



Excited state intramolecular proton transfer in a new *o*-hydroxy Schiff base in non polar solvents at room temperature and 77 K.

Autorzy

Abhijit Mandal
Aleksander Koll
Aleksander Filarowski
D. Majumder
Samaresh Mukherjee

Rok wydania

1999

Czasopismo

Spectrochimica Acta Part A-
Molecular and Biomolecular
Spectroscopy

Numer woluminu

55A

Strony

2861-2868

DOI

10.1016/S1386-
1425(99)00105-5

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

A new orthohydroxy Schiff base, 7-ethylsalicylidenebenzylamine (ESBA) has been synthesised. The excited state intramolecular proton transfer (ESIPT) processes have been investigated by means of absorption, emission and nanosecond spectroscopy at room temperature and at 77 K in non polar solvents. The ESIPT is evidenced by a large Stokes shifted emission ($\sim 11\ 000\text{ cm}^{-1}$) only at 77 K. From fluorescence and excitation spectra it is suggested that at least three different species are present in the excited state at room temperature. Our theoretical calculation at AM1 level confirm the *cis*-isomer to be the only viable form in the ground state.

Słowa kluczowe

Proton transfer, *o*-Hydroxy Schiff base, Non polar solvents

Adres publiczny

[https://doi.org/10.1016/S1386-1425\(99\)00105-5](https://doi.org/10.1016/S1386-1425(99)00105-5)

Strona internetowa wydawcy

<http://www.elsevier.com>

Plik został wygenerowany dnia 2026-08-24 02:21:14

Adres w repozytorium <https://old.chem.uni.wroc.pl/pl/repozytorium/Tjep78w>.