ACOUSTICS2008/3201 Changing of scattering properties of underwater objects covered by elastic shell

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In certain situations it is of a great importance to decrease reflection properties of underwater objects positioned into water, deployed on a seabed or buried into sediments. This effect could be achieved by means of covering shell changing acoustic parameters of considered object. The aim of the paper is to present the idea of performing the covering material for underwater objects as well as results of experimental investigation of its scattering characteristics. Acoustic scattering measurements were performed in laboratory condition on solid air-filled objects of sphere or ellipsoidal shape with or without covering shell. The objects were insonified by acoustic source at frequency in range of 60 kHz - 150 kHz.