ELECTRONICALLY EXCITED STATE DYNAMICS OF THE ALKOXY RADICALS

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We have measured the lifetimes of some of the prominent bands observed in the moderate-resolution, jet-cooled laser induced fluorescence excitation spectra of the $\tilde{B} \leftarrow \tilde{X}$ transition of several alkoxy radicals. High-resolution rotationally resolved studies have given isomer and conformer specific assignments for all the bands for which lifetimes have been measured. We report lifetime trends observed as a function of isomer and conformer, as well as for level of vibrational excitation. The implications of these observations for the dynamics of the $\tilde{B}$ state will be discussed.