ELECTRONIC SPECTROSCOPY OF COBALT-NEON

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Co^+Ne was generated via laser vaporization in a pulsed supersonic expansion source, mass selected, and analyzed by visible photodissociation spectroscopy. An electronic band system was observed with an origin beginning at 13503 cm^{-1}. A progression of peaks beginning from the origin until the convergence limit can be seen, corresponding to the vibrational bands in the excited state of Co^+Ne. The excited state constants (we=124 cm^{-1}) were determined and the electronic cycle leads to a ground state binding energy (D_0=948 cm^{-1}). The ground state binding energy can be compared to other rare gas binding energies, which is correlated to the polarizability of the rare gas.