ETHANE ASYMMETRIC C-H STRETCHING VIBRATIONAL SPECTRA

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In previous work it has been studied the ethane vibrational spectra , being considered as a non-rigid molecule. The vibrational modes that had been considered are the symmetric C-C and C-H stretching modes. In this study the asymmetric C-H stretching mode is analysed. The vibrational spectrum is taking in consideration that the molecule is a non-rigid molecule. The interaction of the asymmetric mode with the symmetric modes studied previously is also being analysed. Finally the spectrum is compared with the experimental study reported in the literature (J.M. Fernandez and S. Montero, J. Chem. Phys. 118-6, 2657,(2003)).