

Guidelines for cleaning ultraFAIMS chips

After heavy use, ultraFAIMS chips may start to show signs of contamination. Replacement chip modules can be ordered from Owlstone when required, but often the lifetime can be extended by cleaning the chips.

Often, simply leaving the chip on the Mass Spectrometer overnight with hot gases (which must **not** exceed 200°C) flowing in the source will remove contamination.

If this is not sufficient, remove the chip module from the FAIMS interface and sonicate in an appropriate solvent (or series of solvents) for up to 20 mins per solvent. The following solvents are compatible:

- Toluene
- Isopropyl alcohol
- De-ionised Water
- Methanol

Whichever of these solvents are used, we recommend rinsing with de-ionised water and then HPLC-grade methanol as the final stage.

After removing the chip module from the liquid, allow it to dry FULLY before running any FAIMS sweeps. If FAIMS voltages are applied to a wet chip module, the chip and the ultraFAIMS control unit may be damaged and the warranty will be voided.