**Use of Lawesson’s Reagent in the Synthesis of Novel Thiocarbonyl Compounds**

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Lawesson’s reagent [2,4-bis(p-methoxyphenyl)-1,3,2,4-dithiadiphosphethane-2,4-disulfide] (Figure 1) is a versatile agent used for  thionation of carbonyl compounds. It is reported that reactions using the comparable reagent P4S10 normally need higher temperature and large excess of thionating agent. However, the use of this reagent is popular on account of it producing high yields, its convenient handling, its easy work up and easy availability. In the present review, various synthetic routes employing the use of Lawesson’s Reagent (LR) for the synthesis of thiocarbonyl compounds has been compiled.

LR can be obtained readily by the reaction of phosphorus pentasulfide with anisole or reaction of red phosphorus, elemental sulfur and anisole in moderate yields.



Figure 1. Lawesson Reagent