

Differential Capacity of the Double-Layer Formed at a Solid Electrode (Pt, Au)/Ionic Liquid Interface

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The differential capacity at the electrode (Pt, Au)/ionic liquid interface of 18 ionic liquids (ILs), was measured applying chronoamperometry. The measurements were done by a two electrode system. The double layer capacity at the Pt/IL and Au/IL interface was $1 - 8 \mu\text{F}/\text{cm}^2$. The capacity, estimated from the impedance measurements, was approximately constant within a potential range of ca. 3 V.

Key words: Double-Layer Capacity; Ionic Liquids.