INFLUENCE OF THE PRESENCE OF VARIOUS IONS ON ELECTROCONDUCTIVITY OF WATER AND NEAR-ELECTRODE RELAXATION PROCESSES OCCURING IN IT

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S u m m a r y

It is shown, that near-electrode relaxation processes can essentially influence the shift of the region, where there is no dispersion of conductivity and permittivity of water, to the side of higher or lower frequencies. The influence of the ion structure of water on the parameters of such processes is investigated. Dielectric relaxation near the near-electrode area is described on the basis of the Debye equation with a symmetric distribution of relaxation times. For the most part of the liquids investigated, the time of dielectric relaxation is proportional to the specific resistance of water. The assumption is made that, for some liquids, the deviation from such a law can be caused by the dependence of parameters (which describe dielectric relaxation) not only on the concentration of ions, but also on the chemical composition of liquids.