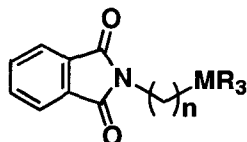


PHOTOCHEMISTRY OF N-(TRIMETHYLSILYLALKYL)- AND
N-(TRI-BUTYLSTANNYLALKYL)-IMIDES

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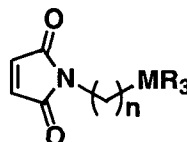
Recent investigation of the photochemistry of N-(trimethylsilylalkyl)imides (**1a-e** and **3a-b**) has covered a novel C to O TMS transfer process resulting in generation of azomethine ylid intermediates with the methyl analog (**1a** and **3a**) and intriguing solvent effect on the excited state reaction chemoselectivities with the higher alkyl analogs (**1b-e** and **3b**) which are potentially applicable to the synthesis of functionalized nitrogen heterocycles. In continuing efforts to develop new excited state processes which are synthetically useful, we investigated the photochemistry of the stannyl analogs **2a-c** and **3c** which reveal azomethine ylid generation in the photochemical reaction of **2a** and very efficient photocyclization processes with **2b-c** and **3c**. We will discuss the results from the investigation of photochemistry of N-(trimethylsilylalkyl)- and N-(tributylstannylalkyl)-imides in detail.



1a MR₃ = SiMe₃, n = 1

1b-e MR₃ = SiMe₃, n = 2, 3, 4, 5

2a-c MR₃ = SnBu₃, n = 1, 3, 4



3a MR₃ = SiMe₃, n = 1

3b MR₃ = SiMe₃, n = 3

3c MR₃ = SnBu₃, n = 3

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