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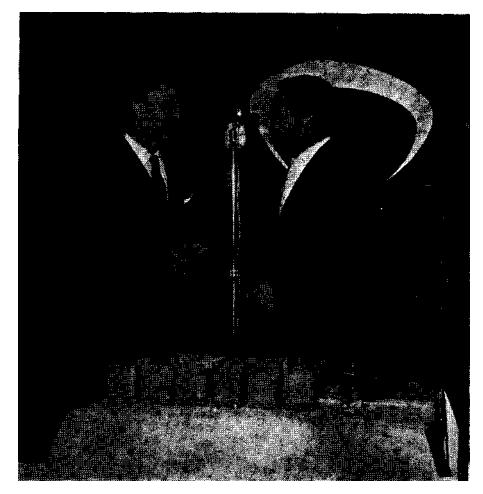
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## The opening speech by the General Director

Dr. SADRETTIN ALPAN delivered at the ceremony arranged on the 12th of March 1964, 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,

You are welcome to the traditional annual meeting of ours, at the M.T.A. Institute, when we get a chance to express our gratitude to the men and women who have, within the year, successfully and honourably completed an uninterrupted 25-year service in the organization. Before proceeding with the distribution of medals, permit me to give you a short account of our activities in the past year.

1963 was the first year of the Five-Year Plan and a busy and important year for the Institute, when old projects were carried on and preparations of the new ones completed. As compared with previous years applied projects reached comlpetion ahead of schedule, thanks to hard work put in by the M.T.A. men both in office and field. This we gladly interpret as the true working potential matching nearly twice the capacity of our normal programs.

During the 1953 fiscal year, geological maps (scale: 1:25,000 or greater) of an area totalling 27,069 km<sup>2</sup> were completed. In addition 8250 km<sup>2</sup> were prospected for oil,

69,797 km<sup>2</sup> for various ores, including phosphates and lignite. Correlation and compilation studies were conducted on 40,734 km<sup>2</sup>, together with geophysical studies covering another 30,959 km<sup>2</sup>. Topographic maps prepared during this period added up to cover 3471 hectares, while airborne prospection for phosphate rocks and radioactive minerals covered 80,500 km<sup>2</sup>. Out of the anomaly areas picked up during previous airborne studies, geology was done in 49 areas, surface geophysical methods were applied in 20 areas and 10 areas were marked down as promising. Figures on our other activities include: 24,075 m drilling, 63 m tunneling, 307 m shaft sinking, 2931 m<sup>3</sup> excavation (trenching), 10,108 sample analyses and determinations, 145 reports submitted, and various publications (magazines, booklets, maps and monographies) — totalling 34,650 copies. Mineral prospection and general or detailed geology studies were carried out for various minerals on 174 areas with mining rights held by the private sector and on 44 areas for lignite.

Search for iron in Otlukilise (Gürün-Sivas), Hornovil (Divrik-Sivas), Bizmişen (Kemaliye-Erzurum), Selimiye (Balıkesir), Karabacak (Yozgat), Kırdök (Keskin-Ankara), Karakütük (Kaman-Ankara), Kesikköprü (Ankara); aluminium in Mortaş (Seydişehir-Konya), Ayrancı (Konya Ereğlisi-Bolkardağ); lignite in Malkara (Tekirdağ), Sütkans (Oltu-Erzurum), Kavacık (Balıkesir), İspir (Erzurum); uranium in Karacahayıt (Kisir-Söke-Aydın), Kasar-Köprübaşı (Gördes-Manisa) are completed.

Search for phosphates in Derik (Mardin), and aluminium (bauxite) in Doğankuzu (Seydişehir-Konya) are still continuing.

1963 discoveries of about 4,500,000 tons of iron ore, 38,000,000 tons of aluminium ore (bauxite and diasporite), 28,000,000 tons of lignite, uranium ore with 330 tons of recoverable metal content and 13,000,000 tons of phosphate rock are worth roughly 3,700,000,000 Turkish liras.

Other prospection activities included iron, copper, lead, zinc, aluminium, manganese, antimony, mercury, chrome, coal and radioactive mineral occurrences, plus industrial raw materials, such as clay, kaolin, feldspar, meerschaum, magnesite, bentonite, asbestos, sand and limestone. Antalya, Çukurova and Keban mining prospection and study projects were continued.

Samsun, Adana, Hatay, Ankara and Konya map-sections of the 1 : 500,000 scale Geolocic Map of Turkey were published.

Petroleum studies in closed areas (No. III and IV) went on, while detailed geology and geophysical studies in Darende, Gürün and Hafik districts continued with promising results.

Geological and geophysical studies began on hot and mineral water springs having economic and touristic value. Geothermic energy studies were likewise taken up during the year.

Geophysical studies to draw gravimetric and magnetic maps with a view to determine geologic structure of Turkey started along with the above activities.

Anomalies previously determined by aerial surveys were further investigated through geological and geophysical metfiods, plus drilling.

Obtaining, through AID, of material and equipment needed for this project is being planned. For this purpose ah Aero-Commander survey plane was purchased.

Survey flights scheduled for 1964 summer will start, provided the necessary supplies are secured by that time.

In order to speed up the mineral investigations, preparation of a 1:25,000 scale geologic map of Turkey is undertaken. Many university professors, both Turkish and foreign, became interested in this project of ours for a 1:25,000 scale geologic map of Turkey.

As a result, several students working toward their Ph. D. degrees come to work for us during the summer months. Assistance on this project requested by the M.T.A. from Geologisches Landesamt in Krefeld (Nordrhein, Westfalen) and Bundesanstalt fur Bodenforschung in Hannover, were in principle accepted by the German Government. Representatives of German Government have already come to Turkey to discuss the details of cooperation.

The Statistics and Mineral Inventory Section, previously set up in the Institute in order to make an inventory of the underground resources, to compile statistical data, to determine the mineral output potential and their proper utilization and to keep track of the Common Market and world market situations, was further expanded. In connection with the reorganization of this Section certain preliminary studies were deemed necessary and an agreement in principle is reached between the M.T.A. Institute and the Economic Institute of the Netherlands, to this effect. An agreement to be reached with the Netherlands Government is pending.

Some new phosphate discoveries during 1963, mainly in Mardin, Burdur and Salihli areas, pointed to the presence of extensive reserves of various grades. In Mardin area, exploration work is already under way and being continued under difficult winter conditions by reinforced groups of prospectors and geologists. An agreement was reached in principle between the Government of Turkey and OECD to set up an international Phosphate and Chrome Research Center» here in our Institute and the Turkish permanent delegate in Paris signed the agreement.

A joint project with the «Union Chimique Belge» (UCB) of Belgium, which is being considered between parties, concerns a study of the natural gas reserves of the Black Sea coast, as one of the country's power resources. If an agreement is reached, necessary steps will follow.

Projects for building a new technical bureau and laboratories, where necessary technological studies and pilot tests will be taken up on all types of minerals and industrial raw materials of the country, are made ready and construction started.

The M.T.A. personnel — relentlessly working in the field and bureau for the purpose of finding the badly needed raw materials which constitute the very foundation of the country's industrial growth — needed and deserved a place by the sea in order to take a few days' rest each year. Such a place, modest though it is, is now provided for them at Akçakoca on the Black sea shore, about 45 miles to the west of Zonguldak.

Reliable information concerning our mineral deposits is of utmost importance. Local study of mineral occurrences alone is now believed insufficient to give all the answers. Instead, broader studies of the metallogenic provinces need be taken up. Results of such regional investigations are to be made available both to public and private sectors for their use, with a truer picture of mineral potential in a given district. The law covering the activities of our Institute is now being reviewed from that angle and the Ministry of Explorations has officially applied for necessary amendments. A special permit has been obtained from the Council of Ministers giving M.T.A. the right to sign contracts with private miners to go ahead and undertake exploratory work (including drilling) on their mining claim areas for copper, lead, zinc, phosphate, antimony, chrome and mercury besides coal and iron.

In connection with colour photography to be used during geological and mining studies, the first experiments gave satisfactory results.

Application of geo-chemistry in mining prospection and geological studies in general has in recent years gained worldwide interest. Work in this connection has already been started in the M.T.A. and a geo-chemistry laboratory set up, to take part in our field activities.

By what is known about the country's underground mineral wealth, it can be stated that Turkey is, without doubt, well endowed in natural resources. 28 years' past work by the M.T.A. has already brought to light mineral reserves — excluding Zongul-dak coal basin — worth around 70 billion Turkish liras and along with this proved the fallacy in the old rumor that «Turkey was perhaps rich in variety of minerals but lacked sufficient reserves». It is our conviction that in addition to 25 projects now being carried on by the M.T.A., aerial survey plus the 1 : 25,000 scale geologic map which gained an extra-national character, will soon lead to the discovery of ore deposits of great economic significance. Likewise, when the law has undergone the required changes and new laboratory facilities begin to play their part, search for and evaluation of our mineral reserves will be speeded up substantially.

I would like to point out that the finding of mineral reserves alone does not, of course, complete the job. Their exploitation is what counts and what will benefit the national economy. Here, expert handling combining necessary resolution and know-how is of utmost importance, which the young miners must bear in mind throughout their efforts to bring the mining practice up to the level where it can and will serve this very purpose.

The number of persons, technical or not, working in our Institute now reaches 1147, of this 29 are foreigners. As before we still send students abroad for higher education.

It is my pleasant duty to note that the graduates out of the Turkish schools and universities, who come to work with us, proved quite valuable in reducing the technical element shortage, by their contribution, which we find reliable and promising. In addition we have conducted a number of special technical courses and trained men as prospectors and drillers. The successful ones are already commissioned.

In connection with the CENTO Stratigraphy Project a group of geologists, working jointly, completed preliminary surveys in Pakistan, Iran and Turkey. Iron Symposium, arranged in Isfahan, Iran, has been very enlightening for the participant countries.

On behalf of the Institute, I would like to thank one by one the Turkish organizations always ready to help us overcome our difficulties, the OECD Organization, participant countries and the United States, the French Government for scholarships regularly provided for our trainees in France, the United Kingdom Government for the experts sent to Turkey using the Technical Assistance Fund, the Government of West Germany, which in principle decided to aid us in our efforts to carry out the 1 : 25,000 map project by supplying some technical personnel and materials needed, and finally the Dutch Government for their decision to supply assistance in a project covering an inventory of the minerals and market studies.

I also thank and congratulate all my friends in the M.T.A. who are technical personnel, employees or workers for having cheerfully shouldered their share of the burden in 1963, a year of success in which many important projects were taken up, several were completed and set to work.

Now I am both proud and happy to hand my 18 friends their «25-Year Service Medals» in memory of a superb perseverance and 25 consecutive years of faithfulness and loyalty.

> Dr. Sadrettin Alpan General Director

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