

NON-SYMMETRIC PUSH-PULL MOLECULES IN THE GAS PHASE: HIGH RESOLUTION STARK SPECTROSCOPY OF *M*-AMINO BENZOIC ACID.^a

ADAM J. FLEISHER, PHILIP J. MORGAN and DAVID W. PRATT, *Department of Chemistry, University of Pittsburgh, 15260.*

The permanent electric dipole moments of two conformers of *m*-aminobenzoic acid (MABA) in their ground and electronically excited states have been experimentally determined by Stark-effect measurements in a molecular beam. The two conformers, differing by a rotation about the bond connecting the carboxylic acid group and aniline ring, have very similar rotational constants. However, the two conformers may be unambiguously assigned using their respective permanent dipole moment orientations. The possibility of excited state mixing in this non-symmetric biologically relevant push-pull molecule will be discussed.

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