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**Metribuzin removal with electro-activated granular carbon**

(2012) Chemical Engineering and Processing: Process Intensification 55, 20-23

2, 2012

<http://dx.doi.org/10.1016/j.cep.2012.02.005>

**ABSTRACT:**

The main purpose of this work was to extend the application of a novel separation technique to the removal of pesticides from superficial waters. The technique is based on the process of adsorption on granular activated carbons (GAC) that are initially activated by an electrical potential. The activation technique, so-called electro-activation, was applied to a column of GAC, in which the adsorption of the pesticide metribuzin was investigated under process-affecting variables, namely, the electrochemical potential, the initial metribuzin to GAC concentration ratio and the ionic strength of the adsorbed solution, which was varied by adding solutions of NaCl, KCl and Na<sub>2</sub>SO<sub>4</sub>. The results obtained for a solution with an initial metribuzin to GAC concentration ratio of 30 mg/g, an electrical potential of -200mV<sub>SCE</sub> and an NaCl solution of 2gdm<sup>-3</sup> showed a maximum increase in the adsorption capacity of metribuzin of 38% compared to that obtained without the electro-activation of GAC.