

SYNTHESIS, CHARACTERIZATION AND ELECTRICAL PROPERTIES OF BRIDGED TETRAPYRAZINO PORPHRAZINE IRON (II)

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ABSTRACT

Abridged complex structure of Tetrapyrazinoporphrazine, PzFe (II) with 1, 4-dicyanobenzene was prepared. The study shows that the complex has the structure (PzFeDCN) n . It is analyzed by elemental analysis and spectroscopic methods (IR, Uv-Visible and ^1H NMR) in addition to the thermo gravimetric method and X- ray diffraction method. The dc electrical conductivity measurements show that the complex has a semiconducting behavior with activation energy of 1.12 eV compared with the activation energy of PzFe which is 0.9 eV which could be related to the PzFe plane separation in the bridged complex..

KEYWORDS: Bridged Tetrapyrazino Porphrazine, Dc Electrical Conductivity