

IN MEMORIAM

JAN B. OBRĘBSKI

**Outstanding researcher and educator, Honorary Member
27 January 1943 – 8 September 2020**



Outstanding scientist and educator, a recognized expert in the field of construction, Emeritus Professor of Warsaw University of Technology, died in Warsaw on 8 September 2020.

IASS suffered a great loss with the death of longtime activist and honorary member, Jan B. Obrębski. Structural engineers make their distinct contribution to the construction of buildings, and although they are recognized less than architects, they enable the materialization of architectural forms. Among them there are those whose input is direct, the designers, and those whose research work forms the necessary basis for the former category and broadens the scope of knowledge. Jan B. Obrębski was in the latter category.

Born in Międzyrzecz Podlaski on January 27, 1943, Jan B. Obrębski was the youngest of three siblings. His eldest sister, Barbara, was a professor of climatology at the Jagiellonian University in Krakow, and his middle sister, Anna, a landscape architect, was

involved with others in the revitalization of the gardens in the royal palace in Wilanów (Warsaw). His father, Czesław, was a construction engineer, designer, and county construction supervision inspector, and at the end of his career taught at the local technical college of construction, enjoying widespread respect in the city. Undoubtedly, his father's profession and the challenges related to the post-war reconstruction of the country influenced Obrębski's decision to choose the profession of construction engineer.

He enrolled in the Faculty of Civil Engineering at Warsaw University of Technology in 1960 and earned his M.Eng. in 1966. During his studies, he received awards for his academic performance and also completed a two-month IASTE student internship in Skopje, Yugoslavia. After graduation, he worked as a construction site manager on large industrial projects, including the construction of large chemical plants in Puławy, where he obtained executive building qualifications.

In 1969 Obrębski began his doctoral studies in the Institute of Fundamental Technological Research of the Polish Academy of Sciences capped by the dissertation "*Statics of hexagonal bar meshes*" and the conferral upon him of the degree Dr. Eng. by this Institute in 1972.

In the same year, he began working at the Faculty of Civil Engineering of the Warsaw University of Technology. He remained faithful to this university until the end of his professional career, first working as a senior assistant, then as an assistant professor, associate professor and full professor.

In 1980, on the basis of the work "*Numerical analysis and synthesis of large structural systems*", he obtained the habilitation degree and in 1996 he became a full professor at the Warsaw University of Technology. Obrębski served there also in a number of administrative positions until his retirement in 2016. In 1987-1991 he was the Deputy Director of the Institute of Mechanics of Engineering Structures, and he was then the Director of this Institute in 1991-1996. In 1992-1998 he was the Head of the Chair of Strength of Materials.

He also collaborated with other universities. In the years 1990-2004, he taught at the University of Warmia and Mazury in Olsztyn, where he was also the Head of the Department of Structural Mechanics. He actively cooperated with the Military University of Technology in Warsaw, taking part in their annual conferences.

In scientific research Professor Obrębski specialized in the strength of materials and mechanics of thin-walled beams. His most important scientific achievements include the development of calculation methods for large structures using the method of difference-matrix equations, applied among other types of structures for thin-walled beams. He implemented this method in the WDKM software that has been used for many practical design calculations. Another very important achievement was the development of advanced theoretical solutions for the analysis of thin-walled straight beams, including first- and second-order theories.

Obrębski presented the results of his research in over one hundred published scientific papers, including several monographs. His lectures at IASS symposia were also an important forum for the presentation of his work.

In 1988 he became a member of the IASS, becoming very active right away. He contributed greatly to the rapid expansion of IASS participation from Poland and pioneered the promotion of the newly introduced Chapters to encourage as many engineers as possible to join the association. He was elected to the Executive Council and then to Advisory Board. In 1995 he organized in Warsaw a large international conference "Lightweight Structures in Civil Engineering". In 2002, he was the organizer of the Annual Symposium of the IASS in Warsaw. He was awarded the IASS Honorary Membership in 2013. In 2019 he received also the Lifetime Honorary Membership from SEWC.

Starting in 1995 he organized annual seminars of the members of the Polish Chapters of the IASS, called "Lightweight Structures in Civil Engineering". Although the name "Polish" suggests a national participation, these gatherings attracted participants from many countries and became an important event in the scientific calendar. These seminars are

continued until today by younger colleagues of Professor Obrębski.

His relationship with the IASS was both professional and emotional. He spread his enthusiasm for the activities of the association. Nobody who came into contact with him remained indifferent to his personality. He found many friends in the association with whom he maintained both scientific and private relations.

He understood his scientific work as a service to society, hence his social commitment and sensitivity. In the years 2012-2016 he was involved in the work of the commission dealing with the explanation of the causes of the plane crash in 2010, in which the President of Poland and many other prominent people were killed.

Professor Obrębski was an excellent teacher, well liked and respected by students. He lectured and taught classes in Mechanics of Thin-walled Beams, Theoretical Mechanics and Strength of Materials. He always found time for students and tried to bring them closer to the complex issues he dealt with. He designed and built various physical models and presented his experimental results to his students. He advised many Master's students and six PhDs. He received many national awards for his scientific and teaching achievements.

Sailing was his great passion. Obrębski obtained the rank of Sea Captain Licensed Mariner in yachting (1981) and powerboating (1987). From 1982 he was a sailing instructor. He participated as a captain in many international regattas, incl. at the North Sea. He transmitted this passion to both of his sons, who also obtained sailing licenses. His love of sailing connected him with his wife, Maria Krystyna, who frequently attended IASS symposia together with him as an accompanying person. She actively assisted in the organization of symposia that took place in Poland, also hosting some of the conference outings. Social life in the Association owes her a lot.

Professor Jan B. Obrębski was a righteous man, and an outstanding scientist and organizer of science. In the IASS we will remember him for his wise remarks during our meetings, openness and honesty, and for his interest in the future of the Association.