

Call for Tender

Supply of compound-specific isotope analyser for analysis of deuterium enrichment at ppm level in individual amino acids

Tenders are invited for the supply of a compound-specific isotope analyser, comprising a capillary GC interfaced to an isotope ratio mass spectrometer (IRMS) through a high temperature capillary furnace along with an elemental analyser. The GC should be fitted with an auto-sampler with capacity for at least 16 microvials and a FID. The GC capillary column should be 0.32 mm wide and 60 m long with a 5 m retention gap and medium polarity phase (DB-17 type), suitable for separating volatile amino acid derivatives. Large volume injection is desirable as is capillary flow technology switching for solvent bypass and peak heart-cutting. The interface should be capable of high temperature pyrolysis ($\sim 1400\text{ }^{\circ}\text{C}$, for H_2) and combustion chemistries (for CO_2 and N_2). The IRMS should be capable of better than $10\text{ } \delta\text{ } \text{‰}$ ^2H precision ($< 0.2\text{ } \delta\text{ } \text{‰}$ ^{13}C and $< 0.5\text{ } \delta\text{ } \text{‰}$ ^{15}N) upon repeated injection of sub-nanomolar quantities of volatile amino acid derivatives, derived from protein hydrolysates and biological fluids. Control software should be capable of accurate data reduction through comparison with internal and external standards, with spreadsheet-compatible data output.

The quotation should include regulators for gas cylinders, gas tubing, spares and training.

Please do note that the sealed tender should be sent by the 30th of March, 2015 to:

**The Dean, St John's Research institute,
Opposite to Koramangala BDA Complex,
100 Feet Road, Koramangala,
Bangalore - 560034
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