ROOM-TEMPERATURE CHIRPED-PULSE FOURIER TRANSFORM MICROWAVE (RT-CP-FTMW) SPECTRUM OF PYRIDINE

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The pure rotational spectrum of pyridine has been measured from 10-18 GHz by room-temperature chirped-pulse Fourier transform microwave (RT-CP-FTMW) spectroscopy. The measurement and analysis of the spectrum will be discussed and compared to previous reports. Anharmonic *ab initio* calculations complemented the spectroscopy and aided in its interpretation. The design and construction of the RT-CP-FTMW spectrometer will be discussed. It is based on a similar design developed in the Pate laboratory at the University of Virginia, but it is less expensive than the original design. Due to its low cost, the RT-CP-FTMW spectrometer is ideally suited for primarily undergraduate institutions (PUIs).