

SPECTROSCOPY OF THE NO-Ar COMPLEX IN THE VICINITY OF THE $3p \leftarrow X^2\Pi$ TRANSITIONS IN NITRIC OXIDE

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Spectra of the NO-Ar complex have been recorded using REMPI spectroscopy in the region corresponding to transitions to the $3p$ Rydberg states in uncomplexed NO. Additionally, spectra have been simulated using *ab initio* techniques with the aim of better understanding this region, as previous favourable results have been obtained using a similar approach for the $3s$ Rydberg state^a. Excellent agreement with the REMPI spectra is seen for the $3p\pi$ state simulation. Results on the $3p\sigma$ state will be discussed, along with extension to other NO-Rare Gas complexes.

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