

FOURIER TRANSFORM EMISSION SPECTROSCOPY OF ScS

R. S. RAM, *Department of Chemistry, University of Arizona, Tucson, AZ 85721*; P. F. BERNATH, *Department of Chemistry, University of Waterloo, Waterloo, Ont., Canada N2L 3G1*; and T. C. STEIMLE, *Department of Chemistry and Biochemistry, Arizona State University, Tempe, AZ 85287*.

The emission spectra of the $A^2\Pi - X^2\Sigma^+$ and $B^2\Sigma^+ - X^2\Sigma^+$ systems of ScS have been observed in the $10000 - 13500 \text{ cm}^{-1}$ region using a Fourier transform spectrometer. A rotational analysis of the $0 - 1$, $0 - 0$ and $1 - 0$ bands of the $A^2\Pi_{3/2} - X^2\Sigma^+$ and $0 - 1$, $0 - 0$, $1 - 0$, $2 - 0$ and $3 - 1$ bands of the $B^2\Sigma^+ - X^2\Sigma^+$ systems has been obtained and improved spectroscopic constants have been extracted for the electronic states of ScS.