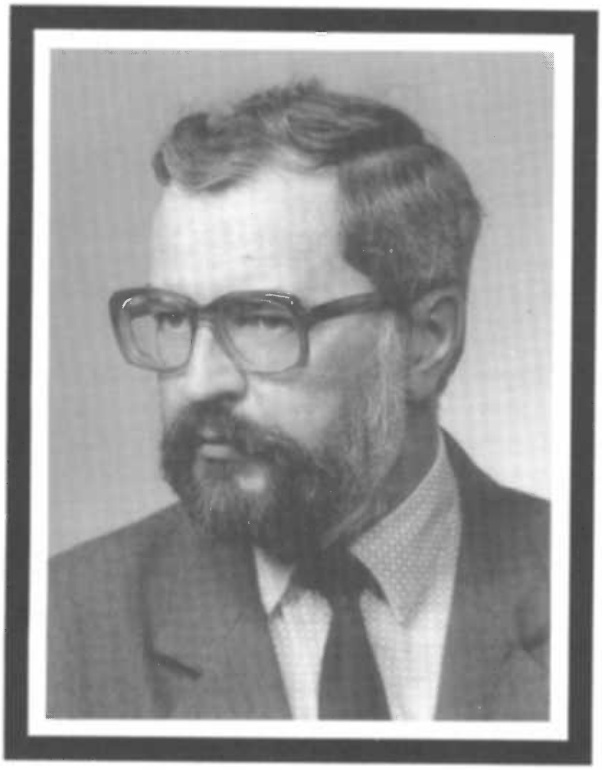

MIECZYSŁAW F. PAZDUR, 1946–1995

Mieczysław Pazdur, Head of the Gliwice Radiocarbon Laboratory, died on 11 May 1995.

Mieczysław Francıszek Pazdur was born on 4 October 1946 in the picturesque city of Tuchów, near the Carpathian Mountains of southern Poland. At primary school, he showed outstanding mathematical ability, and his secondary school education initiated a keen interest in physics. After leaving school, Mieczysław entered the Faculty of Mathematics, Physics and Chemistry at the Jagellonian University in Cracow in 1964. He developed a particular interest in the theoretical physics of elementary particles and in 1969 submitted a thesis on "The electromagnetic interaction of elementary particles in U (6,6) model", for which he was awarded the degree of Master of Physics. In acknowledgment of his subsequent endeavors and growing scientific reputation, Mieczysław's *alma mater* bestowed the degree of Doctor of Physical Sciences in 1978. A second doctorate followed in 1984 with the award of the degree of Doctor of Natural Sciences by the Institute of Geology in Warsaw.

Mieczysław's graduation in 1969 coincided with a period of political unrest in Poland. One consequence was that graduates of the University who held anticommunist opinions and had no immediate family ties to Cracow were required to find employment outside the city. This situation prompted Mieczysław's initial move to Gliwice, where he gained his first job as an assistant engineer in the Institute of Iron Metallurgy. His move to the Silesian Technical University came one year later when he joined the research group headed by Professor Mościcki. This was the initiation of the Gliwice Radiocarbon Laboratory, and Mieczysław had an active and crucial role in those developments that led to the first ^{14}C measurements made in Poland and the subsequent application of this technique in dating natural samples.

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Those early years in the history of the Gliwice Radiocarbon Laboratory are documented in Mieczysław's published work with Mościcki and Zastawny. The main scientific focus was on the design and routine operation of anticoincidence gas proportional counters in natural ^{14}C measurement, derivation of the associated statistical controls and definition of algorithms for age calculation. This contribution still forms the basis of the radiocarbon dating program at Gliwice. The mid- to late 1970s were also an important period in the development of Mieczysław's scientific career, with his initiation of programs of collaboration and cooperation with archaeologists and the other Earth Sciences disciplines that have a direct interest in applied ^{14}C and thermoluminescence (TL) dating. This initiative has grown to become widely recognized not only in his native Poland but throughout the international community.

Following the death of Professor Mościcki in 1977, Mieczysław was appointed to head the Radiocarbon Laboratory, and the next several years proved a highly successful and satisfying period for the ^{14}C research group: M. F. Pazdur, A. Pazdur, R. Awsiuk, T. Goslar and A. Walanus. Between 1978 and 1984, four new gas proportional counters with their associated vacuum gas handling systems were designed, constructed and commissioned. At the same time, A. Bluszcz, who had joined Mieczysław's group, was developing a TL-dating capability to complement the Laboratory's support for research in archaeology and Quaternary science.

The scientific progress achieved in the Gliwice Radiocarbon Laboratory under Mieczysław Pazdur's guidance was often in the face of considerable adversity. The early 1980s was a time of major political strife in Poland, with fast-growing popular support for rejection of the communist system. As a very active member of this opposition, Mieczysław took a leading role in the organization of a Solidarity Committee within the Silesian Technical University and edited the Solidarity Bulletin. His high-profile contribution toward the democratization of Poland led to his arrest and imprisonment for three months during the state of emergency declared by the communist government in 1982.

From 1981 until his death, Mieczysław was head of the Department of Isotope Chronometry in the Institute of Physics at Gliwice. The Radiocarbon Laboratory is a component of that department, which was renamed the Department of Radioisotopes in 1991. One of Mieczysław's primary endeavors as department head was to initiate and foster liaison among other Polish institutions with a direct interest in the natural sciences, mainly under the auspices of the IGCP 158 international research program. Active collaboration under that project has grown to include the committee of Quaternary Research of the Polish Academy of Sciences, the Geological Institute in Warsaw, the Institute of Quaternary Research of the Adam Mickiewicz University in Poznań and the Institute of Geography and Spatial Organization of the Polish Academy of Sciences in Cracow.

He contributed to the advancement of Polish science, and in particular, its international recognition in several other areas. In 1983 Mieczysław organized the first national conference on "Methods of Absolute Chronology", the proceedings of which were published as the initial two volumes of the new journal *Geochronometry* under the series title of "Scientific Notebooks of the Silesian Technical University: Mathematics and Physics". This first discussion forum for Polish users and providers of ^{14}C and TL dating technology is now an established triennial event; Mieczysław chaired the Fifth Conference held in Gliwice on 6–8 April 1995. In 1990, to further promote the use and availability of isotopic dating methods in support of Polish science, Mieczysław set up his Radiocarbon Foundation based in Gliwice. About that time, and again ever mindful of his laboratory's user community, he set about building the Gliwice ^{14}C database, which now provides access to some 4000 records, *i.e.*, almost 70% of the total dating effort so far completed in the Laboratory.

In the mid-1980s, Mieczysław became increasingly interested in other dating methods and their potential application in environmental studies. At this time, he published his first work in the field of paleoclimatic reconstruction, based on isotopic analyses of freshwater carbonates (tufas and spelothems) and lake sediments. This topic continues to be one of the main research interests within the Department of Radioisotopes at Gliwice, and has attracted international attention for its promise of an essential contribution to absolute calibration of the conventional ^{14}C time scale back through the enigmatic period of glacial to postglacial transition.

Worldwide awareness of the work of the Gliwice research group has been assured by scientific publication and active participation in international meetings and conferences. This reputation has been considerably strengthened, however, by Mieczysław's determination to establish scientific cooperation with counterpart institutions across Europe and in the independent states of the former Soviet Union. Since 1985, various collaborative initiatives have linked the Gliwice Radiocarbon Laboratory with the Universities of Cambridge, Ferrara, Glasgow and Perpignan; institutes and museums in Sofia and Trydent; the Centre des Faibles Radioactivités–CNRS in Gif sur Yvette; the NERC Radiocarbon Laboratory in East Kilbride; the Institute of Geochemistry–Ukrainian Academy of Science and Mineral Physics in Kiev; the IAEA in Vienna. In 1994, Mieczysław served as an invited member on the scientific advisory committee for the 15th International Radiocarbon Conference.

In what proved to be the final two years of his life, Mieczysław Pazdur found it necessary to fight yet again for the future well-being of his beloved Poland. As before, his adversary was the old political system, or more correctly, the legacy of entrenched attitudes that it had fostered. Mieczysław believed firmly in the need to revise priorities in the university syllabus to match the ongoing progress of social and economic change in Poland. As recently appointed Dean of the Faculty of Mathematics and Physics in the Silesian Technical University, he was particularly anxious that the teaching and research programs should reflect the importance of environmental protection and the role of isotope-based investigations in this area. It was a bitter disappointment to Mieczysław that not all of his academic colleagues were like-minded, and that some even exhibited a strong resistance to any form of progressive change. On returning home after his last meeting with workers at the Institute of Physics, on May 10, Mieczysław remarked to his daughter, "Why do they want to do nothing? Even some of my pupils and co-workers." "Doing nothing" was anathema to Mieczysław Pazdur in all aspects of his being.

It has been a great privilege to spend many years with Mieczysław: 26 as his wife and 25 as co-worker in his total dedication to scientific research and its organization. I helped him to the best of my ability, but this was not enough. His heart may have failed physically, but certainly not his spirit or determination.

Anna Pazdur

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