

Professor Henryk Makowski (1910-1997)

Professor Henryk Makowski died on 30th January, 1997. The Polish scientific community is proud of his world-famous discoveries on ammonoid biology. His theory of sexual dimorphism in ammonites gained him a wide reputation among fellow scientists. His scientific works rest mostly within the realm of paleontology. Only while working on paleontological questions did he touch stratigraphic problems, perhaps because he mostly had to do with condensed deposits, often containing mixed faunas. Only his lectures and handbooks reveal his deep stratigraphic insights.

There are no longer any geologists alive who would remember Henryk Makowski in his youth. He was born in 1910 in Volhynia, in a part of Europe especially hard hit by the historical cataclysms of the first half of the twentieth century. He grew up in Krzemieniec, where he attended the well-known Liceum Krzemienieckie. Later, he studied geology and palaeontology at the Stefan Batory University in

Vilnius (now Lithuania) and the Jan Kazimierz University in Lvov (now Ukraine). He was employed at Lvov University shortly before World War II, while he was still a student, and he graduated not long after the Soviet invasion of 1939. During the Soviet occupation he worked for an enterprise prospecting for coal in the Carboniferous near the Bug River, and later, during the German occupation, he was employed in the Amt für Bodenforschung.

By the end of the war he was in Warsaw and, since in the aftermath of the war there was no point in returning to his homeland, he remained in Poland. He actually began his research work and his scientific career at the age of 35. He was a senior researcher in the Maria Curie-Skłodowska University in Lublin for some time, but by the end of 1945 he had moved to the University of Warsaw, after his Lvov mentor, the late Prof. Jan Samsonowicz.

The University, like the city itself, was just beginning to rise from the rubble left after the war, and the decimated scientific staff had first to bring it back to life. The palaeontological teaching col-



lection originated from the fire-blackened fossils that Makowski dug out from the ruins and ashes of the Geology Laboratory. He needed to find a new research topic. First, he turned to the stratigraphy of the Jurassic from boreholes in Eastern Poland. Then he became fascinated by the exquisitely preserved ammonite fauna from the Łuków erratic mass, left by the Scandinavian ice-sheet in the Pleistocene. He devoted his monograph "La faune Callovienne de Łuków en Pologne" to these fossils, for which he was granted a PhD in paleontology in 1951.

Detailed studies of this wonderfully preserved material directed him towards studies of the sexual dimorphism in ammonites. These studies became his lifetime fascination and rewarded him with his greatest successes. Sexual dimorphism had already been suggested by earlier ammonite researchers, but it was Makowski who analysed the phenomenon in depth and presented a strong case for it, supported by elaborate arguments. Much of his evidence came from biometric analysis of the ontogenetic development of the shell. He did not restrict his interests to the Łuków ammonites, but also undertook research on large numbers of specimens collected from numerous

Devonian and Jurassic sites. The results were published in 1962, and his monograph *Problem of sexual dimorphism in ammonites*, published in *Palaeontologia Polonica*, opened a new chapter in ammonoid biology. It was acclaimed by the world experts in the field.

This monumental opus set the limit to Prof. Makowski's ambitions. He continued research aimed at further development of the discoveries presented in the monograph, but his later work was hindered by his long illness. He regarded only high level scientific questions as worthy of his attention. He published minor papers with great reluctance and, in fact, he wrote only a few of them following the monograph on sexual dimorphism. His last publication, on dimorphism and evolution in the goniatite *Tornoceras*, appeared in the *Acta Palaeontologica Polonica* in 1991. Scientific research was his main goal; he regarded a formal academic career with warm-hearted irony and the detachment that was so typical of him.

Students knew him as a popular and highly regarded lecturer, as well as an editor and co-author of historical geology textbooks. To his younger colleagues, he was a Professor, head of the Historical and Regional Geology Laboratory, and Dean of the Faculty of Geology of the University of Warsaw. He



did not push forward his own opinions; he approached everyone with attention and respect, was simple and honest. All who knew him remember him as a man of great wisdom, modesty, and goodness.

Michał Szulczewski

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Professor Henryk Makowski (1910-1997) the Editor of *Acta Geologica Polonica* in the period 1976-1981, remains for ever in our memory as a man of the greatest intellect, the author of his *Opus Magnum* on sexual dimorphism in ammonites (1962). He was also an unforgettable person, both as a scientist, and as an academic teacher. Our own personal contact with him dates back to the early 1960s, when we were post-graduate students interested in highly fossiliferous localities. It soon appeared that our interest fitted in perfectly with his own plans, and he cordially invited a group of like-minded students to join him on his fieldtrips to Łuków.

In the 1960s Professor Henryk Makowski was still the youngest of all the professors of our Faculty, and the only one who systematically searched all of the fossiliferous exposures, particularly his favourite locality, Łuków. At a time when the 'goldrush' of amateurs to collect everything in sight was still unknown, the weekend trips to Łuków in the autumn or early springtime were always very productive. The concretions waiting for us in huge heaps after the autumn rains or the spring thaw could be cracked open systematically in order to find those with a pearly ammonite inside. Professor Makowski was invariably optimistic that we would find something exciting, either ammonite species new for the locality (e.g. of the genera *Hecticoceras*, *Choffatia*, *Grossouvria*), or complete specimens of the greatest rarities, known formerly only from small fragments, like almost a giant genus *Collotites*. He was especially keen on finding juvenile shells of the nautilid *Cenoceras* that preserved details, such as the cicatrix, indicative of their hatching from eggs. To keep our hammering under control, he regularly called for a break, so that he could serve to us with cups of the delicious hot coffee that he always kept with him in one or two vacuum flasks. A sudden fall in production at the Łuków brick-kiln in the early 1970s, and the subsequent flooding of the pits by rainwater,

brought that period in our lives to an end. Fortunately, after Łuków was lost to science, he was still able to demonstrate his ideas on ammonoid and molluscan palaeobiology to us at other localities. During our geological excursions we were always amazed at his wide knowledge of subjects outside geology. Any living creature found in the field became the subject of a lecture leading us through meanders of interrelated scientific disciplines. Architectural monuments were also commented on with a deep understanding of their historical background. The Professor was also known as a person who looked at everything with great detachment. He was a simple and decent man. He hated anything that was the slightest bit "bombastic".

He must also be remembered as a leading author and editor. We were always very impressed by his great accuracy when preparing illustrations, both line-drawings and photos, to demonstrate the details of his favorite ammonites. Professor Henryk Makowski actually published only a small number of papers. He was always aware of, and was actually rather proud of, his inability to write 'trivial' papers. It is easy to imagine that some people must have regarded him, in medieval terminology, as a *Homo Uni Libri* - a man of one book only, obviously the monograph on sexual dimorphism.

His editorial skill when he was coordinator and editor of the academic textbook on Historical Geology (published 1977), and Editor of *Acta Geologica Polonica* during the years 1976-1981, was widely recognized. When his health failed rapidly, and we took over the editing of the journal from him, we found that his experience and advice were invariably very helpful.

Andrzej Radwański
Ryszard Marcinowski