



Liquid Calibration System (LCS)

Direct calibration of instrument response using liquid standards



Features

- Compatible with single standards or mixtures
- Precise liquid flow control
- Wide concentration range, pptv - ppmv
- Response in seconds
- Volatility range up to C12 hydrocarbons
- Easy to exchange liquid reservoir
- Cost effective compared to gas standards
- Dedicated control in Vocus software

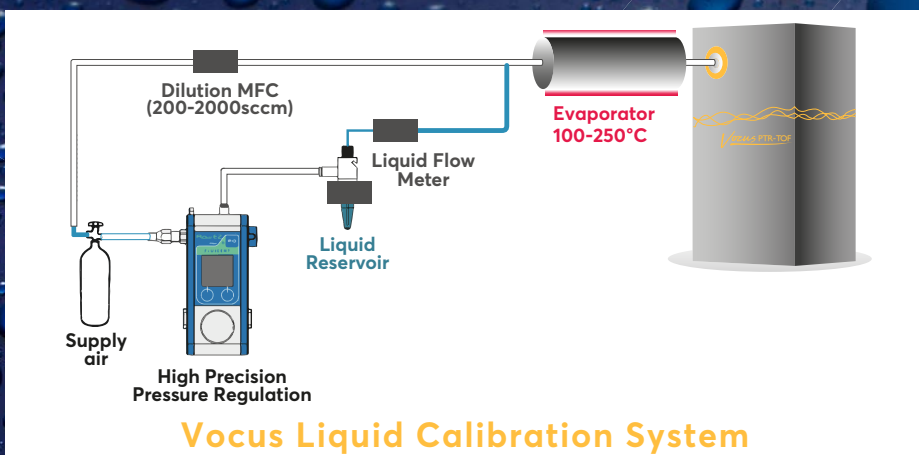
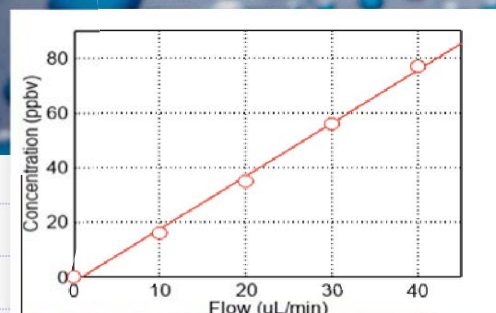
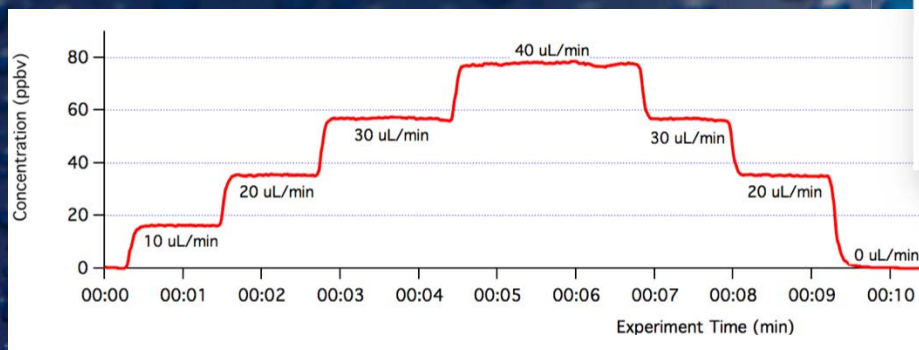
Uses

- Determination of instrument sensitivity and detection limits
- Interpretation of gas-phase data
- Direct liquid analysis
- Trace contaminants in water samples

Vocus CI-TOF

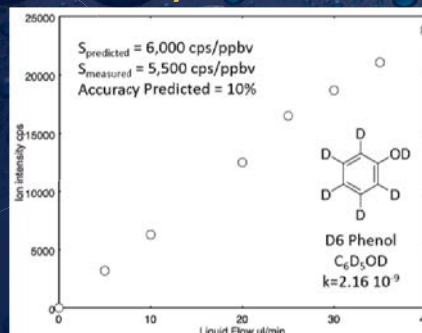
Calibration with a liquid standard

Calibrations are obtained by adjusting the flow rate of the liquid standard during continuous data acquisition with the Vocus CI-TOF.



Vocus Liquid Calibration System

Confirming estimated sensitivity



Vocus sensitivity for many compounds can be estimated using published reaction rate coefficients.

The LCS can be used to quickly check the accuracy of such predicted values. Here, it was shown that the estimated sensitivity for D6 phenol was within 10% of the measured.

Specifications

Liquid Flow Rate	0 to 50 $\mu\text{L}/\text{min}$
Dilution Gas Flow Rate	0 to 2 L/min
Flow Precision	5%
Evaporation Temperature	100 to 200C
Transfer Line Temperature	Ambient to 250C
Size	25 x 15 x 10 cm, 4 kg