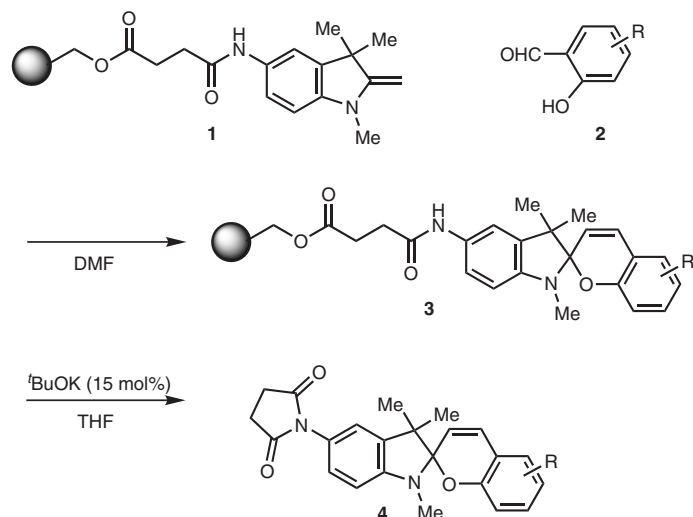


Solid-Phase Synthesis of Photochromic Spiroyrans



Significance: A 23-membered photochromic spiropyran library was prepared via solid-phase synthesis. An indoline derivative was anchored onto the Wang resin by a succinate linker. Reaction of the supported indoline **1** with various salicylaldehydes **2** gave the corresponding resin-bound spiropyran **3**. The resin-bound spiropyran was cleaved from solid phase with a catalytic amount of *t*-BuOK to afford excellent yields of succinimidospiryran (**82–100%**).

Comment: Spiropyran has been extensively studied (R. Guglielmetti In *Photochromism: Molecules and Systems*; H. Dürr, H. Bouas-Laurent, Eds.; Elsevier: Amsterdam, **1990**, pp 314-466). Solid-phase synthesis of photochromic spiropyran was reported for the first time.