

Influence of formal charge of reacting species on standard free energies of activation of heterogeneous electron-transfer reactions

Kargin Y., Vorontsova L., Manapova L., Kuzovenko S.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

The effect of particle charge on the kinetics of heterogeneous electron transfer was studied by the faradaic-impedance technique. One electron reduction reactions of molecules and radical-anions of certain aromatic nitrocompounds as well as of p-nitroanilinium ions in dimethylformamide with .08 M Et₄NI as a base electrolyte were studied. Standard free energies of activation of addition of the first and second electron are reported.
