

THE MILLIMETER- AND SUBMILLIMETER-WAVE SPECTRUM OF CYANOFORMAMIDE (NCCONH₂)

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If water (H₂O) and cyanogen (NCCN) are made to react in the presence of a catalyst, the product is cyanofornamide (NCCONH₂). Using this procedure Christiansen^a in the GIESSEN Laboratory has synthesized this molecule and has measured for the first time the microwave spectrum between 18 and 40 GHz with a Hewlett-Packard spectrometer. Employing a more convenient synthesis for NCCONH₂, we were able to extend the measurements into the millimeter- and submillimeter region using the fast-scan spectrometer (FASSST). The chemical synthesis, the measurements, the laboratory data and their analysis will be discussed. They should provide the information necessary to search for this species in space.

^aJ. J. Christiansen, *to be published*