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Analysis of Optical Spectra Measured in Plasma-Based Tissue Removal System MYEONG CHOI, IL GYO KOO, CAMERON MOORE, GEORGE COLLINS, Colorado State University — An atmospheric pressure plasma used for tissue removal is characterized based on emission spectroscopy. This type of plasma system, which produces large concentrations of reactive chemical species, demonstrates potential application to tissue processing. The plasma is generated using radio frequency (RF) power that is delivered through the dielectric barrier of a quartz tube. In particular we identify gas phase species and estimate their relative concentrations with varying amounts of delivered power, chemical flow, and amount of tissue removal.

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