VIMS IRMS Facility

Virginia Institute of Marine Science

Research Scientist and Facility Manager:
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Rates & Analytical Services
September 2027 – Cost per Sample

For inquiries regarding GC-FID, GC-IRMS, EA-IRMS, or GB-IRMS analyses, please contact
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EA-IRMS

Elemental Analyzer optimized for stable carbon and nitrogen isotopic analyses in solid matrices.

Instrument: Delta-V advantage IRMS (Thermo Fisher Scientific) with dual inlet and Conflo IV interfaced with an elemental analyzer peripheral (EA; Costech ECS 4010 CHNS-O) for $\delta^{13}C$ and $\delta^{15}N$ of solid samples

Analytical Service	Internal	External
C & N in solids	$9.25	$10.92
Tinning samples	$5.00	$5.90
Difficult samples	$3.00	$3.54
Acid fumigation	$2.25	$2.66





GB-IRMS

GasBench II continuous flow isotope ratio determinations of CO_2 and N_2 gases.

Instrument: Delta-V advantage IRMS (Thermo Fisher Scientific) with dual inlet and Conflo IV interfaced with a GasBench II peripheral (Thermo Fisher Scientific) for $\delta^{13}C$ and $\delta^{15}N$ of headspace gases and dissolved inorganic carbon (DIC).

Analytical Service	Internal	External
CO_2 in gas	$17.00	$20.06
N_2 in gas	$12.50	$14.75
DIC	-	-

GC-IsoLink IRMS

Compound Specific Isotopic Analysis (CSIA) for lipid biomarkers and Amino Acids. If interested in other compounds, please contact us.

Instrument: A Trace 1610 GC and a GC IsoLink II (combustion/conversion) coupled via a ConFlo IV to a Delta Q IRMS (Thermo Fisher Scientific)

Analytical Service	Internal	External
CSIA-FAMES & n-Alkanes	$140.50	$165.79
Biomarkers extraction	$70.00	$82.60
FAMES derivatization	$60.00	$70.80
GC-FID (quantification)	$29	$34.22
CSIA-Amino acids	$250.00	$295.00

