

Wastewater Treatment from Phenols by Modified Waste from Oil Extraction Production

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Abstract: The possibility of using carbon-containing sorption material obtained from spent kieselguhr sludge from oil extraction production for extracting phenol from modeled aqueous media is considered. It is shown that maximum efficiency is achieved using particles smaller than 0.315 mm. The kinetics of the process is studied. It is noted that the sorption equilibrium is established after 15 minutes of contact between the adsorbent and phenol molecules. To clarify the mechanism of phenol absorption by the carbon-containing sorption material, IR spectra were analyzed before and after phenol sorption.

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