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Synthesis of 1.8-Diazadibenzo[b,h]fluoren-9-One as a Fingerprint Detection Agent

Jeffrey K. Stowell
Illinois Wesleyan University

Forrest J. Frank, Faculty Advisor
Illinois Wesleyan University

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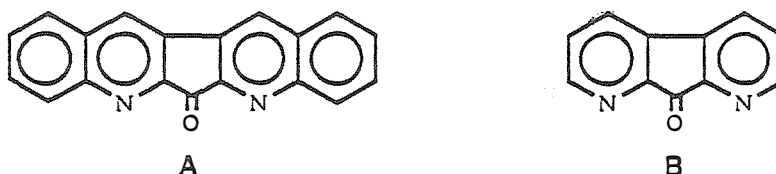
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SYNTHESIS OF 1,8-DIAZADIBENZO[b,h]FLUOREN-9-ONE AS A
FINGERPRINT DETECTION AGENT

Jeffrey K. Stowell, Dept. of Chemistry, IWU, Forrest J. Frank*

The title compound (A) is being synthesized in an attempt to find an improved reagent to detect latent fingerprints. DFO (B, 1,8-diazafluoren-9-one) has recently been discovered to react with the amino acids present in fingerprints to produce a fluorescent product which makes detection of even smaller amounts of fingerprints than possible before. However, the fluorescence occurs in the yellow range of the spectrum where the background fluorescence of some papers obscures the fingerprint fluorescence. The title compound should react similarly to DFO but with the increased conjugation the fluorescence should be shifted toward the red, away from the background interference.



Scheme for the Preparation of 1,8-diazadibenzo[b,h]fluoren-9-one

