is shown to be incorrect. A general mechanism for BP photopinacolization is proposed. It may also be noted that measurements at low light intensities (*e.g.* quantum yield determinations) and at high light intensities (*e.g.* flash photolysis) in a given system may be probing different mechanisms.

Time-resolved spectroscopy and chemical reactivity of energetic transient species of nitroaromatics

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Electronic excitation of trinitrobenzene (s-TNB) leads to a charge transfer complex between deprotonated s-TNB and molecular oxygen. Electronic excitation of trinitrotoluene (s-TNT) generates an *aci*-quinoid transient in non-polar solvents. In the gas phase, electronic excitation of s-TNT forms the 2,4,6-trinitrobenzyl radical. This species is also formed from electronically excited s-TNT, 2,4,6-trinitrobenzyl chloride and hexanitrobibenzyl in 1,4-dioxane at room temperature and in ether–isopentane–ethanol at 77 K. Nanosecond laser spectroscopy and kinetic studies of nitronaphthalenes indicate that the triplet states of these molecules behave like η,π^* states in non-polar solvents while in polar solvents the η,π^* character is reduced with a simultaneous increase in the charge transfer character of the states. Because of the symmetry of nitro substitution, the triplet state of 1,4-dinitronaphthalene remains η,π^* even in polar solvents.

Magnetic field effect on triplet sublevel relaxation: a novel method to probe the dynamics of short-lived triplet intermediates in photoreactions

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A mechanism is described whereby the influence of an external magnetic field on the relaxation between the sublevels of an electronically excited triplet state, which is subject to sublevel-selective deactivation, modulates the yield of photochemical products originating from such a triplet intermediate. A theory of this novel magnetic field effect is outlined and its first experimental application to determine the absolute decay constants of short-lived triplet exciplexes be-