

$\varphi_F = 0.81$  in  $C_6H_{12}$  and  $\varphi_F = 0.03$  in tetrahydrofuran). A lowering of the acceptor character of the triazinyl ring decreases the susceptibility to such quenching. From variable-temperature studies the quenching process involves an increase in the dipole moment of the dye at a rate limited by the solvent dielectric relaxation. Flash photolysis and steady state studies of triplet state generation ( $\varphi_T \cong 0.15$ ) and properties are reported for TA and related systems.

The data provide further evidence for the twisted intramolecular charge transfer model [1] and shed light on intersystem crossing in twisted charge transfer biradicaloid ( $^+ \cdot D-A \cdot^-$ ) states.

1 Z.R. Grabowski, K. Rotkiewicz, A. Siemiarczuk, D.J. Cowley and W. Baumann, *Nouv. J. Chim.*, 3 (1979) 443.

### **Diffuse reflectance laser flash photolysis**

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A laser flash photolysis system which has been developed to study transient absorption from highly scattering powdered samples after excitation by nanosecond dye-laser pulses is described. Transient spectra are reported from organic molecules adsorbed as monolayers on metal-oxide surfaces including activated catalysts and semiconductors as well as from powdered solids. Assignments of these spectra and numerical solutions to the differential equations for transient diffuse reflection from photoinduced inhomogeneous absorbing samples are discussed. The potential of this new technique [1] is illustrated with examples of flash photolysis studies at a variety of interfaces.

1 R. W. Kessler and F. Wilkinson, *J. Chem. Soc., Faraday Trans. I*, 77 (1981) 309.