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Water Supply and Wastewater Treatment

**ADSORPTION OF HUMIC ACIDS AND OF SOME METAL IONS FROM
AQUEOUS SOLUTIONS ON ACTIVATED CARBONS**

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Abstract

This paper is the investigation concerning the removal, from surface water, of humic acids and of some cations (Cu^{2+} , Al^{3+}) on activated carbons AG-3, BAU, CASO-16 from individual solutions as well as from their mixtures both in static and dynamic conditions. The conclusions of the paper are that, when humic acids are adsorbed from micellar solutions, semiassociates are formed on the surface of activated carbon BAU (in its porous structure), while humic acids adsorption on activated carbon CASO-16 depends on pH variation, this being indicated during the increase of their equilibrium concentrations. In case of adsorption of mixtures formed from Cu^{2+} , Al^{3+} ions and humic acids on activated carbon BAU in dynamic conditions and at various filtration velocities, it is the Cu^{2+} ions that are the first ones to appear, followed by Al^{3+} ones and, finally, by humic acids.

Key words: adsorption, activated carbon, humic acids, metal ions

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