INFRARED SPECTRA OF METHYLAMINE IN THE ASYMMETRIC C-H STRETCH REGION

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High-resolution IR spectra of methylamine were obtained using slit jet absorption spectroscopy. A total of 1330 lines were recorded in the asymmetric C-H stretch region (2965-3005 cm^{-1}). Hindered internal rotation about the C-N bond and inversion of amino group complicate the analysis of the observed spectra. The subbands are found by fitting the lines to quartic polynomials and these assignments are confirmed by comparison with ground state combination differences based on microwave and far infrared data.