



### Equipment & Analytical Costs for External Clients

Unless otherwise stated, prices are given in New Zealand dollars and are listed exclusive of GST or applicable local tax. Prices are subject to change. For all instruments and services, users who intend ongoing use or have large scale projects are invited to negotiate a special contracted price.

#### Chemical Services Unit

##### AA Analysis

\$100/sample/element for a sample fully-prepared.

Multiple samples and sample preparation is negotiable.

- User operated: \$50/sample/element
- Additional technical assistance: \$75/hour

##### GC-MS

\$100-\$150/sample depending upon the information required (No data processing is included in this charge).

Multiple samples by negotiation.

- User operated (Users supply their own columns): \$75/hour or \$200/day
- Training (mandatory): \$150/hour
- Additional technical assistance: \$75/hour

##### HPLC including Ion Chromatography

\$100/sample set of up to 6 samples in the same system plus consumables.

System set-up and sample preparation: \$75/hour (1 hour minimum charge). Larger sets and multiple systems by negotiation.

All rates for HPLC are based upon provision by the client of a column and HPLC-grade solvents.

##### LC-MSn

Users must supply their own columns plus eluents for liquid chromatography.

- Direct infusion plus msn: \$100/sample  
Prices for multiple samples can be negotiated.
- Liquid Chromatography-Mass Spectrometry: Price upon application.
- User operated: \$500/day or part thereof
- Training (mandatory): \$150/hour
- Additional technical assistance: \$75/hour

##### High Resolution MS

- High Resolution Mass Spectrum by ESI: \$75/sample.  
Rates for multiple samples can be negotiated.

- Protein Molecular Weight Determination: Price upon application.

##### Other Instruments

IR Spectrometers, UV-VIS Spectrometers, Differential Scanning Calorimeter, Luminescence Spectrometer, Electron Spin resonance Spectrometer, X-Ray Diffractometer, Zeta Particle Sizer.

- \$125/hour plus consumables plus technician time at \$75/hour (1 hour minimum charge).

#### NMR

- \$165/hour for acquisition of spectra (1 hour minimum charge) plus \$150/hour for an academic to interpret the spectrum (1 hour minimum charge).
- User operated: \$120/hour plus any required training by an academic at \$150/hour.

#### MALDI-TOF

##### Full Technical Service

With full service from the unit's technical staff, costs are as follows:

##### Molecular Weight Determination

- 1-5 samples \$105 /sample
- 6 + samples \$95 /sample

##### Tryptic Digestion

- 1-10 samples \$125 /sample
- 11-20 samples \$110 /sample
- 21 + samples \$95 /sample

##### Peptide Mass Fingerprinting

- 1-10 samples \$95 /sample
- 11-20 samples \$85 /sample
- 21 + samples \$80 /sample

##### Tandem Mass Spectrometry

- 1-10 samples \$95 /ion
- 11-20 samples \$85 /ion
- 21 + samples \$80 /ion
- In-depth analysis \$100 /hr

##### User Operated Operation

- Training (mandatory): \$100/hour plus reagent costs
- Instrument usage: \$150/hour

##### Contract Instrument Use

For extensive use a contract may be negotiated and will vary with amount of use and goods and services required.

#### ICP-MS

For fully prepared samples the fees are:-

- ICP/MS (up to 40 elements): \$30/sample
- Urgent ICP/MS (up to 40 elements): \$35/sample
- Laser Ablation/ICP/MS: \$880/day or part thereof
- ICP/MS in DRC mode (using ammonia or methane to remove interfering species): \$38/sample
- ICP/MS in DRC mode (using two channels): \$46/sample
- Sample preparation: \$75/hour or part thereof
- Method development: \$75/hour or part thereof
- Custom ICP/MS for unique sample: \$75/sample
- Interpretation of data by Academic and peer reviewed: \$200/hour or part thereof

#### Waikato DNA Sequencing Facility

##### Core Services Pricing

All services include options for electropherogram printouts, secure FTP file hosting and the emailing of generated FASTA files. Failed reactions will be re-setup or rerun once (dependant on template and primer availability), with further work at the discretion of the WDSF and its staff.

- Full Sequencing: \$20/sequencing reaction. A single dye terminator sequencing reaction.
- Genotyping Reactions: \$10/sample. Single genotyping (Fragment or SNP) reactions with result collation.
- Run only: \$8/sample. For those performing their own sequencing or genotyping reactions.
- Quantitations: Complimentary. Each template is eligible for free quantitation by fluorometry.

##### High Throughput Pricing

For large numbers of similar templates like clone libraries, environmental collections or population profiling. Failed HT reactions or runs to be resetup or rerun at the sole discretion of the WDSF.

See our website at

<http://sci.waikato.ac.nz/research/facilities/dna>.

Please contact us at [sequence@waikato.ac.nz](mailto:sequence@waikato.ac.nz) or 07 838 4757 for details or to establish HT pricing for your group or project.

#### Waikato Electron Microscope Facility

##### Scanning Electron Microscope

- 1-2 samples \$350
- 3-4 samples \$425
- Operator \$450.00/hr
- Cryo-SEM \$250/hr

##### CPD (Critical Point Drying):

- 1-5 samples \$250

##### Transmission Electron Microscope

- Price on application.

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# Faculty of Science & Engineering Services

## Earth & Ocean Sciences Services

### Nitrogen (N) and carbon (C) analysis by LECO furnace methods

- 1-20 samples \$25/sample
- 21-100 samples \$20/sample
- >100 samples \$16/sample

These are the prices for dried and ground material for direct weighing. We can grind/ball mill the samples here for you at an extra cost of \$5-10 per sample.

### Mineral identification by XRD

Determination of very fine grained minerals not identifiable by petrographic microscope.

- XRD chart \$50 each
- XRD chart and interpretation \$150 each

### Composition of earth materials for major and trace elements by XRF

Rocks, sands, soils. Price depends on whether major or trace elements are required, and number of samples.

- Trace elements \$100/sample (+GST)
- Major and trace analyses \$150/sample

### Mineral separation and thin sections

Mineral separation: Dependant of rock type and minerals required.

- Standard thin-sections: \$60 each (+GST)
- Polished standard thin-section for reflected light: \$85 each (+GST)
- Petrographic description: \$150 each (+GST)

### Laser-based particle size analysis of a range of materials

Samples that do not require organic material removed:-

- 1-20 samples: \$60/sample
- 21-40 samples: \$50/sample
- 41+ samples: \$40/sample

Samples that require organic material removed:-

- \$85/sample

### Triaxial compressive stress testing of rocks and soils

Price on enquiry

### Shallow water survey of bathymetry by Multibeam

Price on enquiry

### Oxygen and carbon stable isotope analysis

- CO<sub>2</sub> gas ( $\delta^{13}\text{C}$  and  $\delta^{18}\text{O}$ ): \$30/sample
- Carbonates ( $\delta^{13}\text{C}$  and  $\delta^{18}\text{O}$ ): \$60/sample

### Mastersizer 2000

Measure particles between the sizes 0.06 and 2000 micrometers. Bulk samples may be discounted.

- Cost per sample \$60 (+GST)
- If organic removal required \$85

## Waikato Biological Imaging Facility

### Confocal Microscopy

- \$70 per hour.
- An introductory fee of \$40 per hour for the first 5 hours of confocal microscope usage.
- Training on the instrument is included at this time.
- Additional technical assistance (after the first five hours): \$25/hour

### Photomicroscopy and Photography

- Including epi-fluorescence and all transmitted light modes
- High resolution still, time-lapse and video Imaging
- Extended depth-of-field imaging using AutoMontage
- Photomacrography, close-up and general technical photography.

Shorter tasks are charged at \$60 per hour with a minimum charge of \$30. Additional time is assessed in quarter-hourly increments.

Charging for longer periods, including for time-lapse photography, is by negotiation.

Certain facilities may be available to approved users to operate the equipment themselves.

Access and pricing are negotiable.

## Waikato Stable Isotope Unit

### Routine\* C or N isotope analysis and N Content

- 1-20 samples: \$NZ25 or \$A25/sample (NZ and Australia); \$US20 for others
- 21-100 samples: \$NZ20 or \$A20/sample (NZ and Australia); \$US15 for others
- 101-300 samples: \$NZ16 or \$A16/sample (NZ and Australia); \$US13 for others
- >300 samples: \$NZ13.50 or \$A13.50/sample (NZ and Australia); \$US11 for others

*\* Routine samples are dry plant or animal samples for which C and N content is known within reasonable limits. If sample is not routine, we will provide a specific quotation for the analysis.*

### Other service charges

- Grinding (depending on sample type): \$5 - \$10 (\$NZ, \$A, or \$US)
- Second isotope: 60% extra
- Precision %N: No extra charge
- Precision %C: Extra \$10
- Non routine samples (e.g. sediment) : \$25 per isotope

### Routine-precision 13C in breath ( $\pm 1.05\%$ )

- 1-10 subjects \$NZ25
- 11-100 subjects \$NZ17
- >100 subjects \$NZ13

### Routine-precision 18O in water ( $\pm 1.0\%$ )

- 1-50 samples \$NZ30.00
- >50 samples \$NZ25.00
- >100 samples \$NZ20.00

See our website at

<http://sci.waikato.ac.nz/research/centres-and-units/isotope>.

## Waikato Radiocarbon Dating Laboratory

- Radiometric determinations: \$525/sample
- AMS determinations: \$775/sample

For a fast turnaround on standard radiometric determinations (2 weeks) and AMS (4 weeks) an additional express rate of \$200/sample applies.

Note: These charges include standard pre-treatment procedures and stable isotope analysis ( $^{13}\text{C}/^{12}\text{C}$ ).

For costs of specialized pre-treatments please see our website [www.radiocarbon dating.com](http://www.radiocarbon dating.com). Contact the lab for bulk discount prices (>10 samples).

Extended counting can be provided for radiometric determinations for an additional charge of \$50/sample (1000 minutes) or \$100/sample (2000 minutes).

For samples imported from overseas an additional MAF import charge of \$35 applies. This is an inspection fee levied by the Ministry of Agriculture and Forestry on all samples imported into New Zealand. If samples in a batch are unsuitable for dating, we reserve the right to charge an inspection fee of \$50 plus the MAF fee. Any samples that have undergone pre-treatment and subsequently found to be unsuitable for dating, or abandoned for other reasons, may incur a partial charge. Typically this is \$100 for the cost of the pre-treatment or \$200 for pre-treatment and combustion but charges will vary depending on the sample type.

### Options for pre-treatment procedures

- Cellulose extraction (recommended for wood samples): \$100
- Gelatinisation of bone (includes N%, 15N, 13C and C/N analyses): \$175
- Solvent extraction (for samples that may be contaminated by oil, glue etc): \$100

*\* N% analysis is undertaken as a preliminary step to test bone for suitability for dating. If the bone is found to be unsuitable we charge.*

See our website at [www.radiocarbon dating.com](http://www.radiocarbon dating.com).

### Other available services include:

- Auto Analyser / FIA
- Electric Fishing Survey Equipment
- Blood / Oxygen Binding analyses
- Research vessels (plus associated marine and limnological sampling tools)
- Water flumes – flow, wave, annular.

For more information and contact details, please refer to the Faculty's website <http://sci.waikato.ac.nz/research/facilities>.