

ELECTRONICALLY EXCITED STATE DYNAMICS OF THE ALKOXY RADICALS

SANDHYA GOPALAKRISHNAN, LILY ZU, TERRY A. MILLER, *The Ohio State University, Dept. of Chemistry, Laser Spectroscopy Facility, 120 W. 18th Avenue, Columbus, Ohio 43210.*

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.