SEARCHING FOR AMINOMETHANOL AMONGST THE REACTION PRODUCTS OF $\mathrm{O}(^{1}\mathrm{D})$ INSERTION INTO METHYLAMINE

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Aminomethanol (HOCH₂NH₂) is a molecule of astrochemical interest as it is thought to be the precursor to the simplest amino acid, glycine. To date, no laboratory spectrum has been recorded because it is unstable under normal laboratory conditions. As a result, a millimeter spectrometer was developed to study the products of $O(^1D)$ insertion into methylamine, with the goal of producing aminomethanol. Here we present the results of this study, including other observed reaction products and a preliminary assignment of aminomethanol.