JERZY WEHR

JERZY WEHR, 54, professor, for many years the scientific worker of the Institute of Fundamental Technological Research, Polish Academy of Sciences, lost his life in the prime of his creative forces, as a member of a climbing expedition in Hindu Kush at the altitude of 6000 m on August 10th, 1977.

This tragic event put an end to the activities of a man of unusual versatility, a scientist known in the milieu of acousticians who has managed to assemble around him not only the closest co-workers, but also many other scientists from all over Poland.

Professor Jerzy WEHR started his scientific career at the Warsaw Technical University, initially in the field of electronics. Since 1952 he has dealt with acoustics, working in the Vibrations Research Department and, subsequently, in the Institute of Fundamental Technological Research of the Polish Academy of Sciences. In 1954 he published his first paper on the application of transversal and standing waves to the detection of flaws. In 1961 he obtained his Ph. D. degree after presenting a thesis on "The use of non-reflective transducers in the measurements of ultrasound". In 1969 he obtained the title of assistant professor, after presenting the paper "Ultrasonic method of the determination of density and compressibility of liquids". He was nominated professor in 1975. In the recent years he performed the function of the deputy director for scientific matters in the Institute of Fundamental Technological Research of the Polish Academy of Sciences. He has also been a coordinator of the interdisciplinary problem of the application of acoustic methods in engineering and medicine, involving all the acoustic research centres in the country.

As a member of the Committee on Acoustics of the Polish Academy of Sciences, Professor WEHR greatly contributed to the rapid development of acoustics studies in Poland. He pointed to the main perspective directions of investigations which he was carryingo ut with his own team. He also stimulated the research work of other Polish research centres.

The scientific contribution of Professor Jerzy WEHR comprises a total of 58 publications including 2 books, 10 patents on the ultrasonic detection of flaws, the ultrasonic methods of measuring mechanical properties of solids and liquids, the piezoelectric transducers and ultrasonic probes, with special attention given to the ceramic materials and plastics, and also to the methods of dimensional analysis and electro-mechanical analogy. In his last works Professor WEHR attacked the difficult problem of the measurements in dispersive media.

The results of longstanding and consistent investigations, regarding the methods of physical acoustics, were published in numerous Polish and foreign periodicals. Many of these papers were presented by Professor WEHR at acoustical meetings in Poland and abroad.

Apart from his scientific activities Professor Jerzy WEHR has developed a number of measuring devices based on his own patents. The achievements in this field not only distinguish him as a talented designer but also demonstrate his ability to take advantage of his own theoretical considerations in the construction of the above-mentioned devices.

Vast scientific production of Professor WEHR, concerning the development of the methods of measuring the velocity and damping of ultrasonic waves, was recapitulated in an extensive monograph under the title "The measurements of the velocity and damping of ultrasonic waves" published in 1972. It presents briefly his numerous achievements in this field and constitutes a valuable item in the world's literature, being based on rich experimental material and due to the clear and concise formulation. The book was to be translated into foreign languages.

Professor Jerzy WEHR's scientific achievement has placed him amidst the world's best and not numerous scientific authorities on ultrasonic measurements. Over the 25 years of his scientific work he has developed and used ingeniously a number of experimental methods intended primarily to obtain the information about the material structure. Special mention deserves not only his mastery elaboration of diverse experimental techniques but also a thorough knowledge and understanding of the physical phenomena being the subject of his investigations. He possessed an unusual ability of seeing and presenting complicated problems in a clear and simple way. In 1966 he was awarded the Collective Scientific State Prize of the 2nd degree. He also received many Polish and foreign medals.

Being for many years the head of the Physical Acoustics Department, he took care of the young scientific workers and despite of his numerous duties — always amicable and friendly — he found the time to render advice to those needing his assistance. He has left a group of disciples who will continue his work. A humanist and erudite, speaking fluently six languages, he maintained contacts with scientists in many countries. He worked in scientific institutions in the United States, the USSR, England, Italy, France, Switzerland

and Cuba. On his return from Hindu Kush he was to deliver a series of lectures in recognized acoustic centres in France.

He had many passions. His knowledge of the fine arts, history, politics, literature and music was amazing. He was an excellent sportsman and ardent traveller – the mountains were part of his life. He took part in scientific research expeditions organized by the Polish Academy of Sciences to Vietnam and Spitsbergen. He climbed the peaks in the Tatra Mountains, the Alps and the Rocky Mountains, he was also a successful climber in the mountains of Spitsbergen, Hindu Kush and the Caucasus.

Full of creative forces, he set out every year for subsequent ascents in the high mountains. This time he did not return, remaining for ever on the slope of Nadir Shak summit. Polish acoustics has suffered a severe and painful loss.