Benzoid–Quinoid Tautomerism of Schiff Bases and Their Structural Analogs: LII.* Schiff Bases Derived from 6-*tert*-Butyl-5-hydroxy- and 5-Hydroxy-6-iodo-2,3-tetramethylenebenzo[*b*]furan-4-carbaldehydes**

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Abstract - Two series of Schiff bases, 4-aryl(alkyl)iminomethyl-6-*tert*-butyl-5-hydroxy- and 4-aryl(alkyl)-iminomethyl-5-hydroxy-6-iodo-2,3-tetramethylenebenzo[*b*]furans were synthesized. These compounds in solution give rise to tautomeric benzoid–quinoid equilibrium; the fraction of the quinoid form in the equilibrium mixture increases with rise in solvent polarity and in going from *N*-aryl to *N*-alkyl derivatives. The benzoid tautomer shows fluorescence with an anomalous Stokes shift. The absorption and luminescence spectral properties of the examined Schiff bases make them promising as signal fragments of chemosensors for metal cations.