



“Gheorghe Asachi” Technical University of Iasi, Romania



MATHEMATICAL MODELING OF SORPTION PROCESS OF Cu^{2+} IONS ON ANALCIME AND CLINOPTILOLITE

Claudia Cobzaru^{1*}, Vassilis Inglezakis²

*¹“Gheorghe Asachi” Technical University of Iași, Faculty of Chemical Engineering and Environmental Protection,
73 Prof.dr.doc. Dimitrie Mangeron Street, 700050 Iasi, Romania*

²SC European Focus Consulting SRL, Bacau, Romania

Abstract

The sorption capacity of the native Romanian clinoptilolite and analcime employed for removing Cu^{2+} ions from wastewater was investigated under various conditions of temperature, time and solution concentration. These parameters are necessary and sufficient for developing a mathematical model of the sorption process. The corresponding mathematical models show common characteristics due to the good arrangement of the experimental points on the response surfaces and correlation coefficients close to unity. Differences appear with respect to the shape of the response surface and model equations.

Key words: analcime, clinoptilolite, mathematical model, sorption process

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*Author to whom all correspondence should be addressed: e-mail: ccobzaru@yahoo.com