STARK SPECTROSCOPY OF CH_3OD AND CD_3OH USING THE DCN AND H_2O LASERS

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The Stark spectra of CH_3OD and CD_3OH have been investigated in the far-infrared region using the DCN and H_2O lasers. The spectra were recorded at room temperature for both parallel and perpendicular polarizations using electric fields up to 60 000 V/cm. Several transitions have been observed with these laser lines. For CD_3OH, the transitions $J_K = 14_5 \leftarrow 13_6$ E_2 $v_t = 1$, $J_K = 14_3 \leftarrow 15_2$ A^- $v_t = 1$, and $J_K = 11_6 \leftarrow 10_7$ E_1 $v_t = 1$ have been identified with the 195 μm line of the DCN laser. Zero-field frequencies for all assigned transitions will be reported.