

SYNOPSIS

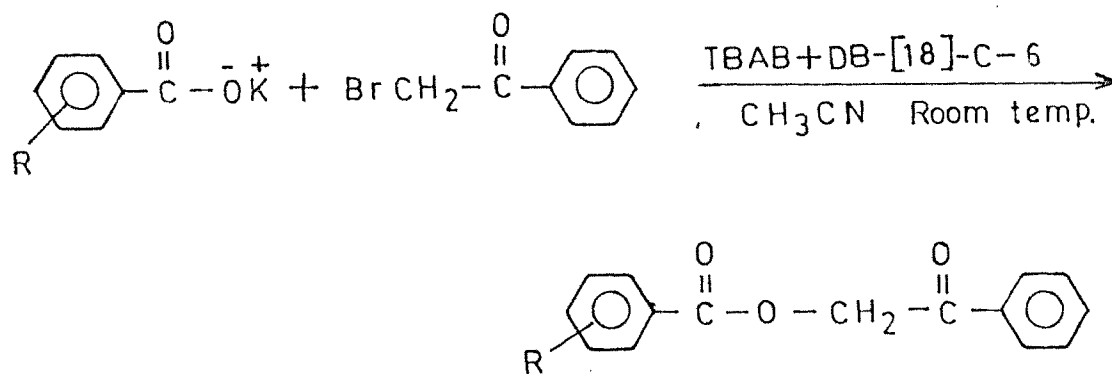
The dissertation entitled, "**Applications of Crown Ethers in Organic Synthesis**", consists of three chapters and embodies account of : Chapter-1 - A brief review on the applications of Phase Transfer Catalysts and Crown Ethers in Organic Synthesis. Chapter - 2 - Synthesis of Phenacyl esters by using mixture of tetrabutylammonium bromide and dibenzo-[18]-crown-6. Chapter - 3 - Facile synthesis of phenacyl ethers by using mixture of tetrabutylammonium bromide and dibenzo-[18]-crown-6.

Chapter - 1 gives the brief account of the structure, properties of different phase transfer catalysts (PTC) and crown ethers as well as their applications in organic synthesis.

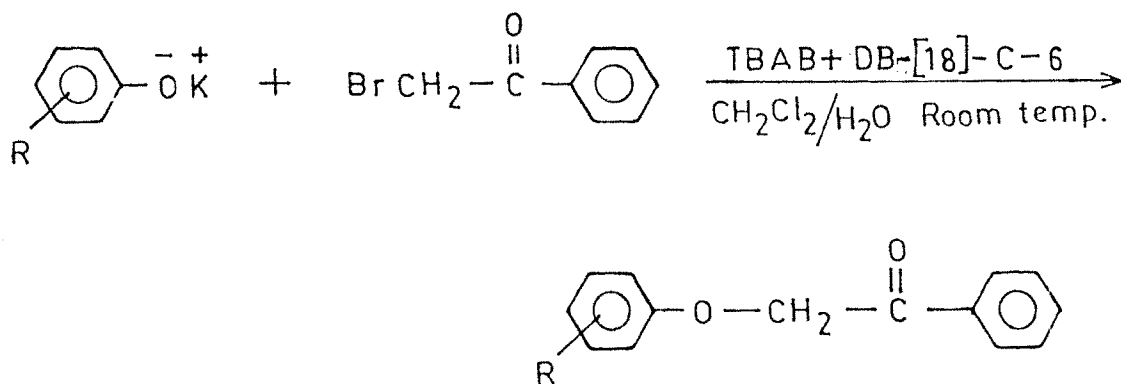
Chapter - 2 describes an efficient method for the synthesis of phenacyl esters of carboxylic acids. Potassium salt of carboxylic acid on reaction with phenacyl bromide under the condition of solid-liquid phase transfer catalysis using mixture of tetrabutylammonium bromide (TBAB) and dibenzo-[18]-crown-6 as the catalysts gives/ corresponding phenacyl ester in high yield (scheme-1).

Chapter - 3 describes facile synthesis of phenacyl ethers of substituted phenols. In view of the importance of phenacyl ethers in group protection and an enzyme

SCHEME - 1 : SYNTHESIS OF PHENACYL ESTERS USING MIXTURE OF TETRABUTYLAMMONIUM BROMIDE AND DIBENZO-[18]-CROWN-6 .



SCHEME - 2 : FACILE SYNTHESIS OF PHENACYL ETHERS USING MIXTURE OF TETRABUTYLAMMONIUM BROMIDE AND DIBENZO-[18]-CROWN-6 .



inhibitors, a simple and efficient method for synthesis is described here, in two phase system with mixture of tetrabutylammonium bromide (TBAB) and dibenzo-[18]-crown-6 as the phase transfer catalysts under mild reaction conditions in high yield within very short time (scheme-2)

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