On the Synthesis of New Heterocycles Derived from Pyrazolo[3,4-b]pyrazine of Anticonvulsant Activity

Sabah Esmail,a,b, Abdel-Rahman Farghali,a Ali Abdel-Hafez,a Hussein El-Kashef,a

a) Chemistry Department, Faculty of Science, Assiut University, Assiut 71516, Egypt.
b) Chemistry Department, Faculty of Science, Ibb University, Yemen

ali_abdelhafez@yahoo.com

The pyrazolo[3,4-b]pyrazine ring system is an interesting class of heterocycles. It has been reported that some of its derivatives are used as bone metabolism improvers, antiinflammatories, blood platelet aggregation inhibitors. Antifungal, antibacterial, adenosine antagonists. We wish to report herein facile syntheses of the some new heterocycles derived from pyrazolo[3,4-b]pyrazine, and the evaluation of their anticonvulsant. The synthesis of the following structures will be described.