SYNTHESIS AND CHARACTERIZATION OF NEW DERIVATIVES OF 1H-2, 3-DISUBSTITUTED-[1, 2-e] [1, 3]-BENZODIAZEPINE-4, 7-DIONE

AHMED N. AYYASH¹ & OBAID H. ABID²

¹College of Science, Department of Chemistry, University of Anbar, Anbar, Iraq ²College of Education for Pure Science, Department of Chemistry, University of Anbar, Anbar, Iraq

ABSTRACT

The one-step polar nucleophilic (2+5=7) polar cycloaddition reaction of phthalimide with Schiff bases derived from heterocyclic amines and heterocyclic aldehydes or ketones in dry tetrahydrofuran (THF) gave 1H-2,3-disubstituted-[1,2-e][1,3]-benzodiazepine-4,7-dionesin good yields. The products were identified by their melting points, UV, FT-IR and ¹HNMR spectra.

KEYWORDS: Benzodiazepine-4, 7-Dione, Phthalimide, Schiff Bases, Synthesis