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SYNTHESIS AND BIO- SPECTRAL STUDY OF NEW LIGANDS FROM BIS - (THIAZOLE – HETERO CYCLES) AND FORMAZAN LIGANDS

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ABSTRACT

Various and new eight ligands from bis –(thiazole –heterocycles) and formazan were synthesized in this work by using benzil compound as a starting material for preparation of thiazole derivative which converted to bis (anil compound) via condensation reaction with para-formal benzaldehyde , the last compound reacted with (sodium azid , mercapto acetic acid , o-hydroxy benzoic acid ,phthalamide)via condensation reaction to produce various ligands including bis heterocycles (five, six, seven)_ membered ring in their structures like (tetrazole ,thiazolone ,oxazine , diazepine). The structure of the newly synthesized compounds were monitored by (TLC) and identified by many techniques (Uv.Vis-spectro ,FT.IR- spectro , ^{1}H.NMR-spectro) , melting points , solubility in different solvents , study of bio- activity for synthesized ligands.

KEYWORDS: Thiazole, Tetrazole, Oxazine, Diazepine, Formazan