

Superacid promoted synthesis of imidazole and benzimidazole containing spirocycles

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A variety of imidazole and benzimidazole-containing spirobifluorene analogs have been prepared via intramol. Friedel-Crafts reaction. The condensation reactions are promoted using the Bronsted superacid, triflic acid (CF₃SO₃H). This methodol. consistently provides very high yields within 24 h without the need for heating. A mechanism is proposed involving dicationic intermediates. The precursor fluorenyl alc. is synthesized from deprotonation of the N-aryl imidazoles and reaction with 9-flourenone.