

electrokinetic potential, ζ

Potential drop across the mobile part of the double layer, that is responsible for electrokinetic phenomena. ζ is positive if the potential increases from the bulk of the liquid phase towards the interface. In calculating the electrokinetic potential from electrokinetic phenomena it is often assumed that the liquid adhering to the solid wall and the mobile liquid are separated by a sharp shear plane. As long as there is no reliable information on the values of the permittivity and the viscosity in the electrical double layer close to the interface, the calculation of the electrokinetic potential from electrokinetic experiments remains open to criticism. It is therefore essential to indicate in all cases which equations have been used in the calculation of ζ . It can be shown, however, that for the same assumptions about the permittivity and viscosity all electrokinetic phenomena must give the same value for the electrokinetic potential.

Source:

Green Book, 2nd ed., p. 60

PAC, 1996, 68, 957 (*Glossary of terms in quantities and units in Clinical Chemistry (IUPAC-IFCC Recommendations 1996)*) on page 971

PAC, 1994, 66, 891 (*Quantities and units for electrophoresis in the clinical laboratory (IUPAC Recommendations 1994)*) on page 894