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Properties of anion exchange resins exhausted by humic compounds

Z. Maletskyi[a]*, T. Mitchenko[a], N. Makarova[a], W.H. Hoell[b]

[a]*National Technical University of Ukraine "KPI", 37 Pobedi Av., Building 4, Room 117, 03056 Kiev, Ukraine*
Tel. +380 (44) 241-86-22; Fax +380 (44) 241-94-43; email: mail@zahar.info
[b]*Technology Center for Water Karlsruher, Str. 84, 76139 Karlsruhe, Germany*

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ABSTRACT

The loading of anion exchange resins with humic compounds adsorbed during industrial water treatment processes has been investigated. It has been found that humic compounds are uniformly distributed throughout the bead. Fresh and exhausted anion exchange resins have been studied with respect to their ability to be loaded with Fe(III) oxides. The results show that anion exchangers containing humic compounds retain iron better than fresh ones. The uptake may be due to catalytic oxidation and contact coagulation at the surface.

Keywords: Anion exchange resins; Humic compounds; Exhausted resins; Iron sorption

* Corresponding author.