Available online at www.joac.info

ISSN: 2278-1862



## Journal of Applicable Chemistry

**2014, 3 (6): 2498-2503** (International Peer Reviewed Journal)



## Synthesis, Characterization of Some Diorganyl Dichalcogenides as Ligands in Coordination Chemistry

**Rajeev Kumar** 

Department of Environment Studies, Panjab University, Chandigarh-160014, INDIA

Email: rajeev@pu.ac.in

Accepted on 7th November 2014

## ABSTRACT

The synthesis of some novel organochalcogenides compounds having coordination bond with cadmium and mercury. The complexes of mercury and cadmium are readily formed by its reaction with sterically less demanding dichalcogenides. However, complexes of cadmium/mercury with ligands containing selenium and sulfur are polymeric in nature as indicated by their not solubility in any of the solvents. The synthesized compounds have been characterized analytically with the help of various spectroscopic techniques viz., IR, CHN, TGA and ED-XRF.

Keywords: Sulfur, Selenium, Cadmium, Intermolecular coordination, metal chalcogenolates.