

AC ELECTRICAL CONDUCTIVITY OF PHALOCYANINA TO ALUMINUM CHLORIDE

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ABSTRACT

Ac conductivity in the frequency range of 5×10^3 to 5×10^5 Hz of Phthalocyaninato Aluminum Chloride (PcAlCl) was measured, which consists of frequency dependent and independent parts. The Dc conductivity is attributed to the charge carrier's transition, between valance and conduction bands, while the Ac conductivity is due to hopping of charge carriers, between the localized sites around Fermi level which is an indication of degree of imperfection around Fermi level in the crystal lattice. The number of the hopping sites were estimated, using Webb and William relation $4.7 \times 10^{20} \text{eV}^{-1} \text{cm}^{-3}$.

KEYWORDS: Phthalocyaninato Aluminum Chloride, Ac And Dc Electrical Conductivity