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NEW AZASTEROID COMPOUNDS: SYNTHESIS AND SPECTRAL ANALYSIS

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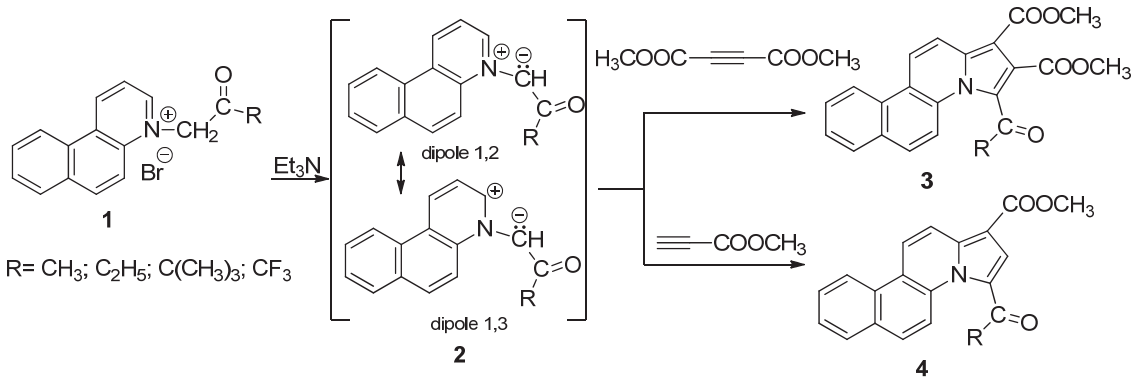
Azasteroids, are invaluable compounds demonstrating fascinating potential applications for medicine, being a top and widely discussed research field in modern science. Many compounds containing nitrogen heterocycle moiety have demonstrated versatile biological activities, which include antiviral and anticancer,[1] anti-inflammatory,[2] antimicrobial,[3] antifungal,[3] antiandrogenic, etc.

Initially, we generate '*in situ*' the benzo[f]quinolinium ylides **2**, from the corresponding benzo[f]quinolinium salts **1**, using Et_3N as base. In the next step, the ylides **2** were treated with DMAD (dimethyl acetylenedicarboxylate) or methyl propiolate (as activated Z-alkynes), leading to the corresponding tetracyclic cycloadducts **3** and **4**.



The structures of all compounds were unambiguously proved by spectral analysis (IR, ^{1}H-NMR, ^{13}C-NMR and 2D NMR experiments). All the elemental and spectral data are in accordance with the proposed structure.

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