

## Effect of Intramolecular Exciplex Formation upon the Photoreactivity of Naphthylalkylamines and Anthrylalkylamines

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*Summary* Several *NN*-diethyl-1-naphthylalkylamines and *NN*-diethyl-9-anthrylalkylamines exhibit intramolecular exciplex formation and as a result reactions typical of the hydrocarbon singlet states, *e.g.* hydrogen abstraction from tertiary amines and dimerisation, are quenched.

A SERIES of *NN*-diethyl-1-naphthylalkylamines (**1**;  $n = 1, 2, \text{ or } 3$ ) and *NN*-diethyl-9-anthrylalkylamines (**2**;  $n = 1 \text{ or } 3$ ) have been prepared by standard reactions. Their u.v. absorption spectra are identical with those of their parent hydrocarbons, 1-methylnaphthalene and 9-methylantra-

