

APPLICATION OF A COAXIALLY CONFIGURED SUB-MILLIMETER PULSE JET SPECTROMETER FOR INVESTIGATION OF WEAKLY BOUND DIMERS.

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Recent investigations of low frequency bending transitions in Ar-HBr, Ar-HI, Ne-DCI and rotation-tunneling transitions in HBr dimer and HI dimer will be reported using a co-axially configured submillimeter pulsed jet spectrometer. These studies will be used to characterize the potential and limitations of this spectrometer for the investigation of this type of weakly bound complex. Finally, the derived spectroscopic data will be utilized to generate improved potentials for the specified dimers including a refined three dimensional potential for the Ar-HBr complex.