

# The Interference Study of Green-House Gases for an Ammonia Sensor

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**Abstract:** This paper describes a preliminary study of the possibility of greenhouse interference during ammonia measurement in the  $200\text{nm}$ - $230\text{nm}$  region. An absorption spectrum of ammonia is compared with the greenhouse gases absorption lines to theoretically justify that there were no discernible interference effects during the ammonia concentration measurements. It was theoretically found that the primary greenhouse gases namely ozone, methane and nitrous oxide have no significant interference for ammonia sensing in the  $200\text{nm}$ - $210\text{nm}$  region.

**Keywords:** ammonia sensing, interference, spectroscopy, spectra comparison.

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