THE PROTOTYPE DIPEPTIDE GLY-GLY: A ROTATIONAL STUDY

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The simplest dipeptide Gly-Gly has been examined for the first time in the gas phase by laser ablation molecular beam Fourier transform microwave (LA-MB-FTMW) spectroscopy. The nuclear quadrupole hyperfine structure of two ^{14}N nuclei has been totally resolved allowing the conclusive identification of three conformers in the supersonic expansion. Intramolecular hydrogen bonding interactions have been analyzed on the bases of the structure of the observed conformers. Present results indicate that it is possible to face the study larger peptides using LA-MB-FTMW spectroscopy.