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## INFLUENCE OF SURFACE IONIZATION ON THE ADSORPTION OF AQUEOUS MERCURY CHLOROCOMPLEXES BY ACTIVATED CARBONS

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**Abstract**—The adsorption of aqueous mercury species from chloride solutions on a number of activated carbons has been studied. It was found that whereas the adsorption of neutral HgCl<sub>2</sub> or positive Hg<sup>2+</sup> was very low, significant quantities of the tetrachloromercury(II) complex, HgCl<sub>4</sub><sup>2-</sup>, were adsorbed. Adsorption isotherms of this complex were measured at different pH values, and the results analysed by the Langmuir equation and by a simple surface ionization and specific adsorption model in order to obtain estimates of the adsorption stoichiometry and the mean free energy of adsorption. © 1997