

NEW INFRARED EMISSION MEASUREMENTS ON HNC

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We have measured and analyzed the emission spectrum of HNC from 400 to 4100 cm^{-1} . The HNC was observed as an equilibrium mixture of HCN and HNC in a fused quartz cell heated to 1350 K. The three fundamental bands and many hot bands of HNC were measured with resolutions ranging from 0.006 cm^{-1} for the lowest fundamental to 0.033 cm^{-1} for the other two. Thirty-five different vibrational and vibrational angular momentum states were measured. High rotational levels, in some cases up to $J = 50$, were also measured. Now all the quadratic contributions to the vibrational and rotational term values have been measured, as well as some higher order contributions.