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THE RELATIVE DONOR CAPACITIES OF CH_3O AND CH_3S BY ROTATIONAL BARRIER MEASUREMENTS

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THE RELATIVE DONOR CAPACITIES OF CH_3O AND CH_3S BY ROTATIONAL BARRIER MEASUREMENTS

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In most aromatic or unsaturated systems the donor capacity of CH_3O surpasses that of CH_3S , but the latter group becomes a successively better donor with increasing electron-attracting capacity of the attached delocalized system. Rotational barriers of $\text{RX}\cdot\text{C}:\text{Y}\cdot\text{NMe}_2$, where $\text{X} = \text{O}$ or S and Y is O , S , or NR_2^+ , are convenient probes for the donor capacity of RX . A crossover in donor capacity has been found when going from $\text{Y} = \text{O}$ to $\text{Y} = \text{S}$.