

Obituary

Prof. Dr. Kâzım ERGİN ¹

[21 May 1915–24 November 2002]

by

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Prof. Dr. *Kâzım Ergin* [MEHMET KÂZIM ERGİN], known to everyone as *Kâzım Hoca*, was the most distinguished, eminent and best Turkish geophysicist whose theoretical and experimental research contributed to every aspect of the geophysical sciences. He died on 24th November 2002

on *Teachers' Day*, an annual day devoted to school teachers to acknowledge their endless efforts in teaching, when many of his former students and colleagues regularly used to visit or call him. He will always be remembered as one of the pioneering figures in the



¹ Taymaz, Tuncay (2002). *Biographical Memoirs of Prof. Dr. Kâzım Ergin*. İstanbul Technical University Press, 56 pages, April 2002, İstanbul, Turkey.

development of the Earth sciences, not only for his individual contributions but also for his influence on his colleagues and students.

Prof. Dr. *Kâzım Ergin* was born on May 21, 1915 in Gaziantep, SE Turkey, and was married with one son and daughter. He completed his primary, secondary and high school education in Gaziantep under somehow severe conditions with many interrupts due to French occupation of the city during *First World War*. After finishing his basic education he went to İstanbul, where he completed his B.Sc. degree in mathematics at İstanbul University. He was later granted to study mining, metallurgical and petroleum engineering by Mineral Research and Exploration Institute (MTA) on June 1937 at *Freiburger Bergakademie* (near Dresden, Germany) During first two years he has attended the various courses, and also worked at mining operations in different parts of Germany. When he was visiting his parents in Gaziantep where he heard radio news at a local coffee house announcing the invasion of Poland by Hitler's army. *Second World War* had already started. Therefore he could not return to Germany, but for about two months later MTA Institute decided to send all the students to USA. He has finally joined *Massachusetts Institute of Technology (MIT)* to study geophysics and geology, and received his B.Sc. degree in *Geological Sciences* on December 18, 1942, and in the mean time started to study for M.Sc. degree along with *Prof. Beno Gutenberg* on September 1942 at *California Institute of Technology (Caltech)* at Pasadena, and obtained his M.Sc. degree on June 11, 1943. After he had obtained a master's degree, he had started taking courses for *PhD degree*. Professor Gutenberg has suggested a subject, namely "*Energy Ratios of the Seismic Waves Reflected and Refracted at a Rock-Water Boundary*". He liked the research subject and started the calculations. It involved long calculations with a primitive calculator. After many difficulties and administrative mismanagements he had to return to Turkey and start working for MTA Institute during 1943–1949. He has married and completed his military service, and conducted many geophysical experiments for exploration of mineral deposits and oil structures at various part of Turkey. Finally he has obtained a

scholarship from MTA Institute to go back to Caltech and to complete for a PhD degree, and arrived Pasadena on June 6, 1949. He has worked hard to finish calculation part. In addition to the "*Partition of Energy among P and S Waves at a Rock-Water Boundary*" he had to work on another subject, namely "*Observations on the Recorded Ground Motion due to P, PcP, S and ScS Waves*", and obtained his *PhD Degree in Geophysics and Mathematics* on June 9, 1950. He has worked at Caltech as a research fellow for a while, and also taken courses at Duncan, Oklahoma, on well-logging methods for drill holes of petroleum exploration, and returned to Turkey. He was appointed as director of the Department of Geology at MTA Institute on March 1953, and served until 1956 at various important projects. On June 15, 1956 he was appointed as *Professor of Geophysics* at the Faculty of Mining Engineering of İstanbul Technical University, where he has established modern *Geophysical Engineering Department*, and trained many successful students over the years, and was officially retired from İTÜ on April 20, 1982. He has discovered main ore field between Lepiskur river and Murgul (Artvin, NE Turkey). In 1958 a drill hole identified by Ergin has gone through a very rich copper deposits at a depth of 14 m. Rich copper minerals were encountered at several levels. This very rich field today known as Çakmakkaya has provided crucial inputs to Turkey's economic welfare over the years, and is still in operation and producing rich ores.

Prof. Dr. *Kâzım Ergin* was also good administrator and proved his abilities to be director of the various institutions in Turkey. He has served at the various administrative levels of the following institutions:

- Chairman, Scientific and Technical Research Council of Turkey (TÜBİTAK)
- Rector, İstanbul Technical University
- NATO Science Committee Membership
- European Science Foundation (ESF) Membership
- UNESCO Working Group on Seismicity and Seismotectonics

² Dan Peter McKenzie (1987). Edward Crisp Bullard. *Biographical Memoirs of Fellows of the Royal Society* 33, 67–98, London, UK.

Prof.Dr. *Kâzım Ergin* also shared opinions of Lord Rutherford of Cavendish Physics Laboratory and those of Sir *Edward Crisp Bullard*² of Geophysics in Cambridge when running things:

- Running things requires confidence that you know what you are doing, a belief that it will all come out all right and the ability to say what you think without offending people.
- Another thing you must do is to spend time with people who are in trouble, either emotional, financial or scientific. This is a large part of any Director's job.
- The main thing is to keep as firm a hold as possible on scientific appointments.
- Whatever the consequences, you soon learn that, however unreasonable other people are, you have to remain calm, sympathetic and reasonable (an occasional explosion does no harm but it must be rare and calculated).

Kâzım Hoca was a well-liked, both effective scientists and director, and was knighted for his services. Under his leadership the Geophysics Department at İTÜ played a major role in the establishment of geophysical sciences in Turkey, and his influence on others involved in these ideals was very extensive. He was very concerned with the welfare of his students and colleagues and went to great trouble to find them good positions. He made a large collection of scientific books and scientific periodicals over the years, and donated his collections to the Department library, known as *Kâzım Ergin Kitaplığı*.

Acknowledgement

Kâzım Hoca provided detailed notes about his early life, which I have used extensively.

Selected Publications of Kâzım Ergin

- ERGIN, K. 1950. *Amplitudes of PcP, PcS, ScS and ScP in Deep-Focus Earthquakes*. PhD Dissertation Thesis, California Institute of Technology.
- ERGIN, K. 1952. Observations on the Recorded Ground Motion due to P, PcP, S and ScS. *Bulletin of Seismological Society of America* **42**, 263–270.

Memories

- I have always encountered new ideas after having visited *Kâzım Ergin*.
–*Silva Büyükaşıkoğlu*
- During my short tenure as the Head of the Department at İTÜ, I used to visit Professor Ergin and indirectly solicit his opinion on administrative issues, while enjoying interactions with him on scientific issues. I think it was my third trial to solicit his opinion when Professor Ergin told me "Cahit, I know that you know what to do in running the Department. You do not need to try and make me feel comfortable by soliciting my opinion. Let's exclude the administrative issues from our interactions." This was quite a contrast to what other recently retired faculty were expecting! My best regards to Professor Ergin. – *Cahit Çoruh*
- It is really very difficult to comment on *Kâzım Ergin* whose *PhD Thesis* examiners were Prof. B. Gutenberg, Prof. C.H. Richter, Prof. H. Benioff, Prof. A. Erdélyi, Prof. Noble, and Prof. Ward. – *Ülben Ezen*
- I always adore his remarkable ability to teach the fine details of reality and humour during even more serious matters involved. – *Metin İlkışık*
- I feel privileged to have been nearby to *Kâzım Ergin* who has taught us not only the fine details of science but also those of social life, and now all we have to do is to transfer this experience to next generations accordingly. I cannot forget his emotional reunion momentum with Clarence R. Allen after many years in a seminar held at Kandilli Observatory. – *Özer Kenar*
- Prof. *Kâzım Ergin* has always provided whatever we need under very severe circumstances and difficulties no matter what. – *Muzaffer Sanver*
- I regret not being able to participate in *Kâzım Ergin's* lectures earlier as a student. But, I have learnt a lot through his vision of science and life in a developing country. –*Tuncay Taymaz*

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- ERGIN, K. 1975. Times of Refracted, Reflected and Diffracted P at Distances Larger than 70°. *In: Beauchamp, K.G. (ed), Exploitation of Seismograph Networks. NATO Advanced Study Series, Series E, Applied Sciences, No. 11, Noordhoff, Leiden, 527–533.*
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- ERGIN, K., GÜÇLÜ, U. & Uz, Z. 1966. *A Catalogue of Earthquakes for Turkey and Surrounding Areas (11 AD –1964 AD)* [in Turkish with English abstract].