

## ABSOLUTE INTENSITIES IN ACETYLENE: THE $7.5\mu\text{m}$ REGION

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Spectra of  $\text{C}_2\text{H}_2$  have been recorded at room temperature in the range from 1140 to  $1490\text{ cm}^{-1}$  using a Bruker IFS120HR spectrometer. The interferograms were collected with a maximum optical path difference of 300 cm. Sample pressure/absorption path length products ranging from 1.3 to 330 hPa\*cm were used. Absolute line intensities have been measured using direct non-linear least squares fitting of Voigt profiles — convoluted with an instrument line shape function — to the observed spectral data. Measurements have been performed in the  $\nu_4 + \nu_5$  cold band and in hot bands originating from levels involving the bending modes  $\nu_4$  and  $\nu_5$ <sup>a</sup>. The results and analysis of the measurements will be presented and discussed.

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<sup>a</sup>Y. Kabbadj, M. Herman, G. Di Lonardo, L. Fusina, and J. W. C. Johns, *J. Mol. Spectrosc.* 150, 535 (1991)