



## Synthesis and Identification of some New Sulphadiazine Derivatives

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### ABSTRACT

*This research involves the synthesis of some new pyrazolines and pyrimidines from sulphadiazine derivatives. Firstly was converted sulphadiazine to 4-(acetamido)-N-(pyrimidin-2-yl) benzene sulfonamide (ASDZ) by reacting sulphadiazine with acetic anhydride in presence of some drops of sulfuric acid. Then, Chalcones were prepared from the reaction of (ASDZ) with aromatic aldehydes in basic medium to prepare (A,B,C,D and E) compounds. Chalcones derivatives were reacted with phenyl hydrazine and 2,4-dinitro phenyl hydrazine to prepare pyrazoline derivatives ( $A_{PH}$ ,  $B_{PH}$ ,  $C_{PH}$ ,  $D_{PH}$ ,  $E_{PH}$ ,  $A_{NPH}$ ,  $B_{NPH}$ ,  $C_{NPH}$ ,  $D_{NPH}$  and  $E_{NPH}$ ). Also pyrimidine derivatives were synthesized by reaction between Chalcones and urea, thiourea and guanidine ( $A_U$ ,  $B_U$ ,  $C_U$ ,  $D_U$ ,  $E_U$ ,  $A_{Th}$ ,  $B_{Th}$ ,  $C_{Th}$ ,  $D_{Th}$ ,  $E_{Th}$ ,  $A_G$ ,  $B_G$ ,  $C_G$ ,  $D_G$  and  $E_G$ ). The synthesized compounds have been measured by their melting points, and characterized by C.H.N. analysis, FT-IR and <sup>1</sup>H-NMR (for some of them) spectroscopy.*

**Keywords:** sulphadiazine, Pyrazolines, pyrimidine, Claisen-Schmidt condensation, Chalcones.

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