PFI-ZEKE SPECTROSCOPY OF Be_2O

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The PFI-ZEKE spectrum of Be_2O^+ ion was recorded to obtain accurate ionization energy for Be_2O and vibrational frequency data for Be_2O^+. A short progression of the bending mode was observed, which included bands involving odd changes in the vibrational quanta. This observation indicates that the ion and/or the intermediate state used in the excitation process deviate from $D_{\infty}h$ symmetry.