Synthesis and Spectral Investigations of Some New Mercury(II), Copper(I) and Silver(I) Complexes Containing Ortho -Tellurated p-Bromoacetanilide

Ali Z. Al-Rubaie*1, Shaker A. N. Al-Jaddan2 and N.D .A. Al-Jabiri1

¹Department of Chemistry, College of Arts and Science, 7th April University Al-Zentan P.O.Box 718, Libya. E-mail: alrubaie49/@vahoo.com
²Department of Chemistry, College of Arts and Science, 7th April University Gherian, P.O. Box 64200, Libya.

Keywords: Tellurium, mercury(II), copper(I), silver(I), p-bromoacetanalide, ditelluride, telluride.

ABSTRACT

Bis(2-acetamido-5-bromophenyl)ditelluride(1), bis(2-acetamido-5-bromophenyl) telluride(2) and 2-acetamido-5-bromopheny(4-ethoxyphenyl) telluride(3) were reacted with HgCI₂, CuCl and AgNO₃ to form complexes of the type MX_a.L (L = 1, 2 or 3; M = Hg(II), Cu(I), Ag(I); X = CI, NO₃; n = 1 or 2). Mercury complexes were found to be ionical species in DMSO solution. IR and ¹HNMR data suggested that the ligands in these complexes coordinate through the tellurium atom.