

Carbon-13 and nitrogen-15 NMR spectra of some methanesulfonanilides. Wazeer, Mohammed I. M.; Ali, S. Asrof. Chem. Dep., King Fahd Univ. Pet. and Miner., Dhahran, Saudi Arabia. *Magnetic Resonance in Chemistry* (1990), 28(7), 601-5. CODEN: MRCHEG ISSN: 0749-1581. Journal written in English.

Abstract

The ^{13}C and ^{15}N NMR spectra of some ortho-, meta- and para-substituted methanesulfonanilides were recorded. Correlations of the ^{13}C chem. shifts with the appropriate substituent chem. shifts for monosubstituted benzenes were excellent and showed enhancement of the substituent effects at C-1 (para to the substituent). The C-1 chem. shifts were also examd. by dual substituent parameter (DSP) and DSP-nonlinear resonance equations. The results indicate that the $\text{NH}\text{SO}_2\text{Me}$ moiety is a weak electron donor. The ^{15}N chem. shifts of the para-substituted compds. were analyzed by the DSP equations and the results compared with those of related compds. Ortho-substituted compds. show a high sensitivity of ^{15}N chem. shifts towards steric compression. T1 And nuclear Overhauser enhancement data for the protonated carbons of methyl-substituted compds. are given.