

FLUORINATED 1,3-DIKETONES AS REACTION INTERMEDIATES FOR SYNTHESIS OF BIOLOGICALLY ACTIVE HETEROCYCLES

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Recently the chemistry of fluorinated 1,3-diketones has aroused great interest as they serve as reaction intermediates for the synthesis of a large number of biologically active heterocycles, viz: pyrazoles, flavones, isoxazoles and diazepines.

In our comprehensive programme of developing new fluorinated 1,3-diketones and related compounds, we wish to report here the synthesis and some of the synthetic applications of these fluorinated 1,3-diketones. These fluorinated 1,3-diketones have been synthesized by the claisen condensation. The fluorinated 1,3-diketones when subjected to condensation reaction with pentafluorophenylhydrazine to yield the corresponding 3-(p-fluorophenyl)1,5-trisubstituted pyrazoles. Similarly condensation of the above 1,3-diketones with guanidine carbonate in the presence of HCl afforded corresponding 2-amino 4,6-trisubstituted pyrimidines. These compounds have been characterized by their elemental and spectral studies (I.R., PMR & Mass). The biological screening of these compounds are under investigation.