

Glossary

Act	The Enterprise Act 2002.
CC	Competition Commission.
Gas IRMS	Gas isotope ratio mass spectrometers: Gas IRMS (also called 'stable' or 'light' IRMS) analyse stable elements, samples of which have been introduced in gaseous form.
GVI	GV Instruments Limited.
Ionization	Ionization is the gain or loss of electrons. The loss of electrons converts an atom into a positively charged ion, while the gain of electrons converts an atom into a negatively charged ion.
Isotope	Isotopes are any of the several different forms of an element each having different atomic mass (mass number). Isotopes of an element have nuclei with the same number of protons but different numbers of neutrons.
Isotope ratio	The ratio of the different isotopes of an element present in a sample.
IRMS	Isotope ratio mass spectrometers or isotope ratio mass spectrometry (depending on context).
MC-ICP-MS	Multi-collector Inductively Coupled Plasma mass spectrometers: MC-ICP-MS use inductively-coupled plasma heated to about 10,000°C as the ion source.
MS	Mass spectrometer or mass spectrometry (depending on context): a mass spectrometer is a device that is used to establish the masses and relative concentrations of atoms and molecules in a sample. It works by ionizing (see ionization) the sample, separating ions of different mass in the sample, and measuring the concentration of each type of ion detected.
Noble Gas IRMS	Noble gases are stable gases which do not react with other elements. Noble Gas IRMS analyse the isotopic ratios of helium, neon, argon, krypton and xenon.
OFT	Office of Fair Trading.
Peripherals	Peripherals are sample preparation systems and sample introduction devices as well as software interfaces between these devices and the mass spectrometer.
Plasma	A plasma is a gas consisting of ions, electrons and neutral particles. In MC-ICP-MS , a plasma is formed from argon gas. The plasma is used to atomize and ionize (see ionization) the elements in a sample.

Thermo

Thermo Electron Corporation, of which Thermo Electron Manufacturing Limited, which acquired GVI in July 2006, is a part.

TIMS

Thermal Ionization mass spectrometers: TIMS utilize a heat process to perform the ionization function with the sample introduced into the instrument on a filament through which an electric current is then passed.