THE ESKOLA MEDAL AWARDED TO PROFESSOR TOM. F. W. BARTH



The Eskola medal was presented to Professor Tom. F. W. Barth by the Rector of the University of Helsinki, Erkki Kivinen, at the ceremony arranged by the Geological Society of Finland in the Festival Hall of the University on the 26th April, 1968. This was the first time the Eskola medal had been awarded since Professor Pentti Eskola received the medal in 1963.

According to the statute of the Geological Society of Finland, the Eskola medal can be awarded to a foreign scientist in recognition of his studies on the Precambrian geology of Finland or of his research work closely applicable to it. Professor Barth is undeniably one of the most noted petrologists in Fennoscandia today. Although none of his research has taken place in Finland he fully meets the requirements for foreign recipients of the Eskola medal. Barth's investigations in theoretical petrology conducted both in the laboratory and in the field have been of particular significance to the Precambrian geology of Finland.

Thomas Frederick Weybye Barth was born in 1899, lived his early years in northernmost Norway, attended school in Trondhjem and began his studies at the University of Oslo in 1919 where he was fortunate to receive academic inspiration from W. C. Brøgger and V. M. Goldschmidt. After the completion of his doctoral thesis in 1927 the young doctor was offered the opportunity of familiarizing himself with the latest achievements in petrology in Berlin and Leipzig and of lecturing at the institute of K. H. Scheumann for two years. In 1929 a Rockefeller fellowship took the young scientist to the USA to the institute of Esper Larsen and R. A. Daly at Harvard.

At that time Barth had already attained considerable note in his career as a scientist and had published important works in mineralogy and petrology. Barth was among the first to apply the facies principle of Eskola in his work on the metamorphism of the calcareous sediments in the Precambrian bedrock of South Norway. His study on the origin of pegmatites is still applicable to the pegmatite occurrences in Finland. Still more significant and more closely adaptable to the Precambrian geology of Finland are those theoretical studies which Barth carried out after he had moved from Harvard to Washington to work at the Geophysical Laboratory in collaboration with Bowen, Daly and Washington. His first subject of interest was basaltic magma and its crystallization which he tried to elucidate by means of laboratory tests and field investigations. At the same time he continued his earlier works in x-ray crystallography now together with Posnjak.

After Barth had returned to Norway in 1936 to a professorship at the University of Oslo, he changed the direction of his studies from the laboratory to the field. This led to outstanding investigations on the Precambrian formations of South Norway. In these works Barth purposefully endeavoured to apply the results of his laboratory and theoretical research. It is understandable that a man emerging from the laboratory of Bowen was a pure magmatist and so was the Barth of the »Three-Men's-Book» in 1939.

Under the difficult conditions of the war and

inspite of a period spent in a prison camp, Barth was able to continue his field studies. When the University of Chicago set about organising the strongest possible department of geology, Barth was invited to work with his older colleague and friend N. L. Bowen. After three years Barth returned to Oslo to the directorship of the Mineralogical Geological Museum and to the problems of Precambrian geology. The man to return to Norway was now a sceptic in his opinions. Thus the Barth of the first edition of Theoretical Petrology was no longer the unshakeable magmatist of the Barth-Correns-Eskola. Since his return to Oslo Barth has published a number of studies on Precambrian geology, vulcanology and general theoretical topics. The adaptability of these studies to research on the Precambrian geology of Finland is obvious. The use of co-existing feldspars as a geological thermometer was a find that has since often been employed in Finland.

Field investigations in South Norway have turned Barth more and more clearly and uncompromisingly into a transformist. According to Barth himself this has happened inspite of the high estimation and appreciation he has always felt for this former teachers and collaborators Goldschmidt and Bowen.

In recognition of his high qualifications, Prof. Barth has received many awards, among them honorary doctorates at the universities of Copenhagen and Nancy and the Roebling medal of the Mineralogical Society of America in 1962.

In 1964 Barth was elected President of the International Geological Union. Since 1960 he has been a Corresponding Member of the Geological Society of Finland.

The significance of the new medal is greatly enhanced when it can be awarded to a recognized scientist such as Tom. Barth. Also, the Geological Society of Finland has no higher token of esteem for Professor Barth than to award him the Eskola medal which he is the first to receive after Pentti Eskola himself.