

GERMANIUM QUADRUPOLE COUPLING IN THE ROTATIONAL SPECTRUM OF $(\text{CH}_3)_3^{73}\text{GeCl}$

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The microwave spectrum of $(\text{CH}_3)_3^{73}\text{GeCl}$ has been studied using supersonic jet Fourier transform microwave spectroscopy in the range from 7-20 GHz. The assignment of the observed lines is complicated by the presence of three internal rotors and nuclear quadrupole coupling by two different nuclei.

The internal dynamics of the three methyl rotors and nuclear quadrupole coupling of chlorine yielding the V_3 barrier to internal rotation and bonding situation of the chlorine atom, respectively, were determined recently^a. The current investigation extends the nuclear quadrupole coupling analysis towards ^{73}Ge , with a nuclear spin of $I = 9/2$.

^aM. Schnell, J.-U. Grabow, *Phys. Chem. Chem. Phys.* **8**, in press.