

## AC AND DC ELECTRICAL PROPERTIES OF TETRAPYRAZINO-PORPHYRAZINE VANADYL (IV)

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### ABSTRACT

Ac and dc conductivities of thin film of Vanadyl complex of tetrapyrazino porphrazine were carried out at different temperatures and different frequencies. The study shows a semiconducting properties and frequency dependence conductivity. It shows that the ac conductivity of the complex is higher than it's dc conductivity due to the sum of the temperature and frequency dependence for the ac conductivity. The density of states around Fermi level $[N_{(EF)}]$ , between which the electrons hope, were estimated using Mott and Davis relation and it has a value of about  $1.1 \times 10^{29} \text{ ev}^{-1} \text{ cm}^{-3}$ .

**KEYWORDS:** Tetrapyrazinoporphrazine Vanadyl Complex. Ac and Dc Conductivity