



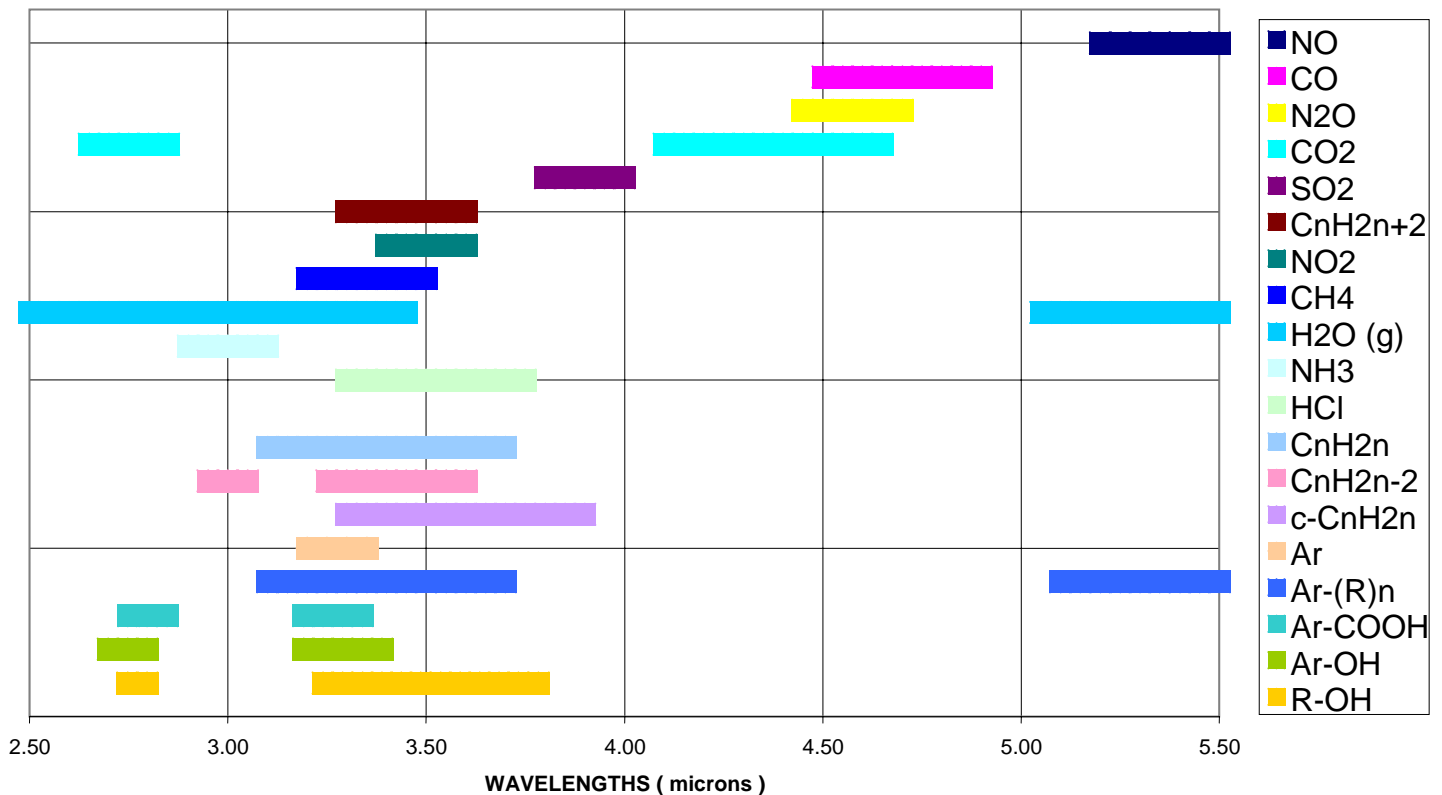
Time based Levels Of Detection Using Aspectrics MultiComponent™ 5000 Analyzer and I-Cell dedicated sampling accessories.

SUMMARY: *when dealing with the quantitative analysis of IR-absorbing chemicals in gas phase, an ever-present question is that of the limit of detection of the method.*

Current EP-IR spectrometers can be used for the detection of many more chemical compounds than just hydrocarbon compounds. As a matter of fact, many nitrogen, oxygen, sulfur and halogen containing compounds do present very distinct absorption features in this region of the spectrum as well.

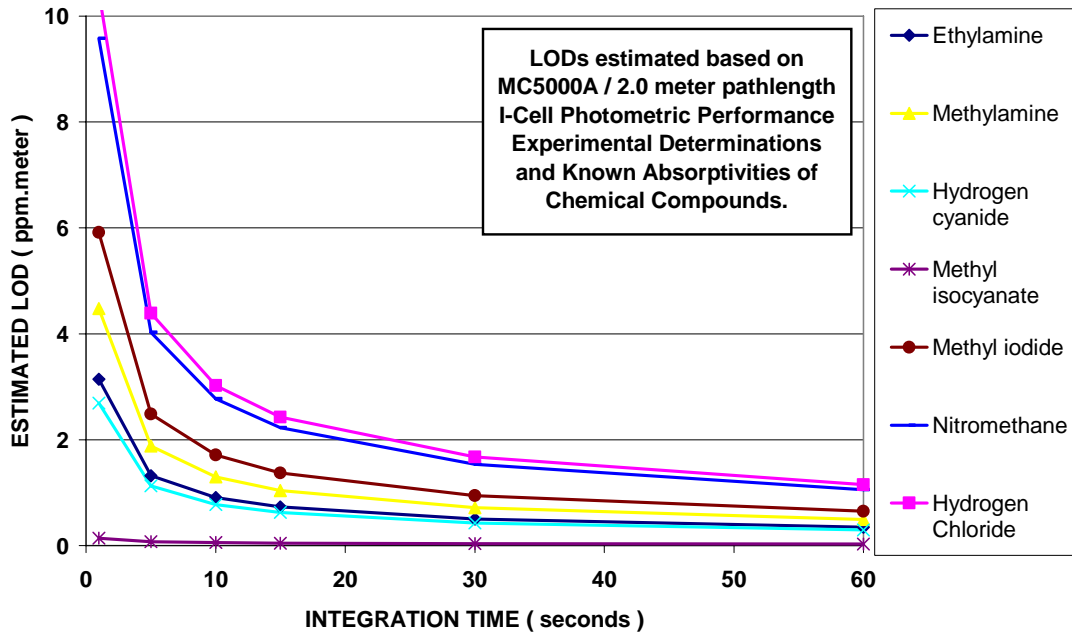
This technical note reports, based upon the experimental determination of photometric noise of EP-IR spectrometers coupled to a dedicated 2.0 meter multi-pass I-Cell gas sampling accessory and known IR absorptivities of chemical compounds, theoretical levels of detection as a function of time.

Combustion Emission Chemicals Species Observed By Aspectrics MultiComponent™ 5000 Analyzer





Estimated LODs Nitrogen and Halogen Containing Compounds



Estimated LODs Oxygen & Sulphur Containing Compounds

