

# Synthesis and Study of Copper(II) Complexes with Aspartic Acid, Serine, and Valine

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**Abstract**—Binary and ternary copper(II) complexes with aspartic acid ( $H_2Asp$ ), serine ( $HSer$ ), and valine ( $HVal$ ) were prepared by electrochemical and chemical procedures. The purity of the compounds was confirmed by elemental and thermogravimetric analyses. According to the IR spectra, all the complexes contain a five-membered chelate ring in which the  $Cu(II)$  atom is bonded with the oxygen atom of the carboxy group and nitrogen atom of the amino group. This is also confirmed by the ESR spectra.