



## Any questions?

- **How does the Jetanizer work?**

The Jetanizer is a 3D printed FID jet, that is filled with ARC's patented methanation catalyst. It uses the FID's heater and hydrogen supply to convert CO, CO<sub>2</sub> and formaldehyde to methane for detection in the FID.

- **What is the longevity of the Jetanizer?**

The Jetanizer lasts about 6 months or 5,000 injections. This is dependent on the compounds that are being analysed. Exposing the Jetanizer to ambient air while at 400°C can lead to damage and should be avoided. The catalyst can tolerate air injections for analysis.

- **What sample matrices should be avoided to reduce potential poisoning of the catalyst?**

There is a shortened lifetime of the catalyst caused by high molecular weight hydrocarbons (C<sub>6</sub>+), alkynes, unsaturated hydrocarbons, and sulfur-containing compounds. These should all be avoided if possible. Avoiding these compounds will extend the life of the Jetanizer. You can use the Jetanizer to backflush to avoid injecting larger compounds.

- **What is the sensitivity of the Jetanizer-FID for CO, CO<sub>2</sub>, and formaldehyde?**

The sensitivity is that of your FID for methane. A variety of factors can impact sensitivity or LOD, such as baseline noise and separation resolution. We have quantified concentrations less than 1 ppm for CO, CO<sub>2</sub>, and formaldehyde. Detection limits for CO & CO<sub>2</sub> have been as low as 100 ppb.