

Acoustic Monitoring of the Dispersed Composition of Air Bubbles in Aeriated Waste Water Purification Processes

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Abstract: A passive acoustic method is proposed for monitoring the dispersed composition of air bubbles, which determines the efficiency of wastewater treatment in facilities with aeration systems, in treatment facilities with aeration systems. The principal possibility of applying the method has been demonstrated on an experimental plant assembled on the basis of a flotation column. The size of the bubbles created by the flotation column aeration system was determined photometrically. It is shown that the error in determining the bubble radii by the proposed method relative to the photometric method was no more than 17.5%.

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