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MEMORIAL OF RIAD ABDEL-MEGID HIGAZY

September 13, 1919–March 7, 1967

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Riad A. Higazy was stricken by a heart attack on March 7, 1967 while preparing for his day's teaching at Ain Shams University, Cairo, Egypt, U.A.R. He is survived by his wife and one daughter. He will be remembered by his many professional colleagues and friends as a man of uncompromising integrity and great skill in both teaching and management. His personal magnetism, keen wit, and rollicking good humor are sorely missed.

Higazy was born on September 13, 1919 at Tanta, a town in the Nile Delta, north of Cairo. He received his B.Sc. (with Honors) and M.Sc. in 1939 and 1943 respectively at Cairo University. Under the auspices of the Advisory Mission Committee of the Egyptian Government, he attended the University of Chicago from January 1946 to June 1948, where he received a Ph.D. in Geology on June 18, 1948. In the spring of 1950, he joined the Department of Geology of the University of Edinburgh in Scotland where he was awarded a D.Sc. in Geology on December 19, 1952.

His Ph.D. thesis, *Petrogenesis of Perthite Pegmatites in the Black Hills, South Dakota* is a work of distinction. Under the supervision of Prof. Tom F. W. Barth, Higazy unraveled the role of metasomatic replacement in the formation of pegmatites near Glendale, Pennington County, South Dakota. His hypothesis of the metasomatic origin of the Perthites is supported by field observations of outcrops and several mine cuts, by microscopic studies of the perthite textures and those of the enclosing rocks, and by extensive chemical analyses. During his two-and-a-half year affiliation with the University of Chicago, he was an active student. He was elected President of the Kappa Epsilon Pi fraternity and a member of the honorary society of Sigma Xi, Chicago Chapter. He worked as Assistant in Petrology and Mineralogy at Chicago in 1947–1948 and also at Stanford University during 1949–1950.

Having developed the skills and mastered the techniques of laboratory studies of pegmatites, Riad Higazy planned another phase of graduate

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study. He took the South Dakota material to the University of Edinburgh in Scotland for further study. He worked with the late Prof. Arthur Holmes, F.R.S., who was then Head of the Department of Geology. He divided his time between that Department and the Macauley Institute for Soil Research, Craigiebuckler, Aberdeen, where he was given generous facilities for carrying out spectrographic analyses. He studied material other than that of South Dakota which was supplied by members of the Department of Geology. A dissertation entitled *Geochemical Contributions to Problems of Petrogenesis* was submitted to the University of Edinburgh in the autumn of 1952 and it was in December of that year that Higazy was awarded a D.Sc. in Geology.

Riad Higazy began his teaching career in 1939. Following completion of his bachelor degree from the Faculty of Science at Cairo University, he was appointed Demonstrator, or laboratory instructor, at the Department of Geology. He held this post from October, 1939 to August, 1944. During this period he pursued research work on the mineralogy of some bottom deposits of the northern Red Sea. His work was supervised by Prof. N. M. Shukri and earned him an M.Sc. in Geology in 1943. He spent the spring of 1943 and that of the following year studying the relationships of the igneous complex to the iron-rich Nubian Sandstone in the Aswan area, Egypt. This he did as part of his own training as a demonstrator. His students of that period remember him as a demanding teacher.

In 1944 he joined the Department of Geology at Alexandria University as Assistant Professor. He was promoted to Associate Professor in 1951 and remained with Alexandria University until 1956. During this period, he gave instruction in mineralogy, petrology, and geochemistry, did research work and published about twelve papers in the same fields, and supervised graduate work of a number of M.Sc. and Ph.D. students. At the time he left the University to become Director of the Egyptian Geological Survey in 1956 he was known as one of the finest geology professors in Egypt. His reputation earned him "King Farouk's Prize—Geological Sciences" in 1949 and the "National Award of Excellence—Earth Sciences" in 1956.

When Riad Higazy accepted the post of Director of the Egyptian Geological Survey in August, 1956 he virtually ended his career as a teacher. He held the post at the Survey for three years, and was noted for his hard work and great managerial skills in directing mapping and mineral exploration programs. In August, 1959 he was named Deputy Minister of Industry for Mineral Wealth Affairs. By the end of 1961 the government had launched a "Five Year Plan" for industrial development and created a management organization for the nationalized mineral

industries. Riad Higazy was named President of the Managing Council of the "Egyptian General Agency for Mining." The mining industry did not develop as was expected during that period. A second "Five Year Plan" was launched at the end of 1965 and some reorganization took place, with Higazy retaining the post of President of the Managing Council of the "Egyptian General Agency for Geological Research and Mining." He was with the latter agency for about one year.

In December, 1966 he returned to teaching. He joined the staff of the Department of Geology at Ain Shams University in Cairo as Professor of Geology. He hardly reoriented himself into the academic life when he suddenly died three months later at the age of 47.

Higazy belonged to and actively participated in numerous scientific societies. He was elected Fellow of the Mineralogical Society of America in 1952. He was also Fellow of the Geological Society, London, and Fellow of the Geological Society of Norway. He was a member of the Geological Society of America, the American Geophysical Union, Society of Economic Paleontologists and Mineralogists, and the Society of Sigma Xi.

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MEMORIAL OF HISASHI KUNO

January 7, 1910–August 6, 1969

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On August 6, 1969 petrologists of the world lost an eminent leader and a prolific researcher in their science. Early this morning at 2:30 a.m. Professor Hisashi Kuno of the University of Tokyo passed away of a stomach cancer in a hospital in Tokyo.

Professor Kuno was born on January 7, 1910 at Kanda in the central part of Tokyo, the eldest son of Mr. Kamenosuke Kuno, a Japanese painter. After finishing primary and secondary schools in Tokyo, he went to Sendai to attend the Second High School, where he was so interested in geology, that he determined to be a geologist. However, he spent most of his time in mountain climbing and skiing. In 1929 he enrolled at the Geological Institute, Tokyo Imperial University (now University of Tokyo). Under stimulating influence of Professor Seitaro Tsuboi he was interested in petrology. In 1930 there occurred North Izu Earthquakes in Izu peninsular to the west of Tokyo, and he decided to study the volcanic rocks in this region. This was the start of his life work on the petrology of Izu-Hakone region of nearly forty years. After graduation in 1932, he continued to study the volcanic rocks for one more year at the graduate school.

In the early 1930's, when Kuno was a student, the crystallization of pyroxenes from magma was discussed by many investigators, among whom were Barth, Bowen, Schairer and Tsuboi. The genesis of basalt