

**Effects of calcium chloride on the proton transfer dynamics of 4 - hydroxy - 1 - naphthalenesulfonate in alcohol/water mixtures.** Than Htun, M.; Suwaiyan, A.; Klein, U. K. A. Chemistry Department and Laser Research Laboratory, King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia.

Chemical Physics Letters (1997), 264(3,4), 285-291.

### **Abstract**

Proton transfer from excited 4-hydroxy-1-naphthalenesulfonate to the water solvent is studied in 70:30 n-alc.-water contg. CaCl<sub>2</sub>. The proton-acceptor concn. passed through a max. with increasing CaCl<sub>2</sub> concn. This non-linear dependence was explained in terms of H-bond breaking increasing the proton-transfer rate initially, and the depletion of free H<sub>2</sub>O mols. due to hydration leading to a decrease in the proton-transfer rate.