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## SYNTHESIS AND CHARACTERIZATION OF SOME NEW MONO AND BIS CYCLIC AZETIDIN-2-ONES

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## **ABSTRACT**

This study is concerned with the synthesis and characterization the 3-methoxy/3,3-dithio dipropyl mono and biscyclic azetidin-2-ones **3** (**a-d**). These compounds **3** (**a,b**) were prepared by reacting methoxyacetyl chloride with the appropriate imines **2**(**a,b**) in the presence of triethylamine in dry dichloromethane under nitrogen atmosphere at -10°C and the compounds **3** (**c,d**) were prepared by reacting 3,3'-dithio dipropanoic acid with the appropriate Schiff's base **2** (**c,d**) in the presence of triethylamine with phosphorusoxychloride in dry dichloromethane under nitrogen atmosphere at -10°C. The active acid chloride reacts with triethylamine to generate corresponding ketene in situ which further reacts with Schiff's base to furnish corresponding 3-methoxy/3,3-dithio dipropyl mono and biscyclic azetidin-2-ones **3** (**a-d**).

**KEYWORDS:** Characterization, Heterocyclic Compounds

