

Pure Rotational Spectra of N-Ethylformamide (NEF), (NEF)₂, and NEF-H₂O.*
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The pure rotational spectrum of N-ethylformamide (NEF) was previously studied by Hirota and co-workers in 2005 (*J. Mol. Struct.* 744, 815). The most stable form of this peptide “mimic” was found to be a conformer with a nonplanar heavy atom skeleton. In this report, we describe CP-FTMW experiments that confirm this finding. We also discovered the spectrum of a less stable conformer of the monomer, a water complex of the more stable conformer, and a dimer of the more stable conformer. The latter molecule exhibits many of the characteristics of the β -sheet structure found in biology. These results will be discussed.

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