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Newly synthesized Schiff bases: Structure analysis, theoretical IR, UV, ¹H, ¹³C-NMR spectra and structure-activity relationship

Ayse Aydogdu¹, Ulku Dilek Uysal² and **Halil Berber²** ^{1,2}Anadolu University, Turkey

Schiff bases are most widely used organic compounds. They are used as pigments and dyes, catalyst, intermediates and polymer stabilizer. They exhibit a biological activities, including antifungal, antibacterial, antimalarial, antiproliferative, anti-inflammatory, antiviral, antipyretic, and herbicide properties. Furthermore, they have anti-tumor activity. These are widely applicable in analytical determination, using complex formation reactions, utilizing the variation in their spectroscopic characteristics following changes in pH and solvent. They have been used for manufacturing organic light emitting diodes having significant applications in night-vision readable displays, optical communications, laser technology and optical sensors recently [1]. To understand the mechanism of these properties, we need to some physicochemical properties of the five Schiff bases (Figure 1) synthesized by our group. Their structures were elucidated by 1H-NMR, 13C-NMR. Two out of the Schiff bases are original. Their properties have been searched DFT method

CHO
$$R_1$$
 R_2 R_1 R_2 R_1 R_2 R_1 R_2 R_1 R_2 R_2 R_2 R_3 R_4 R_5 R_5

Biography

Ayse Aydogdu has taken her Bachelor's degree in 2015 from Anadolu University. She is student of Anadolu University at Graduate School of Sciences.

a.aydogdu@anadolu.edu.tr

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