

17th SYMPOSIUM ON HYDROACOUSTICS

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CONTRIBUTION OF HYDROACOUSTICS TO WORLD AND POLISH ACOUSTICS

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During the XX century the essential changes of the behaviour and scientific and technological importance of the acoustics took place. Its beginning as the restrained branch of physics related with the audible sound, in the second half of the century acoustics became the generally recognized interdisciplinary science linked with a number of very diverse scientific disciplines.

Several new branches of the acoustics were in the meantime created. One of the first was in the years 1914-1918 the underwater acoustics initiated by the necessity to increase the safety of navigation. However, the ties of the methods, formulations and terminology of the divers fields of acoustics were retained and assure the substantial scientific integrity. Maybe even more important was the supported personal links and the mutual understanding between the acousticians of divers specialities. After the World War II the spectacular expressions of the acoustical communities integration on national and international level were the foundation of several acoustical societies, the numerous congresses and symposia as well the scientific journals comprised all fields of acoustics. Having in view this state of affairs, it seems, worth just at the present symposium on outset of the XXI century to point out the place of the hydroacoustics in the world and Polish acoustics. I have no claim or competence to evaluate the substance of this topic. Prof. E. Kozaczka in his paper „Fifty years of Polish acoustics" at the International Symposium on Hydroacoustics and Ultrasonics in 1997 gave an outstanding review of the Polish achievements. I would like to conime my remarks to the purely quantitative illustration of the problem.

The table serve to present the numerical data about the place of hydroacoustics in the development of the world and Polish acoustics in XX century.

Explanation to the table:

Item 1. The numbers expres the percentage of the papers on hydroacoustics to the total references number to the papers on acoustics given by the international Databases INSPEC and MEDLINE (see also Journ. Ac. Soc. of Am.). About 1600 Journals and serial sources related to acoustics are included in these databases.

Item 2-5. The numbers express the percentage of the papers on hydroacoustics to the total number of the papers presented at the indicated meeting.

Item 6. The approximate participation of the projects on hydroacoustics to the total research projects related to acoustics sponsored by the Committee of Scientific Research (KBN).

In substance the data given in the table are self expressing. Only few additional remarks would be perhaps useful.

The most significant seems the increase of the share of hydroacoustics in the references to papers on acoustics at the world level, particularly in the second half of the century. The participation of the items related with hydroacoustics in the international congresses on acoustics (ICA) depend in certain degree on the place of the congress, the last ICA congress in Seattle is here an example. Nevertheless the continuous growth of the interest to hydroacoustics is evident.

The similar trends are observed during the last fifty years at the regular meetings of the Acoustical Society of America. From the polish point of view it is worth to welcome the regular increase of the part of the papers on hydroacoustics in the annual OSA symposia, which are the unique occasion for gathering the scientists representing all fields of Polish acoustics. Even at the last OSA'99 which took place in mountains (Zakopane) the hydroacoustics was one of the significant topics.

Table: **Contribution of hydroacoustics to world and polish acoustics in XX century**

1	REFERENCES TO CONTEMPORARY PAPERS ON ACOUSTICS			
	Years	1959-1963 3,6	1982-1983 3,9	1996-1997 5,0
2	INTERNATIONAL CONGRESSES ON ACOUSTICS (ICA)			
	Congress ICA	V 1965 2,0	XI 1983 4,6	XVI 1998 15,1
3	FORUM ACOUSTICUM			
	Forum		Antwerp 1996 8,2	Berlin 1999 16,1
4	MEETINGS OF ACOUSTICAL SOCIETY OF AMERICA			
	Year	1967 14,1	1982 11,2	1999 16,0
5	OPEN SEMINARS ON ACOUSTICS OSA (POLAND)			
	Seminar OSA	XIII 1965 9,1	XXX 1983 9,6	XLVI 1999 11,6
6	RESEARCH PROJECTS RELATED WITH ACOUSTICS SPONSORED BY KBN (POLAND)			
	Period		1995-1999 10,5	