



Measurements of carbon monoxide and methane at ppb level using Mid-IR Laser based sensor

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We are currently developing a middle-infrared laser-based sensor platform that is capable of monitoring a wide range of species with high sensitivity, accuracy and selectivity. The laser technology covers the O-H, N-H, and C-H stretch region between 3-4 microns and the C-O and N-O stretch region between 4-4.6 microns and is being used to monitor key greenhouse and other trace gases such as CH₄, CO₂, CO and N₂O. We will present results from laboratory tests of sensitivity, stability, and accuracy showing ppb level performance for carbon monoxide and methane. For CO, this level of precision is key for source attribution in background monitoring applications and for CH₄ it is required for greenhouse gas monitoring.