

THE ν_3 FUNDAMENTAL VIBRATIONAL BAND OF SCCCS REVISITED

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The ν_3 fundamental vibrational band of carbon subsulfide, SCCCS, first studied by Holland and collaborators^{a,b} has been reinvestigated using a combination of laser ablation production, free-jet expansion and quantum cascade laser spectroscopy. In addition to the fundamental band (located at 2100 cm^{-1}) and associated hot bands originating from the lowest bending mode ν_7 , the hot bands from the two energetically higher-lying bending modes ν_5 and ν_6 have been observed for the first time as has the S^{13}CCCS isotopic species.

^aF. Holland, M. Winnewisser, C. Jarman, H. W. Kroto, and K. M. T. Yamada 1988, *J. Mol. Spectrosc.* 130, 344

^bF. Holland and M. Winnewisser 1991, *J. Mol. Spectrosc.* 147, 496