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### IN MEMORIAM

#### **Farewell to Dr. Sci. Marijonas Repečka (9 January 1937 – 18 October 2018)**



The Baltic marine geology has lost a well-known scientist, experienced sedimentologist and long-term participant of famous Russian-Soviet oceanology expeditions, Marijonas Repečka. Marijonas (often called Marius) was born on 9 January 1937 in Purveliai village, Anykščiai district. In 1956 he graduated from Kavarskas secondary school and in 1961 the Faculty of Natural Sciences of Vilnius University where he got the diploma of engineer-geologist. Being a 5th year student, Marius went to Gelendzhik (on the Black Sea) marine geology campus of the Moscow Institute of Oceanology of the Russian Academy of Sciences where he performed his pre-diploma practical work on R/V “Shirshov” and “Vityaz”, led by academician Nikolay M. Strachov. The Gelendzhik Branch was an environment that gave the beginning of scientific pathway for M. Repečka

as a sedimentologist and marine geologist and also for famous oceanographers – marine geologists from Lithuania. Actually, in Gelendzhik scientific career was started by Kazys Šimkus, Emelyan Emelyanov, Liudas Lukoševičius, and later Egidijus Trimonis and Olegas Pustelnikovas.

In 1961, Marius Repečka graduated from Vilnius University with diploma work titled „Features of geology and geomorfology of the north-eastern part of the Black Sea“ and was appointed to work in the Far East Branch of the Institute of Oceanology in Vladivostok. The same summer, Marius left homeland for long years of research in the World Ocean.

First, for several seasons M. Repečka surveyed the ocean bottom relief from the soviet navy ships, but soon he joined a scientific team of R/V “Vityaz” and began studies of bottom sedimentation processes in the Japan Sea, as well as Pacific and Indian oceans. The main task of this period for M. Repečka was to collect factual data and to analyze physical properties of bottom sediments, in particular, the influence of dispersed volcanic rock material on processes of marine sedimentation. In 1972, M. Repečka completed his thesis and defended a degree of the candidate of science in geology and mineralogy (in 1993 nostrified as Doctor) entitled “Pyroclastic material in bottom sediments of the Japan Sea and northern part of the Pacific Ocean.”

Looking back to this period of his scientific activity, Dr. M. Repečka wrote: “... *taking part in the expeditions in different oceans, tremendous and unforgettable impression was given from a powerful ocean element, from an underwater world of corallin reefs, from the majesty of natural eruption processes of Kilauea volcano in Hawaiian archipelago.*”

In 1973, Dr. M. Repečka was invited to work at the Lithuanian Institute of Geology and came back to Vilnius. First, he was employed as a junior scientific researcher and soon, in 1975, got a position of senior scientific researcher and began to actively participate in the marine geological works in Lithuania.

At that time, the south-eastern segment of the Baltic Sea underwent the deep marine oil prospective

drillings. M. Repečka joined the Institute's marine geology group that had a task to create a primary database of survey of the geological structure of the south-eastern Baltic Sea. M. Repečka himself studied the occurrence of Quaternary deposits and distribution of bottom sedimentary materials. This was necessary seeking to understand the peculiarities of sedimentary processes in such an intercontinental sea basin as the Baltic Sea on the whole.

In 1979–1985, Dr. M. Repečka worked at the preparation of the geological mapping programme of the so-called glacigenic shelf of all three Baltic Sea states at a scale of 1:200,000 and helped to establish a marine geology mapping group in the Gargždai Oil Prospecting Expedition of the Lithuanian Geological Survey.

Since 1985, M. Repečka was involved in the work of the marine geology and geomorphology group of the Quaternary Geology Department of the Institute of Geology, and his scientific activity included the leading participation in the compiling and publication of the geological maps of the Baltic Sea at a scale of 1:500,000, in the performance of marine geological mapping at a scale of 1:50,000, and in the geological work of the EU pilot projects in the Baltic Sea, such as GOBEX and INFO-COPERNICUS MASS-III.

In 1992, on the basis of above-mentioned group a Baltic Marine Geology Department, led by Professor Habil. Dr. Algimantas Grigelis, was established at the Institute of Geology. Beside the detailed geological mapping of the Lithuanian segment of the Curonian Lagoon and Baltic Sea waters, which lasted from 1993 to 2000, Dr. M. Repečka, as a leading scientist in sedimentology, in 1993–1996 took part in EU 4th Framework Program devoted to Baltic Sea System Studies (BASYS), part “Geology”: “Palaeoenvironment of the Baltic Sea through the last 8000 years”. The project was performed by two marine expeditions with R/V “Petr Kottsov”, and Dr. M. Repečka as well as Dr. Birger Larsen (GEUS, Denmark) took responsibility for sea bottom investigations and bottom sediments classification.

In 1998–1999, the entire database of the sea bottom sediments was actually reported in the bilateral Lithuanian–Swedish GEOBALT project that presented the fundamental elaboration of the recent geological map by a group of authors, edited by Dr. Marijonas Repečka and Dr. Ingemar Cato (SGU, Sweden), entitled “Bottom sediments map of the Central Baltic Sea, scale 1:500 000”, published with an extended explanatory note in Uppsala by the Geological Survey of Sweden (1999).

Dr. M. Repečka was a practical researcher and preferred visual work and laboratory studies of the moraines and bottom sedimentary materials instead of writing scientific reports. However, he published

over 60 scientific publications and geological maps. Besides, he compiled a very important and still actual database of the Baltic Sea bottom sediments that contains 2099 detailed and indexed core log descriptions and factual samples stored in the Geological Archive of the Lithuanian Geological Survey.

Summarising scientific achievements of Dr. Marijonas Repečka it should be noted that he himself treated deep analytical studies of physical properties of marine bottom sediments as the main, essential task of his long scientific career from the very beginning. M. Repečka reported his main theoretical results in a 2001 publication “Physical properties of bottom sediments in the three basins of the Baltic Sea” [*Fizinės dugno nuosėdų savybės trijuose Baltijos jūros baseinuose. In Lithuanian*].

The excellent scientist Dr. Marijonas Repečka was a very warm, social and public man, a person who liked people, family and song.

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