

## INTRACAVIDY LASER SPECTROSCOPY OF NICKEL CHLORIDE: SYSTEM I

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The near infrared electronic transition of NiCl occurring in the region of  $11,900\text{ cm}^{-1}$  has been recorded by intracavity laser absorption spectroscopy. The NiCl molecules were produced in a nickel hollow cathode operating with an applied potential of 350 to 750 V, using 0.5 to 2.2 torr argon or helium, and a trace amount of carbon tetrachloride. This transition was observed previously at low resolution and originally labeled as System I.<sup>a</sup> At this time we believe it does not connect to the ground state. A high resolution analysis of this transition is in progress and results of the fit will be presented.

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<sup>a</sup>S.V.K. Rao, S.P. Reddy, and P.T. Rao, *Z. Physik* **166**, 261-264 (1962).