Quantification of liquid products from the electroreduction of CO2 and CO using static headspace-gas chromatography and nuclear magnetic resonance spectroscopy

Static headspace-gas chromatography (HS-GC) useful for ex-situ liquid product analysis. Could complement high-performance liquid chromatography and NMR spectroscopy. Particularly high sensitivity towards compounds with high vapor pressure. Detection limits below 0.5μM were shown for acetaldehyde and propionaldehyde. Cannot detect protonated compounds such as formate and acetate.

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