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Ro-Vibrational Emission Spectra of DCN Revisited

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We present a study of the infrared emission spectra of Deuterium Cyanide (DCN) in the 450 to 850 wavenumbers range at 1370 K. Hydrogen Cyanide (HCN) was present as an impurity in the sample. The spectra were recorded using a Fourier transform spectrometer Bruker IFS 120 HR at the Justus-Liebig Universität, Giessen, Germany. A spectrum analysis software called SyMath developed by one of the authors (G. Mellau) was used to analyze the spectra and obtain improved spectroscopic constants. We report the ro-vibrational constants for the DCN molecule and compare them with a previous study published by E. Möllmann *et al.* [1] in 2002.

REFERENCES

1. E. Möllmann, A. G. Maki, M. Winnewisser, B. P. Winnewisser, W. Quapp, *J. Mol. Spectrosc.* 212, 22–31 (2002).

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