

The Investigation of Fulvate Complexes of Zinc by the Gelchromotographic Method

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The pure samples of fulvic acids were isolated from the natural waters and peat. The complex formation of zinc with fulvic acids was studied on various pH by the using of sepadex G-25.

It was calculated the conditional stability constants of fulvate complexes pH=9,02
 $\beta = 1,50 \cdot 10^4$; pH=8,00 $\beta = 1,48 \times 10^4$; pH 6,03 $\beta = 4,63 \times 10^3$; pH 5,01 $\beta = 1,15 \times 10^3$;

According to pH, the stability constants can be put in the following way –
 $\beta(\text{pH}9) > \beta(\text{pH}8) > \beta(\text{pH}6) > \beta(\text{pH}5)$.

The obtained values can be successfully used for the determination of migration forms of toxic metals in different types, classes and groups of natural waters and by the evaluation of the ecological condition of reservoirs.