friendly visit of the Mongolians of Genghis Khan resulted in the abbey being converted into a fortress. That stronghold of Tihany played an important role later when, for one and a

* President of the Association of Hungarian Geophysicists

half centuries Lake Balaton was the border of the Moslem Empire of the Turks. I believe that that was the only period in Hungarian history when we had a navy and fought naval battles. In bygone ages the ice of the Lake also served as a scence of famous duels.

However, not only has the winter ice of the Lake played its part in the history of our people but in that of geophysics as well. At the end of the last century baron Loránd Eötvös, a professor of Budapest University, who was concerned with the shape and rotation of the Earth, invented the torsion balance as a means of measuring the horizontal gradient and the curvature of the gravitational field. He recognized the possibility of utilizing his invention in a practical way too. During the winter of 1902-1903 he performed torsion balance measurements on a grid on the frozen Lake Balaton thus eliminating problems relating to terrain corrections.

The exploratory torsion balance measurements in the years 1915-1916 seeking hydrocarbons on what were to become the oil fields of Egbell are now of science-historical significance: from this time on we can speak of applied geophysics in hydrocarbon explorations.

After the death of Eötvös in 1919, his colleagues founded the Eötvös Loránd Geophysical Institute. This Institute has wide ranging activities both in the pure and the applied areas of geophysics. The Geomagnetic Observatory in Tihany was founded in 1954 as a part of the Institute's Earth Physics Department.

Now, after the very succesful Ottawa and Nurmijärvi Workshops, you are here in that Observatory, and I do hope that your third Workshop will result in very wortwhile achievements too. I offer my best wishes for your successful endeavour and wish you a very pleasant time.