

**Figure 1** – Typical energy levels for  $\pi$ -orbitals of a fluor molecule. Spin singlet (S) and triplet (T) states are separated for clarity. The ionization level  $I_{\pi}$  is shown at the top. Excited states as well as vibrational sublevels (dashed horizontal lines) are shown. Internal degradation is a non-radiative process, while fluorescence and phosphorescence are radiative decays. The decay  $T_0 \to S_0$ , however, is indirect, by interactions with other molecules.