STUDY OF SOLVENT DEPENDENT EXCITED STATE ENERGY FLOW IN DANS PROBED WITH ULTRAFAST FS/PS-CARS

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The $S_1$ excited state vibrational dynamics of *trans*-4-dimethylamino-4′-nitrostilbene (DANS) in the 1000 $cm^{-1}$ to 1700 $cm^{-1}$ frequency range are probed in two polar solvents using fs/ps-CARS. The vibrational dynamics of excited state DANS are slower in propylene carbonate *vs.* acetonitrile, which could be attributed to the twice larger dielectric constant and larger viscosity of propylene carbonate. The dynamics of the $NO_2$ symmetric stretch band around 1300 $cm^{-1}$ are different from other bands, consistent with the current picture of twisted intramolecular charge transfer in DANS.