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Inductive interaction of weak dipoles in unsaturated and aromatic hydrocarbons and their derivatives

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Abstract

1. Calculation of induction according to the field effect mechanism is applicable to compounds containing differently hybridized carbon atoms. 2. The "zero" moments of the bonds Csp 3-Csp 2, Csp 3-Csp, and Csp 2-Csp were calculated according to the molecular orbital method as a linear combination of atomic orbitals (MO LCAO). 3. The dipole moments of a number of alkylbenzenes and their chloro-derivatives were calculated, in agreement with the experimental data. 4. An effect of saturation of induction is observed for fluoro-derivatives. © 1968 Consultants Bureau.

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