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# Impact analysis of the determining factors on the degradation of elements of hydraulic engineering in seawater using methods of the theory of experiment planning

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*The article presents results of the seawater chemical composition control by regulating the pH values, which is functionally related to the concentration of CO<sub>2</sub> in seawater and products of its dissociation. We obtained analytical dependences for constructing two-dimensional section of the response surfaces described by the regression equation of the second order. These results allow us to more accurately predict and calculate the components of the marine environment, which determine its balance; to prevent degradation in hydraulic systems and devices which use sea water as the process liquid.*

**Keywords:** regression equation, factor, experiment, seawater.

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