

## CP-FTMW SPECTRUM OF BROMOPERFLUOROACETONE

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The microwave spectrum of the molecule bromoperfluoroacetone has been measured on a CP-FTMW spectrometer in the 6-18. The spectra is dense with approximately one transition every 5 MHz on average. Rotational constants, centrifugal distortion parameters, and nuclear quadrupole coupling constants will be discussed. Comparisons to the previously studied halogen analogues perfluoroacetone<sup>a</sup> and chloroperfluoroacetone<sup>b</sup> along with a family of previously studied halogenated acetone species will be discussed.

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<sup>a</sup>J.-U. Grabow, N. Heineking, and W. Stahl, *Z. Naturforsch.* **46a** (1991) 229.

<sup>b</sup>G. Kadiwar, C. T. Dewberry, G. S. Grubbs II and S. A. Cooke, Talk **RH11**, 65<sup>th</sup> International Symposium on Molecular Spectroscopy (2010).