

SPECTROSCOPIC INVESTIGATION OF ADDITIVE AND NON-ADDITIVE INTERACTIONS IN THE NeArCO₂ COMPLEX

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Rotational spectra of various isotopomers of the NeArCO₂ van der Waals complex were investigated with a molecular beam Fourier transform microwave spectrometer. NeArCO₂ 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.