BEST: International Journal of Humanities, Arts, Medicine and Sciences (BEST: IJHAMS) ISSN (P): 2348-0521, ISSN (E): 2454-4728 Vol. 4, Issue 7, Jul 2016, 49-62 © BEST Journals



## SYNTHESIS, CHARACTERIZATION OF NEW HETEROCYCLIC RING BASED ON 2, 5-DIMERCAPTO1, 3, 4 -THIADIAZOLE

## SHETHA F. AL-ZUBIADY, DOUAA H. AL. ABBOUDA & BAN DH. ISMAEL

Department Chemistry / College of Science for Women/Baghdad University, Iraq

## **ABSTRACT**

In this work preparation a number of heterocyclic compounds beginners of 2, 5 dimercapto -1, 3, 4- thiadiazole [1] created from interaction hydrazine hydrate with carbon disulphide in absolute ethanol. After then compound [1] reaction with (2mol) thiosemicarbazide to give triazolo derivation [2] and treatment (2mol) from chloroacetyle chloride with compound [3] in dry pyridine obtain on -3,6 dichloroacetamido 1,3,4 thiadiazole derivation. Then the compound [3] reaction with urea and thiourea to give 3, 6 disubstitution from oxazole and thiazole 1, 3, 4- thiodiazole derivation [4, 5]. The treatment of the compounds [4, 5] with derivation aromatic aldehyde to give Schiff base [6-9]. Schiff base treatment with (chloroacetyle chloride, sodium azide, mercaptoacetic acid) in order to give new derivation Schiff base compound  $\beta$ -Lactam [10-13], Tetrazole [14-17], Thiazolidinones [18-21]. The compound characterization was done by using [FT-IR, UV, H-NMR spectra and elemental analysis (C.H.N.S)].

**KEYWORDS:** 1, 3, 4- Thiadiazole Fused With 1, 2, 4-Triazole Ring, Schiff Base