



**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  $T_0 \rightarrow S_0$ , however, is indirect, by interactions with other molecules.