

VARIATION OF THE SOUND VELOCITY IN CAVITATING LIQUID

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S u m m a r y

A method based on the properties of the sonocapillary (SC) effect and developed to determine the sound velocity in a cavitating liquid is described. The features of the method have been analyzed in the cases where it is applied to liquids with various molecular properties, in particular, distilled water, an aqueous solution of glycerol, and a solution of castor oil in dibutyl phthalate. The results obtained are compared with the data known for vapor-liquid media in a stationary state and under the phase transformation. A conclusion concerning the character of oscillations of cavitation voids under the capillary channel has been drawn.