SPECTROSCOPIC INVESTIGATION OF ADDITIVE AND NON-ADDITIVE INTERACTIONS IN THE $NeArCO_2$ COMPLEX

YUNJIE XU and WOLFGANG JÄGER, *Department of Chemistry, University of Alberta, Edmonton, AB, Canada, T6G 2G2*.

Rotational spectra of various isotopomers of the $NeArCO_2$ van der Waals complex were investigated with a molecular beam Fourier transform microwave spectrometer. $NeArCO_2$ belongs to a new class of ternary van der Waals complexes; it is of the type RG-RG'-molecule that has not been investigated before. Both a- and b-type rotational transitions were observed in the frequency range from 4 to 19 GHz. The planar moments obtained were interpreted in terms of effective structural parameters. These parameters were compared with those of the respective dimer subunits to extract information about additive and non-additive interactions.