



KRYSTYNA POŻARYSKA

(1914—1989)

MEMORIAL AND SCIENTIFIC BIBLIOGRAPHY

Krystyna Pożaryska died on the 21 October 1989 in Warsaw at the age of 75. She was an eminent paleontologist, professor emeritus at the Institute of Paleobiology of the Polish Academy of Sciences and at the Geology Department of Warsaw University.

Krystyna Pożaryska was born on the 29 of October 1914 in Warsaw. Her parents, Władysław and Wanda Maliszewski had three children, Zbigniew, Krystyna and Barbara. Their mother was a teacher of music and foreign languages and father—a self-educated ethnographer and geographer, the author of many papers on these subjects. Perhaps, it was after him that Krystyna inherited her scientific interests.

Having finished Cecylia Plater-Zyberkowa's school in 1932 she took up studies at the Faculty of Mathematics and Natural Sciences of Warsaw University from which she graduated in 1937 and got her M.Sc. in geography. Her M.Sc. thesis was entitled "The Evolution of the Pilica River Valley". After graduation, she was employed as a junior lecturer of Geology and Paleontology Chair, Warsaw University, and was com-

missioned by the State Institute of Geology to do the geological mapping of the Quaternary. The same year she married Dr. Władysław Pożaryski, a geologist at the State Institute of Geology and a junior lecturer at Warsaw University.

During World War II, Krystyna Pożaryska did not stop her research. Being deprived of the possibility to work at the laboratory, she continued her studies privately working on the stratigraphy of the Pleistocene of the Kamienna River Valley. This work was based upon the material collected in 1937—1939.

After the Nazis had been driven from Poland, Krystyna Pożaryska volunteered to participate in the restoration of the Chair of Geology and Paleontology at Warsaw University, which was completely destroyed during the war. She started her post-war scientific career at the University. In 1945, she also resumed work for the State Institute of Geology. In 1947, the Chair of Paleontology of Warsaw University was separated from that of Geology and headed by Professor Roman Kozłowski who was the most creative influence in Krystyna Pożaryska's life. In 1953, Krystyna Pożaryska was transferred to the Institute of Paleozoology of the Polish Academy of Sciences. At that time she also lectured paleontology at the Evening Engineering School and, in 1954, she took up teaching sedimentology and marine geology at the Geology Department of Warsaw University and continued conducting these courses for 15 years.

For almost thirty years of her creative life, Krystyna Pożaryska was intimately linked with the Institute of Paleozoology (later re-named Institute of Paleobiology) of the Polish Academy of Sciences. Every step in her scientific career, from a Ph.D. in 1956 to the title of full professor in 1970 was made there. Until 1980 she was the head of the Laboratory of Micropaleontology at the Institute.

Her scientific work can be divided into four periods: 1936—1939, 1945—1957, 1957—1968, 1968—1986.

1936—1939

During those years Krystyna Pożaryska was engaged in the geological mapping of the Quaternary in central and south-eastern Poland. The first results of her field work were published before the war, and the final ones appeared after the war, as a monograph on the Kamienna River Valley (1948). The publications aroused animated discussion among the students of the Polish Quaternary and won her an important position in scientific circles.

1945—1957

After the war Krystyna Pożaryska, inspired by prof. Roman Kozłowski, started her work on the Late Cretaceous microfauna of Poland. The first

step of this wide-scale research was a study of sedimentology of the rocks in question, which resulted in the monograph "Sedimentological questions of the Maastrichtian and Danian of the Pulawy region" (1952). The monograph contains a sedimentological analysis of the rocks, based on their chemical composition and a microscopic thin section study, and also on their typology and nomenclature. At that time it was a pioneer work providing data for the interpretation of the ecology of the Late Cretaceous foraminifera. A year later, she published a paper on the Late Cretaceous index ammonites unknown hitherto in Poland. In 1954 appeared her paper on the Polish Cenomanian-Danian index foraminifera which was widely used in geological prospecting in Poland.

Several years of field research and laboratory work resulted in a large monograph, published in 1957, entitled "Lagenidae du Crétacé supérieur de Pologne" which was her doctor's thesis and was then a significant achievement in the world scale. She described and illustrated with her own drawings 180 species of foraminifera from the Upper Cretaceous and the lowermost Tertiary of the Polish Lowlands, determined their paleo-ecological and stratigraphical significance and recognized their facies relations. The thesis also discussed many biological questions concerning the foraminifera described. To finish her research, Krystyna Pożaryska was granted a scholarship in Sweden. In cooperation with an outstanding Swedish micropaleontologist, Dr. F. Brotzen, she wrote another paper, "Paleocene in Central Poland" (1957) where she proved the existence of the lowermost Tertiary sediments so far unknown in Poland.

The studies on the Upper Cretaceous and lowermost Tertiary foraminifera resulted also in numerous smaller publications.

1957—1968

Cooperation with Dr. F. Brotzen inspired Krystyna Pożaryska's work on the microfauna from the boundary layers between the Cretaceous and Tertiary of the Polish Lowlands. The most important here are two monographs, for the earlier of which, "Foraminifera and biostratigraphy of the Danian and Montian of Poland" (1965) she was awarded a State Prize. Krystyna Pożaryska not only proved that the sediments of the early Tertiary, i.e. Danian and Montian, were present on the Polish Lowlands but also that the Danian should be included into the Tertiary and not into the Cretaceous as it had been generally believed. This work, indeed, was an important contribution to the undersanding of the distribution of Paleocene sediments in Poland and in the whole of Central Europe, making their correlations possible. The foraminifera in question were then one of the best known Paleocene microfauna assemblages in the world.

Her monograph "Foraminifera from the Paleocene of Poland, their ecological and paleogeographical meaning" (1968) corroborated the view

that during the Paleocene (and the Cretaceous) the area of Poland had been influenced by two climatic zones, referred to as the Northern (Boreal) and Southern (Tethyan) European provinces. This was reflected in the presence of the warm-water, middle Paleocene (Montian) foraminifera in the Polish Lowlands due to the ingression of warm seas from the Western to Middle Europe. Later, she elaborated this view when she described the range of the warm-water Paleocene microfauna in Europe and determined directions of its migration.

1968—1986

This period was devoted to further work on the Paleocene, a study of the Eocene, and summing up the results already achieved in several synthetic papers. Most of them were published within the framework of international research programmes.

After her visit to Denmark (and contacts with Dr. A. Rozenkrantz), she started her comparative studies on the foraminifera from the epicontinental Paleocene of the Polish Lowlands and that in the Carpathians. This work allowed her to distinguish two types of the Paleocene foraminifera: the broadly distributed and long-ranging one found in the sediments of a geosynclinal origin, and the type more variable in time and space, of epicontinental sediments. Parallel American studies revealed similar differences between the faunas known as the foraminifera of Velasco and the Midway types, caused by paleogeographical and sedimentological conditions.

Krystyna Pożaryska was among the first to study the Polish Eocene microfauna. As in her previous research, she determined its precise age, origin and geographic distribution and described numerous assemblages of this age. Her most significant achievement was that she found in Poland a Priabonian warm-water microfauna of the Mediterranean type, which had been previously unknown in the area.

Later, Krystyna Pożaryska took an interest in the Oligocene foraminifera, and after 1986, when formally retired and despite of serious illness, she started research on the Miocene foraminifera of the Carpathian Fore-deep. Alas, she did not manage to finish it.

In the 1980s Krystyna Pożaryska participated in working out a standard stratigraphic subdivision of the Tertiary, including the stratigraphy of the Polish Lowlands and the neighbouring countries. She also took part in the international research programme IGCP Project no. 124, where she coordinated the Polish section of research and reported its results abroad. The project aimed at reconstructing the evolution of the Tertiary basin of North-West Europe into which Poland was included.

It is difficult to sum up all Krystyna Pożaryska's achievements in such

a short biography. The enclosed list of her publications gives a better picture of her work. She willingly cooperated with fellow-scientists from Poland and abroad. She often benefited from the experience and opinions of others but at the same time she shared with them her clear-sighted criticism as well as caution while interpreting the geological record. That is why she was a keen collector of comparative material and literature, open to contacts and co-operation, an active participant of all kinds of scientific meetings in Poland and abroad.

She devoted a lot of time to reading and reviewing doctoral theses, tutoring young scientists and advising her Polish and foreign colleagues and students.

Krystyna Pożaryska also understood great importance of popularization of science. At the beginning of her career, as early as 1950, she read number of public lectures on natural resources of Poland. Later she wrote many articles for dailies and the radio.

Krystyna Pożaryska enjoyed great respect in her country and abroad, and she received prizes and honorary titles. In 1954 she received the Medal of the 10th Anniversary of the Polish People's Republic, in 1968 — a State Prize, in 1969 — the medal of the 100 Anniversary of the Hungarian Institute of Geology, and in 1975 — the Cavalier Cross of Polonia Restituta.

In recognition of her achievements she was made member of the Belgian Geological Society and the German Paleontological Society, as well as the German Academy of Sciences Leopoldina in Halle. She was also a member of the Scientific Council of the Institute of Paleobiology of the Polish Academy of Sciences and the Scientific Council of the Geological Publishing House in Warsaw. She also worked in the editorial boards of "Acta Palaeontologica Polonica" and "Revista Española de Micropaleontología". In the 1960s she wrote regularly for the journal "Micropaleontology".

Krystyna Pożaryska was a devoted mother to her children, Christopher born in 1940 and Anna born in 1953. Kind, spontaneous and considerate, she had many friends both at home and abroad. Her interests were very broad and she derived pleasure from meeting people of different walks of life. She practiced skiing, jogging and took part in canoeing rallies. She liked dancing and theatre. She enjoyed her scientific trips and was not only interested in the geology of the country she visited but also in its monuments and natural environment. Her friends were able to share her joy of living while watching slides of exotic countries in the hospitable home of the Pożaryskis.

In her scientific career Krystyna Pożaryska owed much not only to prof. Roman Kozłowski but also to her husband, prof. Władysław Pożaryski.

ryski. Prof. Kozłowski inspired and promoted her scientific studies, while her husband was an invaluable partner both in her professional and private life.

We got used to seeing Krystyna Pożaryska always active, cheerful and full of plans. Thus her death was not only a great grief, it took us unawares, although we had known about her grave illness. Her contribution to science and her lively personality will be remembered by all who knew her.

Janina Szczuchura

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