Chronicle

Professor Czesław Druet – on the occasion of his 70th birthday

OCEANOLOGIA, No. 38 (4) pp. 555–558, 1996. PL ISSN 0078–3234



In 1996 Professor Czesław Druet celebrates his 70th birthday and enters the 50th year of his professional career. A fellow of the Polish Academy of Sciences (PAS), Prof. Druet has made a major contribution to the growth and development of oceanology in Poland and was for many years Director of the Institute of Oceanology PAS in Sopot.

Czesław Druet was born on 29 March 1926 in Vilnius. In 1949 he matriculated from the Pasłęk Grammar School for employed persons. In the same year he embarked on a course of studies at the Faculty of Civil and Hydro-Engineering of the Technical University of Gdańsk,

from which he graduated in 1955 with a diploma in hydroengineering, having specialised in harbour engineering. In 1953, already as a student, he was offered an assistantship at the Institute of Hydroengineering PAS. In 1956–1960 he undertook a three-and-a-half year postgraduate course which he completed successfully with his Ph. D. thesis 'Calculation of the parameters of the stability equation of submerged breakwaters'. After a period of in-service training at the Institute of Oceanology of the Soviet Union's Academy of Sciences in 1960, he took charge of the Marine Dynamics Laboratory at the Department of Harbour Engineering at the Institute of Hydroengineering PAS. His successful defence of his second doctoral thesis 'The hydrodynamic load on port breakwaters in the wave transformation zone' on 21 June 1966 at the Faculty of Hydroengineering of the Technical University of Gdańsk brought him the title of Assistant Professor. By decree of the State Council he received the title of Associate Professor in 1974 and that of Full Professor in 1979. In 1977 he became head of the independent Department of Oceanology PAS in Sopot. This became the Institute of Oceanology PAS (IO–PAS) in 1984, and Prof. Druet was its director from then until 1990.

In 1975 he began lecturing in marine dynamics in the Faculty of Oceanography at the University of Gdańsk and, except for a three year break, continued to do so until October 1996. For a time he was in charge of the Marine Dynamics section of this faculty.

After having obtained his doctorate, his field of interest shifted to the hydromechanics of natural water basins, and it was in this field that he published a number of papers and trained young research scientists. As a result of his efforts, he was able to form a team of competent specialists in hydrodynamics, whose research interests were directed towards the hydrodynamics of sea basins and port constructions. Under his guidance, this team carried out a number of individual and joint research projects, the results of which raised Polish science in this particular discipline to the highest international level. Prof. Druet's own, original achievements in this field covered such problems as mass and energy transfer in the sea and the littoral zone, the physical structure of wind-generated wave action, turbulent mixing processes, the penetration of wind-generated waves into sheltered sections of port basins, and the mechanism of interaction of wind-generated waves with various types of port installations. Prof. Druet's work in this field won him prizes in Poland and esteem at international conferences. His papers are quoted in numerous journals and his results have found practical application in research and design institutions both in Poland and abroad.

In 1970–1975 Prof. Druet conducted theoretical research and hydraulic modelling in connection with the design of the largest Polish maritime construction project, the North Port at Gdańsk, for which he received a state award. Apart from his scientific research, he has also written a number of books. In 1970, together with Zygmunt Kowalik, he published, the first Polish-language monograph on marine hydrodynamics 'Marine dynamics'. In 1972, in cooperation with Soviet authors, he wrote a short monograph entitled 'Random processes in the dynamics of natural water basins', published by Ossolineum (Poland). His next book, written together with Stanisław Massel and Ryszard Zeidler, 'The structure and methods of predicting hydrodynamic processes in the marine coastal zone', came out in 1975. Three years later, he published an extensive work entitled 'The hydrodynamics of marine basins and harbour constructions'. After 1981 Prof. Druet concentrated his attention on empirical research into and the mathematical modelling of the dynamic variability of hydrophysical temperature, salinity and density fields in a stratified sea, and on studies of turbulent sources of this variability and its effect on the phytoplankton concentration in the sea. The results of this work were published in a number of journals with an international circulation, such as 'Oceanologia', 'Oceanologica Acta', and in a Polish-language monograph 'The dynamics of a stratified ocean', published by PWN – Polish Scientific Publishers – in 1994.

In all, Prof. Druet has published the results of his own and joint research in 8 monographs, 26 papers in international journals, 34 papers and 13 communications in Polish journals, and 51 specialised reports. He has also presented his results at international congresses and symposia, at a number of which he was invited to deliver plenary lectures.

As far as Prof. Druet's achievements in professional training are concerned, he has supervised 15 Ph. D. degrees in his research field, 10 of them under his personal guidance. Six of his students have achieved assistant professorial status, and four have become full professors in their own right.

Prof. Druet has organised, either individually or in cooperation with others, several important international marine expeditions, e.g. EKAM-73, Lubiatowo-74, Kamchiya-77, PEX-86, and the Greenland Sea Project. He has also organised and directed a number of large maritime research programmes, e.q. the modelling of the North Port in Gdańsk (1970–1975), the national programme MR–I.15: 'The fundamentals of economy in the marine environment' (1976–1985), the central programme of basic research CPBP-03-10: 'The fundamentals of bioproduction and environmental conservation in the sea, and of oceanographic and meteorological forecasting' (1986–1990). He has also been active in the planning and coordination of maritime research on an international level. In 1977–1980 he was Vice-President of the Intergovernmental Oceanographic Commission (IOC) of UNESCO, and from 1981 to 1984 he chaired the Scientific Board of Control of that organisation. At the present time he is Poland's representative for working contacts with IOC–UNESCO. In 1977–1979 he was the Chairman of the Scientific and Technical Council of the International 'World Ocean' programme, while in 1987–1991 he was a member of the International Coordination Team for the Greenland Sea Project.

In 1979 Prof. Druet was elected a corresponding member of the Polish Academy of Sciences (PAS), and in 1986 he became a full member of this organisation. From 1980 to 1983 he was the Scientific Secretary of the Gdańsk Branch of PAS, and in 1994 he became a member of the PAS Presidium, a function which he continues to hold to the present day.

At present Prof. Druet is a member of the European Geophysical Society and a member of scientific councils and editorial boards of several Polish institutes and scientific journals. Since 1996 he has chaired the Polish National Scientific Committee on Oceanic Research.

The following must be counted among Professor Czesław Druet's outstanding achievements:

- the results of research into the hydrodynamic structure of processes in the littoral zone of a nontidal sea affecting the multifarious aspects of man's social and economic activities there;
- the creation of a widely-renowned Polish school of marine dynamics specialists, and the training of a large number of students and Ph.D. candidates in oceanology;
- his leading role in the organisation of Polish and international research into the marine environment and its rational use by man;
- the compilation and publication of scientific monographs that have become the foundation for the education of students and in-service training of young scientific research teams;
- his immeasurable contribution to the foundation and devlopment of the Institute of Oceanology PAS in Sopot.

For his achievements Prof. Druet has received numerous state awards, among them the Companion's and Officer's Crosses of the Order 'Polonia Restituta', state prizes of the first degree, a number of prizes awarded by the Scientific Secretary of the Polish Academy of Sciences, the Kazimierz Demel honorary medal (a prestigious award in Polish oceanography), and the gold Medal of Merit for his contribution to matters maritime. Professor Druet continues to play an active part in the scientific work of the Institute of Oceanology PAS, and is the Chairman of the Scientific Council of this Institute. Some information on his role and place in these activities can be found on the Institute's Home Page on the WWW Internet on http://www.iopan.gda.pl.

Professor Druet has been married to Maria Kasperska since 1956 and has one son Jacek.

Such a brief biography cannot possibly do justice to the high esteem in which he is held and the popularity and goodwill he enjoys in scientific circles both in Poland and abroad.