INTEGRATED INTENSITIES OF OH VIBRATIONAL OVERTONES IN ALCOHOLS

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Intensities for several OH vibrational overtone bands have been measured for vapor phase methanol, ethanol, and isopropanol. The trends in the intensities as a function of excitation level have been modeled by two empirical approaches, yielding intensity predictions for the higher overtone transitions, up to 7ν(OH). These methods were also applied to recent HNO_3 overtone measurements, resulting in new intensity predictions for higher, photochemically-active overtone bands, which are compared with theoretical estimates.