

SPECTROSCOPY OF THE $C^1\Pi$ - $A^1\Delta$ TRANSITION OF NH-Ne^a

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The NH-Ne van der Waals complex has been observed in conjunction with the $C^1\Pi$ - $A^1\Delta$ transition of NH. Low resolution LIF spectra (0.5 cm^{-1} linewidth) exhibit at least three vibronic bands of the complex in the region of the monomer 0-0 band. The complex bands are spread over a region approximately 30 cm^{-1} wide. The lowest energy band is red-shifted relative to the monomer, indicating that the van der Waals bond strengthens on electronic excitation. Spectra recorded at higher resolution (0.08 cm^{-1}) show congested rotational structure. Analyses of these data and spectra for ND-Ne will be reported.

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