Tendencies in Chemical Shifts in the ¹⁹F NMR Spectra of Fluorine-containing Compounds

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Abstract - Anomalous tendencies in the ^{19}F NMR chemical shifts of certain fluorine-containing, primarily organofluorine, compounds are explained. The explanation is based on the "positive charge" concept, according to which in the a series of Y–Z–M molecules containing a positively charged atom Z (the Y and M atoms are more electronegative than Z) the ionicity of the Z–Y bond increases with increasing electronegativity of the M atom (atomic group).