Dynamics of excited - state proton transfer from 1 - naphthol to urea. Than Htun, M. Chemistry Department, King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia.

Chemical Physics Letters (2000), 328(4,5,6), 437-445.

Abstract

The excited-state intermol. proton transfer from 1-naphthol to urea has been studied in methanol. In the absence of urea, the excited 1-naphthol (ROH*) decays exponentially in methanol. However, upon the addn. of urea, the decay becomes non-exponential. It is attributed to a geminate recombination of an ion-pair in the solvent cage. The quenching const. of ROH* by urea and some rate consts. are evaluated by using both the steady-state fluorescence and picosecond fluorescence decay measurements.