

**Solid state and solution NMR studies of some new complexes of mercury selenocyanate with imidazolidine-2-thione and its derivatives.**

Wazeer, Mohammed I. M.; Isab, Anvarhusein A. Department of Chemistry, King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia. Journal of Coordination Chemistry (2007), 60(24), 2649-2657. Publisher: Taylor & Francis Ltd.

**Abstract**

Reactions of imidazolidine-2-thione (Imt), 1,3-diazinane-2-thione (Diaz) and 1,3-diazipane-2-thione (Diap) with Hg(II) selenocyanate in MeCN gave 2:1 complexes. Both solid state and soln. NMR, confirm the exocyclic S atom to be the donor in all cases.  $^{199}\text{Hg}$  shielding tensors and anisotropies were calcd. from the solid-state NMR spectra. Based on the solid NMR data a distorted tetrahedral disposition of ligands around Hg is proposed.