



“Gheorghe Asachi” Technical University of Iasi, Romania



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## STUDIES ON THE BIOSORPTION OF TERASIL DYE BY ASPERGILLUS NIGER DEAD BIOMASS

Igor Cretescu<sup>1\*</sup>, Mariana Diaconu<sup>1</sup>, Alina Dughila<sup>1</sup>,  
Alina Stefanache<sup>2</sup>, Cornel Pohontu<sup>1</sup>

<sup>1</sup>“Gheorghe Asachi” Technical University of Iasi, Faculty of Chemical Engineering and Environmental Protection, Department of Environmental Engineering and Management, 73 Prof.Dr.docent Dimitrie Mangeron Street, 700050 Iasi, Romania

<sup>2</sup>“Gr. T. Popa” University of Medicine and Pharmacy, Faculty of Pharmacy, 16 Universitatii Street, 700115 Iasi, Romania

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### Abstract

Textile dyeing process is an important source of contamination responsible for the continuous pollution of the environment. Control of water pollution has importance for both organisms, which live in water and those who benefit from water. Many dyes reaching the water source are difficult to decompose and cause many problems due to their carcinogenicity. Consequently, it is important to remove these pollutants from wastewater before their final disposal. This paper reports the results of the biosorption of Terasil dye on dead *Aspergillus niger* biomass. The adsorption behavior of the dye as a function of temperature, pH and initial dye concentration were also studied. Adsorption data were fitted to Freundlich, Langmuir and Sips isotherms and their corresponding adsorption parameters such as  $K_F$ ,  $n$  and  $K_L$  respectively was calculated.

*Key words:* adsorption isotherm, biosorption, dyes, fungus biomass

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\* Author to whom all correspondence should be addressed: email: [icre@ch.tuiasi.ro](mailto:icre@ch.tuiasi.ro)