

4H-Pyran-4-ylidenes: Strong Proaromatic Donors for Organic Nonlinear Optical Chromophores

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R�sum� en anglais	<p>Merocyanines where a polyenic spacer separates a 4H-pyran-4-ylidene moiety and different strong organic acceptors have been synthesized. According to NMR studies and X-ray diffraction data, these compounds have weakly alternated structures and remarkably zwitterionic ground states, with a partial aromatic character that is compared to those of other pyran derivatives. The proaromaticity of the 4H-pyran-4-ylidene donor lies behind the cyanine-like behavior and low (positive or negative) second-order optical nonlinearities of the shorter derivatives. On the other hand, lengthening the π-spacer gives rise to rapidly increasing $\mu\beta_{1907}$ values up to $17,400 \times 10^{-48}$ esu.</p>
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