ELECTRONIC PHOTODISSOCIATION SPECTROSCOPY OF COLD NITROPHENOLATE IONS. PART II. META-NITROPHENOLATE

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Isomers of nitrophenolate can serve as models for flourophores commonly found in fluorescent proteins. Here we report electronic spectra for mass-selected 3-nitrophenolate ions prepared in a cryogenic ion trap, measured by photodissociation spectroscopy. Different from the two other isomers, the spectrum shows sharp vibrational bands at low temperatures. We present a Franck-Condon analysis of the spectrum, and discuss the differences between the spectra of the different isomers.