CHIRPED PULSE FOURIER TRANSFORM MICROWAVE SPECTROSCOPY OF SnCl

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Tin metal has been laser ablated with the pulsed fundamental output of a Nd: YAG laser. Chlorine gas dissolved in argon was pulsed into the products of this ablation event. One outcome of this has been the formation of SnCl entrained in a supersonic expansion. The expansion occured between the horn antenna of a chirped pulse, Fourier transform microwave spectrometer and accordingly the pure rotational spectra of SnCl, $X^2\Pi_r$, has been recorded for the first time between 8 and 18 GHz. Spectroscopic constants will be presented.