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Competition of tautomeric transformations of α-acyl aminoanthraquinones

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Abstract

α-Acylaminoantraquinones have not 9,10-, but 1,10-quinoid structure. Their characteristic feature is competition of two types of tautomerism – acylamino-acylimino and keto-enol, connected with the migration of hydrogen atom in acylamino group. For benzoylaminogroups the most characteristic structure is NHCOPh, and for acetylamino groups − N=C(OH)Me. Both basic and excited states are responsible for tautomeric transformations. Excitation of molecules is accompanied by a shift of tautomeric equilibria.