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(57) Abstract:

The present invention relates to the synthesis of imidazole-oxazepine conjugates by using ultrasonic irradiation. The imidazole-oxazepine conjugate compounds (SIOaj) were synthesized starting from imidazole, subsequent nucleophilic substitution reaction of a solution of imidazole with ethyl chloro acetate, followed by hydrazinated to obtain an acetohydrazide. The acetohydrazide was subjected to Schiff's reaction with various aromatic aldehydes leading to the formation of a Schiff's base which was then subjected to cycloaddition reaction with maleic anhydride leading to ring expansion and formation of 1,3-oxazepine-conjugated imidazole. Further, treatment with aniline derivatives resulting in imidazole-oxazepine conjugate compounds (SIOa-j).

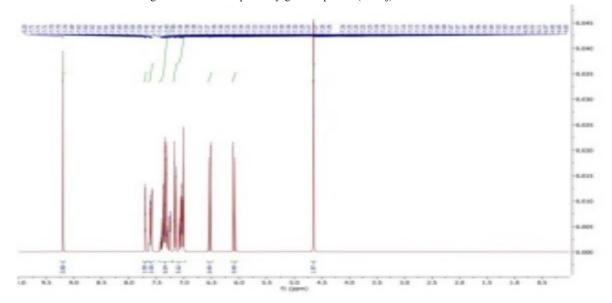


Fig.1 1H NMR spectra of SIO_f

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