

**ABSTRACT****LONG ALKYL GROUP CONTAINING  
BENZOYL-BARBITURIC ACID DERIVATIVE AND SYNTHESIS  
THERE OF BORANE COMPLEX**

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Barbituric acids have long been known for many years and it has several biological activity. Barbituric acids are used in many areas of medicine and pharmaceutical industry. Surprisingly, there are several study about barbituric acid derivatives in literatures, only few examples deal with liquid crystal properties.

In this study, long alkyl group containing benzoyl-barbituric acid derivatives and their boron complexes are synthesized. Structural characterizations of new compounds were made with  $^1\text{H}$ ,  $^{13}\text{C}$  and  $^{11}\text{B}$  NMR, FT-IR and MS spectroscopy. Moreover, liquid crystal properties were examined by polarized optical microscope.

**Keywords:** Barbituric Acid, Benzoyl Barbiturates, Boron Complex, Liquid Crystals