

SPECTROSCOPY AND HIGH RESOLUTION PHOTOCHEMISTRY OF THE $\tilde{A}^2\Pi$ STATE OF THE HCCS RADICAL

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The “dark” photodissociating vibronic levels of the $\tilde{A}^2\Pi$ state of the radical have been probed in a jet-cooled expansion by the fluorescence depletion spectroscopy (FDS) technique. Over thirty dark levels have been observed within the region of 2000 cm^{-1} above the origin. The FDS spectrum compliments previously taken LIF spectrum. Vibronic analysis and fragmentation process will be discussed.