



**EDE HERTELENDI (1950–1999)**

Ede Hertelendi was born in Szeged, Hungary in 1950. He studied in his home town and graduated as a physicist in 1974. He began work at the Institute of Nuclear Research of the Hungarian Academy of Sciences in 1975, and he worked for the institution until his tragic death in 1999.

During the 1970s, research institutes in Hungary faced grave difficulties in procuring up-to-date equipment. Ede, an experimental physicist blessed with excellent technical abilities, was able to design and build his own hardware. He established the Laboratory of Environmental Studies, which to date is one of the best-equipped laboratories in our Institute. He played a decisive role in developing the only low-level  $\beta$ -counting facility in Hungary (see references 1–4), which could be used in archaeological, hydrological and geological research alike. He equipped this radiocarbon measuring system with his own combustion and purification system for  $\text{CO}_2$  preparation and a converter for methane synthesis. The determination of  $\delta^{13}\text{C}$  correction is carried out by an automatic, computer-controlled mass spectrometer used for measuring isotope ratios (5–6), another construction by Ede. Based on worldwide intercalibration measurements, this system has been reckoned with as one of the ten most precise measuring units in the world.

Ede applied the radiocarbon method in many varied areas of science. His interests ranged from archaeology and hydrology, all the way to the hottest issues in environmental research. He identified the absolute age of numerous archaeological samples (e.g. 7–11). His measurements were fundamental in determining the chronological sequence of Neolithic archaeological sites in Eastern Hun-

gary (12–16). He also took part in Bronze Age research in Hungary (17–19). His measurements of  $^{14}\text{C}$  as well as isotope analytical studies were of great help in defining the palaeoenvironments influencing the distribution of prehistoric multilayered tell settlements in the Carpathian Basin (8000–35,000 BP) (20–21). He also carried out dating projects on bogs and sediments from Lake Balaton (23). Ede's extensive  $^{14}\text{C}$  and isotope analytical measurements contributed to the palaeoecological reconstruction of loess formation in numerous sample squares in the Great Hungarian Plain (24–28).

Ede also studied the origins of karstic water (29–30), the vulnerability of aquifers (31) as well as the application of  $^{14}\text{C}$  and other natural isotopes in hydrological and geological research (32–37). He wrote the first description of the radiocarbon method in Hungarian (38). Moreover, he studied the effect of human activity on the concentration of  $^{14}\text{C}$  in the atmosphere (39–44).

Ede was a renowned and widely acknowledged public personality, a member of the Committees for Radiation Protection and Environmental Physics, Radioanalytical as well as Environmental Geochemistry of the Hungarian Academy of Sciences. He also sat on the Subcommittee for Nuclear Energetics. He was a member in the governing bodies of the COST-65, COST-67 and COST-621 Actions of the European Union.

His achievements were acknowledged when he was granted the “Interdisciplinary Prize” by the Institute of Nuclear Research of the Hungarian Academy of Sciences in 1986. He also received the “Elemér Szádeczky-Kardoss Prize” from the Hungarian Academy of Sciences in 1988. In addition, he was awarded the “Institute Prize” from the Institute of Nuclear Research of the Hungarian Academy of Sciences in 1992, and the “Dénes Gábor Prize” of the NOVOFER Foundation in 1998.

Ede was not only an outstanding scholar, but excelled as a teacher as well. His university lectures, motivated by enthusiasm for his research, were extremely popular among the students. Over the years, he was chief adviser on 12 graduate theses and two currently on-going PhD dissertations. His knowledge and special skills, transferred to his students, will remain with us and his students will follow in his footsteps.

*Éva Svingor*

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