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## Preface

Studies of applied micropalaeontology are tightly linked to subsurface exploration - whether as a purely scientific endeavour as is the case with the deep-sea drilling - or as a tool for the search and development of natural resources. Today, micropalaeontological data is used to monitor large-scale paleoclimatic changes, to reconstruct the general circulation of the ocean during forgone periods in earth history - or to simply determine the precise age of a minute sediment sample and correlate subsurface strata. However not every student of micropalaeontology may appreciate the fact that the field of applied micropalaeontology, which has today branched out into such diverse topics as paleoceanography, paleoclimatology, and paleoecology, arguably traces its humble beginnings to a postgraduate student by the name of Józef Grzybowski who took up the task of examining microfossils from borehole muds.

In the summer of 1894, the 25 year-old Grzybowski presented a talk entitled "Preliminary results of microscopic investigations of drilling muds from the Galician oil fields". The occasion was the "7th meeting of the Association of Polish Naturalists and Physicians" in the city of Lemberg (now Lvov) on the outskirts of the Austro-Hungarian Empire. Ostensibly this was the first time anyone had attempted to use microfossils for applied studies. After a number of preliminary reports, by the year 1898, Grzybowski had been able to demonstrate that benthic foraminifera can be used to correlate subsurface strata in wells drilled for petroleum exploration. Unfortunately the news of the discoveries made in the oil fields of Galicia did not spread far beyond the immediate surroundings, and Grzybowski never lived to see his methods and findings adopted by the international scientific community. Because the bulk of Grzybowski's basic scientific work (his taxonomic monographs on foraminifera and associated microfossils) was written in a rather elaborate style of 19<sup>th</sup> century Polish, it has remained obscure outside the realm of slavic languages to this very day. However, Grzybowski's monographs and his extensive collection of microfossils remain to this day the single most important contribution to the taxonomy of cosmopolitan deep-water agglutinated foraminifera. Although abstracts of his work were printed in the German language and English translations of his new taxa can be found in the Ellis and Messina Catalogue of Foraminifera, the original taxonomic monographs, now extremely difficult to obtain in the originals, have never been translated in their entirety from Grzybowski's native Polish.

As a fitting tribute to the one-hundredth anniversary of Grzybowski's pioneering efforts, we have compiled this collection of the taxonomic works of Grzybowski and his contemporaries W. Friedberg and M. Dylązanka. These papers contain all the new taxa described from the deep-water sediments of the Polish Carpathians between 1894 and 1923, along with reproductions of the original plates. In compiling this volume, our primary intentions are the make these classic works available to the modern researcher in a single reference volume. The thoroughly researched biographical article by Dr. Stanisław Czarniecki sets the scene of Grzybowski's studies in the 1890's and early 1900's. Prof. Andrzej Ślaczka's chapter places the classic localities into a modern geological setting. The final article represents an original scientific contribution on the current taxonomic status of the species described by Grzybowski and his student M. Dylązanka and documents the type specimens preserved in the Grzybowski Collection.

The editors  
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