



The opening speech by the
General Director

Dr. SADRETTİN ALPAN

delivered at the ceremony arranged on the 26th of December 1961, on the occasion of granting "Service Memorial Medals," to those who worked for the M.T.A. Institute for twenty-five consecutive years :



Dear Guests and Friends,

We are gathered here this evening to award 25 years service medals to 22 M.T.A. Personnel.

The Institute was founded in 1935 with the object of evaluating the underground resources of our country. Working with a modest budget but utmost capacity the Institute published 1/300,000 scale geologic and tectonic maps since the foundation and has now started printing the 1/500,000 scale geologic map of Turkey, also 1/100,000 scale geologic maps are completed and available on request.

The Institute has carried out extensive geological and geophysical investigations and drilling for petroleum and was successful in discovering the Raman and Garzan petroleum fields.

26,000 meters of crosscut 2400 meters of shafts and 350,000 m. of drilling have been carried out for the investigation of minerals, lignite, coal, industrial raw

III

materials and water. Consequently about 65 billion Turkish liras worth of ore deposits and solid fuel reserves have been evaluated on the basis of current prices. Most of these deposits have been transferred to private or State Enterprise and put into operation. Besides main minerals such as iron, chromium, copper and sulphur, the Institute has proved the reserve of 700 million tons of sub bituminous coal.

Radioactive mineral prospecting and exploration have been conducted by up to date methods. Large parts of our country have been covered by radiometric airborne survey with two planes supplied by the army for this purpose.

The investigation of raw materials required by newly founded factories is amongst the functions of the M.T.A.

The magnetic airborne survey which was financed with a loan of an amount of 900,000 dollars by the U.S. Government (namely DLF), has been completed and the results of the survey (the magnetic maps) are available to the private miners. The Institute has already started follow up work on the ground by checking the magnetic anomalies by geological, geophysical investigations and drillings.

In our laboratories, chemical analysis, ore dressing tests, experiments on ceramics, and some research work are being carried out. For the utilisation of lignite, briquetting tests have already been started although a new utilization project on solid fuels covering a wider scope is being prepared. The extension and modernization of our laboratories are under consideration in order to cope with the needs of our country.

The Institute owns one of the finest libraries in the country, at present there are 50,000 books in our library, and we publish bulletins containing scientific articles twice a year besides an annual magazine in our own printing office.

In the archive of our Institute there are 5689 prospecting and 2869 detailed investigation reports totalling 8558 reports which are available now to all the government agencies and private miners.

The Institute has played an important part in CENTO minerals activities to maintain the cooperation and understanding regarding the mutual mining problems amongst CENTO member countries, and will continue its efforts to make the CENTO mining activities even more beneficial to all concerned.

The Institute has been a good guide to the private miners for discovering new types of minerals and has been helpful to them for geological investigations, exploration work and mining problems. We believe that private enterprise will play an important part in the economical recovery of our country and therefore we want to serve the private enterprise as much as possible by offering all we can. For this purpose, we already initiated the work for making the mineral inventory of our country, so as to determine the mineral potentials, and problems encountered by the private enterprise.

Another function of the Institute is technical personnel training, for which also a great effort is given by educating 218 technical personnel abroad and 135

IV

persons in Turkish Universities. Besides these mentioned, at present the Institute has 114 students in foreign countries such as U.S.A., England, France, Germany and Switzerland and 23 scholarships are given to students in our country.

There are 434 technical and administrative personnel employed by our Institute besides 430 workers. Technical staff totals 278, amongst these there are 200 university graduates including 25 foreign geologists mainly Dutch, German, Austrian, French, Italian and English.

In our Institute there are 40 drilling machines with capacities ranging from 30 meters to 1000 m. We have 230 vehicles for field work. We know that our country is large and the work to be done is enormous. For this reason our aim for the future is to maintain better living and working facilities for our personnel, increase the number of technical personnel and thus speed up the work of finding new mineral deposits and to see that the new ore bodies are put into operation as soon as possible after their discovery and evaluation by M.T.A. (Institute).

I now thank all the Turkish organizations, United Nations and Foreign Governments giving aid to our Institute especially to the U.S. Government for their aid for our geological map work and equipment, DLF Credit, and help given towards radioactive mineral prospecting, and to the French Government for offering continuous bursaries to our personnel so that they are able to improve their knowledge and gain experience in France and also for the assistance given by the French Atomic Energy Commiseria towards our radioactive mineral prospecting with regard to personnel and equipment; and also to the British Government for their aid through CENTO by supplying equipment for our airborne radiometric survey; and also thank to those who have previously worked for M.T.A. I congratulate the technical personnel who work in the field under difficult conditions. I welcome the young friends who have recently joined the Institute. I thank the administrative personnel and workers for their help and understanding.

I am grateful to my 22 friends who have worked at the Institute for 25 years without any interruption since the foundation of the Institute for their keen interest to our organization and in their work and for their invaluable services. I hope that, we'll see these friends among us for many years to come and wish them all the happiness on behalf of the Institute.

Dr. Sadrettin Alpan
General Director

THE SPEECH BY THE GENERAL DIRECTOR, Dr. SADRETTİN
ALPAN, TO OPEN THE 1962 FIELD SEASON

My dear friends,

This meeting has been prepared for the purpose of opening the new field season. I thought that it would be useful to give you some information regarding the activities of the Institute.

The system applied by the Institute up to now has been the fulfilment of the annual working program prepared by the Departments, during the year.

Beginning from the 1962 period, our Working Programme have been changed into projects. This year we shall try to take up seventeen of these projects. Except the annual projects replacing our Working Programs, we have prepared the projects in accordance with the Government's five-year economic plan. Our Institute will take part in the program with twenty-one projects. These projects are as follows :

*Number of the
project*

S u b j e c t

I	Geological study and explorations of iron ore deposits.
II	Geological study and explorations of copper ore deposits and accessory minerals.
III	Geological study and explorations of aluminium ore deposits.
IV	Geological study and explorations of Gold and Silver occurrences.
V	General Prospection and geological researches dealing with various minerals.
VI	International evaluation of coal.
VII	Geological study and explorations of coal deposits.
VIII	General prospection and geological researches of coal occurrences.
IX	Geological studies.
X	Prospection of radioactive minerals.
XI	Geological study and explorations of uranium occurrences.
XII	Publication of geological maps.
XIII	Study and interpretation of geological maps.
XIV	Petroleum prospections.
XV	Hydrogeological studies.
XVI	Volcanological studies.
XVII	Research work on natural steam, one of the energy sources.
XVIII	Geologic study project on Chrome ore deposits.
XIX	Project of the general prospection and geologic investigation of industrial raw material.
XX	Gravimetric and magnetometric mapping of Turkey (as a whole).
XXI	Bureaus and laboratories project of the Institute.

VI

The total cost of these projects will approximately amount to 300 million Turkish Liras.

In addition, the Institute has been asked to help the five-year plan in the mining field. A preliminary report on the subject is under preparation, with the help of some other government organizations such as Etibank and T.K.İ.

The Institute also closely cooperates with the minerals section of CENTO. As you all know, the activities of CENTO, up to now,, have been mostly as symposiums. A Chromium Symposium was held in Ankara in 1960, and a Coal Symposium in Zonguldak, in 1961. This year., a symposium is going to be held in Lahore-Pakistan, on the subject of industrial raw materials, including ceramics and marble. We keep contact with the member countries of CENTO, on the subjects of exchanging publications and organizing training courses, and preparing joint projects. The stratigraphy project which is one of these, is now being prepared.

The airborne survey project for iron ore, on which we started working two years ago, has been completed. Reports written on the subject by the Canadian Aero Service Co. Ltd. which we have contracted, were translated into Turkish. These reports published together with anomaly maps will soon be available for the use of the private enterprisers. With the realisation of this project, approximately 100 important iron anomalies have been earmarked for the follow up work. We have spent about 600,000 dollars (out of the \$ 900,000 appropriated) to the Institute for this project. In order to continue the same work, we have applied for necessary instruments and equipment, to be paid with the remaining \$ 300,000.

As you know we have already obtained permission from the Government to sign contracts with the private enterprise to carry out exploration work for coal and iron ore. According to which, the miner has to pay a small amount of royalty to the government treasury per ton during exploitation. Now we are going to get similar permission for antimony, copper, zinc, lead, chromium and manganese.

You all realize that the economic progress of our country is based upon our knowledge of the real potentiality of underground and surface resources and their true value. Of these, surface resources include touristic and agricultural subjects, therefore they are not within the scope of our work.

As to the valuation of underground resources, it aims to expose the real value of all ore deposits, to prove ore reserves in a very short time and to develop those which are economic, also in the shortest period of time. These cannot be realized only by the activities of the Institute. Private enterprise should take part in this work. We can determine the potentiality of all ore deposits and prepare their inventories. We are able to conduct geological studies. We can study their possibilities for development, if it is necessary we can even give advice from the point of view of mining methods and for the exploration of the extensions of the reserves. As we have the possibilities to undertake all these, we shall try to accomplish those mentioned above, by organizing several groups. We are absolutely determined on this subject.

During the meeting organized in İstanbul with the participation of private enterprise representatives, we tried to determine the subjects that could be realized through cooperation, with the purpose of helping them so as to expand and activate mining in our country. We gave these representatives some information on the five-year plan in connection with mining and asked for their cooperation.

We also plan to publish monographs showing the locations of all minerals in our country. Through these publications, we shall be able to give information to those interested about the geology, mining and economics of minerals.

Funds and equipment are not sufficient to tackle such work, we would also need capable technical personnel. Therefore we are negotiating with the Universities and technical schools to train the personnel needed for our activities. We are pleased to know that the Mining Engineering section has been opened at the Middle East Technical University to train engineers and geologists and also that the Mining Faculty in Istanbul Technical University will award degrees on geological, metallurgical and petroleum engineering, besides mining engineering.

We endeavour to provide better working possibilities for the personnel of the Institute. We have obtained permission from our Minister for the construction of a new building and have waited for this for a long time. We shall try to construct the building as soon as possible. We also plan to extend our laboratories. It is necessary to modernise them to meet the needs of our country and to get them to include other sections, for ore concentration and coal technology. Preliminary studies have already been started on this subject. When it has been decided to construct new office buildings and laboratories we were faced with the following questions : Shall we construct the office building and laboratories on the present area, or only the office building on a separate area, or both together on a more suitable location? As a result of the referendum made for this purpose within the Institute, we understand that the majority wished the office building to be constructed on another part of the city. The studies showed that the enlargement of laboratories is a necessity and it is also necessary to build the office building and laboratories together on the same area in order to provide possibilities for scientific and technological works in the future.

We also plan to provide comfort and safety for our personnel working in the field. We have made an attempt to provide trailers; I hope that we shall be able to obtain a few, soon enough to try them out this year.

The Institute has been functioning for many years : what do others think about its functions and about the Institute? I am giving you only a paragraph out of the reports prepared by the State Planning Department about the Institute :

«Although solely credited with the discovery of some of the important mineral deposits which today hold an undisputable place in this country's economy, the Institute, having not been adequately provided with a set of conditions (organization and other means) that would enable it to bring forth results in accordance with the purpose of its foundation, it did not quite succeed to carry-out a country wide systematic mineral exploration program with all the necessary

VIII

detail work and thus it did not quite play the part expected from it in the improvement of this country's mining».

To answer this we can say : The Institute discovered the minerals which are being mined now, the petroleum at Raman was found by the Institute, basic studies on the requirements of raw materials of all factories, many hydrological studies, and many other technical and scientific investigations the material value of which have not been determined yet, have all been conducted by the Institute and in addition geological maps were published. In spite of this, they still say that, «The Institute could not perform its duty concerning the evaluation of mineral resources of the country». Are they right? If you ask me, they are; because during the last ten years, only a few metallic minerals have been evaluated although large reserves of coal have been proved. In my opinion, the Institute should evaluate a number of mineral deposits each year, and discover new ore reserves for investment in quick succession. It should also conduct research work on industrial raw material. This would help the progress of the country, because through this we should have a source for foreign exchange, our export would be developed and the birth of new industries would be possible. Therefore, it is understood that the functions have not really been accomplished properly. This does not mean that we do not work enough. One reason is the scarcity of technical personnel. However, I believe that we could get much better results by changing our working methods a little. For example, anybody who goes on a field trip should work conscientiously and plan the work he is undertaking so as to serve an economic result. It is not enough if a topographer comes back and thinks that he has accomplished his duty only by topographic mapping of a given area. After this mapping, perhaps a geologist will work on this area, probably a drilling will be made or some other prospecting scheme will follow. The geologist will probably propose new drillings under a new hypothesis. Quite a number of other examples may be given.

Therefore we should consider that our work is closely inter-related and it is always necessary to get an economic and practical result in all our functions. A geologist drawing a geological map should bear in mind that the results he gets would eventually serve practical and economic purposes. These geological maps will show the private mine-owners the probable formations where they can find minerals, so the mine-owner will be able to say «there are these formations on these fields, so let me go and prospect there», in this way the mining would be encouraged. Therefore, everybody should accomplish his work so as to serve an economic object and submit it to those who are concerned, after completing the part of the work he has undertaken.

The personnel who work in the field should help each other as much as possible, without taking into consideration whether he is from this or that department, and do his job in as short a time as possible. I say, «he should bring in results»; how is it done? It is not enough to come back and say «I have done this work». He will prepare a report, bring it back and submit it personally. This report will be approved by the department concerned and the Technical Committee, then it will be ready to be used. All of the technical personnel have to come back and give their reports wherever they work in the fields. These reports will

be compiled at the Archives, and whoever wishes to make use of them can do so whenever he wishes; If we work in this way cooperating together and always think that the work undertaken by one person shall be taken up from there by another, then we can find some minerals every year. I hope that the geological studies of every mineral deposit, prospection of it by technical procedures, consequently the preparation of a scientific report dealing with the reserves of the deposit and its evaluation, should be completed in two years, at the maximum.

We plan to make some minor changes in our Act of Foundation, so that the Institute could serve better in the field of mining. I believe that if these changes take place, the working of the private enterprise in the field of mining could be developed and would be fruitful for our country.

In order to increase the working capacity of the Institute, we have put in a request box, to learn the views and ideas of our engineers. We shall investigate any suggestions and recommendations and those which suit the structure of the Institute will be taken into consideration and carried out as far as possible. Therefore, it should be very useful if everybody chose to speak freely.

Since the foundation, and up to the present time approximately about 250 million Turkish Liras have been appropriated to the Institute, from the Government's budget. In return except for some studies, research work and maps, the value of petroleum and minerals discovered by the Institute is valued at 65 billion Turkish Liras. This is about 250 to one in return.

Even this is not satisfactory, our purpose is to raise the ratio, that is to say, the value so as to have 10,000 to 1.

Consequently, we would profit more if we cooperate and work together in this way. With this meeting our new field season is starting. I beg all my friends to start their field activities as soon as possible. And I shall be with them starting next week. I wish all of you every success. Thank you.

Dr. Sadrettin Alpan
General Director

March 30, 1962