

MICROWAVE SPECTRA OF ISOTOPIC SPECIES OF METHANOL

KOJIRO TAKAGI, YUN-BO DUAN and SHOZO TSUNEKAWA, *Department of Physics, Toyama University, Toyama 930-8555, Japan.*

Microwave spectrum of $\text{CH}_3\text{}^{18}\text{OH}$ has been observed in frequency range between 8 and 200 GHz. Observed lines are those with $J \leq 39$, $-K \leq 8$ for both the A and E species in the torsional ground state and some lines, mainly a -type transitions, in the torsional excited states for $\nu_t=1-3$. Total 568 lines have been fitted to 64 parameters in a reduced Hamiltonian with a root-mean square (RMS) of 0.262 MHz, where the A and E substates are treated simultaneously. Microwave spectrum of CH_3OD has been observed in the frequency range between 7 and 200 GHz. These lines have been analyzed by using a reduced Hamiltonian.