PROBING THE CONFORMATIONAL LANDSCAPE OF 3-INDOLE ACETIC ACID: FLEXIBILITY OF THE SIDE CHAIN.[a]

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3-indole acetic acid (IAA) is an ideal candidate to serve as a simple model to study the flexibility of the side chain as the spatial orientation of the acetic acid group is a function of three dihedral angles. To this end, the rotationally resolved $S_1 \leftarrow S_0$ excitation spectra of the three origin bands of IAA were recorded and analyzed. The results indicate three distinct conformers with an in-plane side chain present in band A and out-of-plane orientations in bands B and C. The detailed structure of the conformational landscape will be discussed.

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