## Ryszard Zeidler

born 19 May 1939 - died 24 February 1998

On 27 February 1998, at the Sopot cemetery, the oceanographic community paid its last respects to Professor Ryszard Zeidler, outstanding scientist and expert on marine and coastal dynamics.

He began his scientific career in 1961 at the Marine Dynamics Laboratory of the Institute of Hydro-Engineering of the Polish Academy of Sciences (PAS). At that time I was the leader of that research team and I followed the career of the budding young scientist with great admiration. He was extremely diligent, highly talented in his research field, spoke several foreign languages fluently and displayed a broad intellectual interest in the world in general. He wrote his Ph. D. thesis in 1970, his second one in 1976, and received his professorship in 1987. His scientific activities took him into an extremely complex field of research: the problems involved with random dynamic processes in the sea and the littoral zone, *i.e.* wind-generated wave motion and the turbulent exchange of mass and energy.

With the passing of time, his research results gained more and more in significance, both in the cognitive sphere and in engineering practice. In particular, his work on the turbulent diffusion of dissolved passive substances (pollutants), heat and discrete mineral particles was received with acclaim by the scientific community and found application in coastal engineering. Professor Zeidler formulated a number of detailed laws governing turbulent diffusion and transfer in the littoral zone of the sea and developed original models of these processes enabling turbulent exchange phenomena to be predicted. These models have since been applied in a number of practical

undertakings, such as forecasting the spread of industrial and communal effluents in the Baltic, the cooling waters of new power stations, and estimating the intensity of longshore drift and its effect on the shape of the coastline.

For his research achievements, Prof. Zeidler was awarded a number of prizes by the Chairman of the Committee of Science and Technology, and the President and Scientific Secretary of the PAS. His scientific output is contained in 80 papers, mostly published in well-known journals of world-wide renown, monographs and the numerous expert opinions which he was called upon to give. In his unusually hard-working life, he also achieved much in the field of research organisation. He developed research programmes and was in charge of research teams in a number of national and international expeditions to the coastal waters of the Baltic, the Black Sea, the Mediterranean and the South China Sea. As a respected Polish scientist, he participated in a number of programmes financed by the European Union: the Prediction of Aggregated Scale Coastal Evolution (PACE), Baltic Sea System Study (BASYS), Guidelines for the Design and Construction of Flexible Revetments Incorporation (PIANC programme), Flexible Revetments in the Marine Environment, and the UIS Country Studies Climate Change programme (Poland SEJ3). He was a long-standing member of the National Polish SCOR, and a member of the Scientific Councils of the Institute of Hydro-Engineering (IH-PAS), the Institute of Geophysics PAS and the Institute of Oceanology PAS. In his last years he headed the Department of Coastal Mechanics and Engineering at the IH–PAS, and was an expert on the Marine Board of the prestigious European Marine and Polar Sciences – an advisory committee to the European Science Foundation.

Ryszard Zeidler's untimely death came when he was at the height of his creative powers, and research communities not only in Poland were very much saddened by his loss. Some people are indeed irreplaceable. As far as the promotion of Polish achievements in research into coastal dynamics and the integration with European scientific teams are concerned, Professor Zeidler's departure to another, possibly better, world, has left a gaping hole that is impossible to fill. A man of broad knowledge and a good heart, a man whose commitment to the study of the sea was passionate, has departed this life. His achievements are enduring, and he himself will live long in our hearts and memories.