The photoinduced electron transfer from organic chromophores into titanium dioxide (TiO_2) surfaces has been investigated extensively using transient absorption and two photon photoelectron spectroscopy (2-PPE) techniques. Transient absorption is a more conventional method of ultrafast spectroscopy while 2-PPE gives more complete and complex information of both the energy distribution and the time dependence of the injected electrons. The electron transfer process has been found to be on the order of 10 fs for the chromophore di-tert-butyl-perylene (DTB-perylene) when bound directly to the surface via a carboxylic acid (COOH) anchor group. By adding another molecular group (or bridge) between the chromophore and the anchor, the rate of electron transfer may decrease depending on both the size and the electronic structure of the bridge. Tentatively, the 2-PPE decay signals are also partially ascribed to the electron transport into the bulk of the semiconductor. Finally, some preliminary results of the electron transfer of DTB-perylene into a ZnO surface will be briefly discussed.