

"Diffraction of waves by obstacles and inhomogeneities
in fluids"

1 - 5 October 1990, Kiev, USSR

1991-08-01

F I N A L R E P O R T

The Colloquium was devoted to the presentation and discussion of the present state and future research directions in the theory of water and acoustic wave diffraction and its applications. The main aim of Colloquium was to discuss and make it clear the main advances in the theory of wave diffraction by localized inhomogeneities in fluids. Accordingly to the registration there were 66 papers by 82 authors and co-authors from 11 countries presented at 12 sessions. The representation of members by countries was as follows:

Country	Authors and co-authors	Oral papers	Posters	Participants
Austria	2	1		1
Bulgaria	1		1	1
Germany	1	1		1
Great Britain	5	5		5
France	3	3		3
Italy				2
Japan	1	1		1
Norway	2	2		2
Poland	2	2		2
Portugal	1	1		1
USSR	65	21	28	70
Total	82	37	29	89

The papers were mostly focused on the applications of exact and approximate analytical methods to obtain and analyse the phenomena of wave diffraction and refraction by inhomogeneities de-

pending on spatial coordinates such as bottom inhomogeneities in water. Interactions of water waves with local 2D inhomogeneities and plane problems of the wave scattering by uneven bottom have been considered. These topics were presented enough fully. Another problem dealing with interactions of acoustic waves with elastic structures were presented essentially not full.

Enclosed booklets of abstracts were received by participants on registration. The time allotted for each oral presentation was 30 minutes including discussion, but in fact an informal discussion took part during all the sessions.

The Colloquium was held in a conference hall of the Institute of Hydromechanics situated close to hotel and therefore the scientific activity of participants was continued also during breaks and evenings, allowing for informal discussions and exchanging of opinions.

The diffraction phenomena are characterized by great complications, manifolds and difficulties to be easily analysed. Therefore, the enough wide range of approaches and considerations presented at the Colloquium will stimulate to generate the new ideas in future researches.

In the future it would be useful to hold the two symposia: one devoted to water waves interactions with bottom inhomogeneities, another to interactions of the acoustic waves with elastic structures.

Financial support for the Colloquium was granted by the Ukrainian Academy of Sciences what allowed to keep the conference fee as low as 200 US \$, including costs of accommodation and subsistence.

Colloquium Co-chairman:

Prof. I. Selezov

