ELECTRONIC SPECTROSCOPY OF THE $6p \leftarrow 6s$ TRANSITION IN Au-Ne

ADRIAN M. GARDNER, RICHARD J. PLOWRIGHT, CAROLYN D. WITHERS, TIMOTHY G. WRIGHT, School of Chemistry, University of Nottingham, University Park, Nottingham, NG7 2RD, United Kingdom; MICHAEL D. MORSE and W. H. BRECKENRIDGE, Department of Chemistry, 315 South 1400 East, Room 2020, University of Utah, Salt Lake City, Utah 84112.

Electronic spectra of the Au-Ne complex have been recorded for the first time in the vicinity of the atomic Au 6p \leftarrow 6s transition. A structured spectrum was observed near the Au $^2P_{3/2} \leftarrow ^2S_{1/2}$ transition, however, the complex spectrum expected near the Au $^2P_{1/2} \leftarrow ^2S_{1/2}$ transition was not observed. This is rationalized using high level *ab intio* calculations.

^aR. J. Plowright, A. M. Gardner, C. D. Withers, T. G. Wright, M. D. Morse and W. H. Breckenridge, J. Phys. Chem. A, 114, 3103, (2010)