Proton transfer and self-association of sterically modified Schiff bases.

Autorzy

Maria Rospenk

Iwona Król-Starzomska

Aleksander Filarowski

Aleksander Koll

Rok wydania

2003

Czasopismo

Chemical Physics

Numer woluminu

287

Strony

113-124

DOI

10.1016/S0301-0104(02)00983-7

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

The intramolecular proton transfer process has been studied by measuring of the dipole moment, an average molecular weight, and UV/VIS spectra as a function of temperature and concentration in a few solvents of low polarity. Ten Schiff bases were selected for such studies, where steric repulsion of alkyl- and aryl-substituents in azomethine moiety enhances the strength of hydrogen bond and the proton transfer process. The self-association of species with intramolecular proton transfer has been investigated as a function of solvent polarity. Behaviour of these systems has been compared with those of Mannich bases, where intramolecular electron coupling between acid and base centres is considerably prevented by $-CH_2-$ bridge. A substantially different behaviour of these two types of compounds has been found out.

Adres publiczny

https://doi.org/10.1016/S0301-0104(02)00983-7

Strona internetowa wydawcy

http://www.elsevier.com