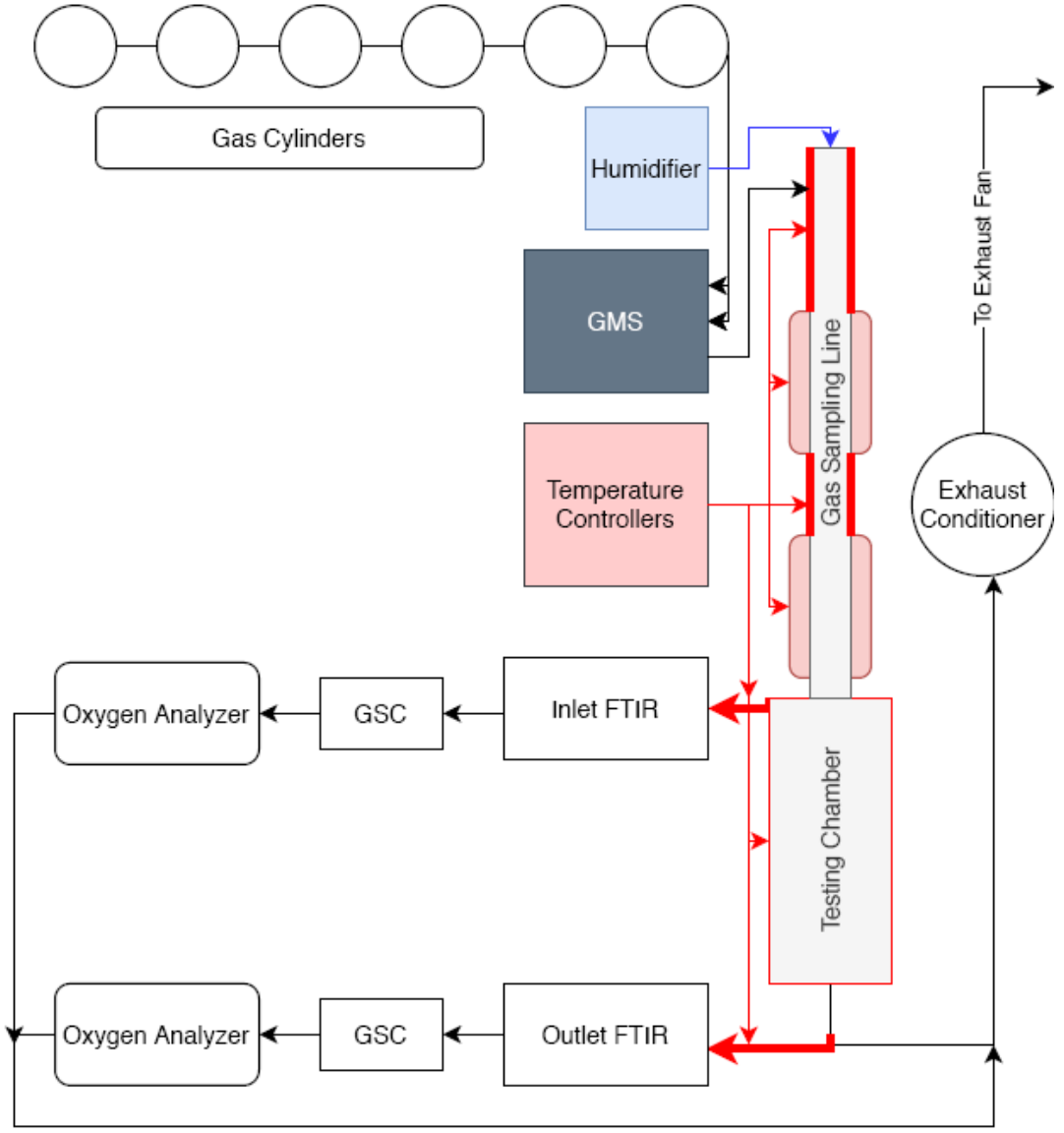
Microbench Catalyst Testing Facility

Further expand your testing needs with CO oxidation, VOC conversion, and more using ICT's microbench facility.

Microbench Layout

- Gas cylinders are used to produce nearly any composition of simulated flue gas, and water in injected using a dedicated, high precision pump.
- Temperature is monitored and controlled throughout the system using a combination of inline heaters, heat wraps, and a tube furnace to ensure test conditions match field conditions as closely as possible.
- FTIR and separate O_2 analyzers collect compositional data of the simulated gas before and after the catalyst.



Versatility at Your Fingertips

- Our gas mixing system (GMS) allows for up to five independent gas cylinders as inputs, and each gas species is controlled using its own mass flow controller for maximum accuracy.
- Additional species can be added with ease using vaporizes located before the test chamber.
- Temperature can be modified quickly due to the size of the system, allowing for dynamic testing across a range of temperatures.

Power of FTIR

- Our FTIR analyzers can detect a wide range of gases, and simultaneous measurements of the inlet and outlet of the test chamber can provide accurate, instant feedback on the performance of your catalyst.
- DeNOx activity, CO oxidation rates, VOC conversions and more can be determined via FTIR, allowing ICT to test for a variety of applications such as coal, natural gas, and diesel-fired generators.
- Daily checks of the analyzers are conducted to ensure reliable data is obtained.