Electroorganic Synthesis of Copper and Zinc Complexes with Novel Ligand Oxalic Acid

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Abstract:

A convenient electroorganic synthesis of divalent metal complexes of empirical formulation [ML2] (M (II) = Cu and Zn; L= oxalic acid) were synthesized at sacrificial metal electrode anode. The metal, as the anode in an undivided cell, is oxidized in the presence of the parent compound of the ligand (HL) in an organic solvent mixture. Gram quantities of complex can be produced in a few hours. Complexes were characterized by elemental analysis, Infrared spectral data, Atomic Absorption spectroscopy and thermal spectral data. The geometrical structure of the synthesized complexes has been identified.

Keywords:

Oxalic acid, Electroorganic, Atomic absorption spectroscopy, Infrared spectra, Sacrificial electrode.