



Structural and aromatic aspects of tautomeric equilibrium in hydroxy aryl Schiff bases.

Autorzy

Aleksander Filarowski

Andrzej Kochel

Małgorzata Kluba

F. S. Kamounah

Rok wydania

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The synthesis and X-ray measurements of four Schiff bases were carried out at 100 K. The HOMA and HOSE aromaticity indices were estimated on the basis of the experimental data. The aromaticity of the phenyl ring and the chelate chain was analysed. A comparison of the aromaticity of naphthalene and phenyl derivatives of hydroxy aryl Schiff bases is presented. The balance between the aromaticity of adjacent rings of the naphthalene fragment and its effect on proton transfer is defined. Research on the interrelations between aromaticity and the intramolecular proton transfer in hydroxy aryl Schiff bases is shown.

Słowa kluczowe

intramolecular hydrogen bonding, crown ethers, proton transfer, Schiff base, aromaticity, HOMA and HOSE indices

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