



19th Quaternary Techniques Short course

Measuring change and
reconstructing past
environments



Weds 9 – Fri 11 August 2023

GNS Science National Isotope Centre
Lower Hutt



TOPICS

Types of archives

- lakes and peats
- marine sediments
- carbonates
- ice cores
- landforms
- soil
- groundwater

Types of proxies

- pollen, chironomids, diatoms
- forams, radiolarians
- stable isotopes of carbon, oxygen, nitrogen
- biomarkers, ancient DNA

Dating techniques

- ¹⁴C
- Tritium
- ¹⁰Be and ²⁶Al (Surface Exposure Dating)
- Paleomagnetism
- Tephrochronology

Laboratory tours and demonstrations:

¹⁴C sample preparation, stable isotope measurement, mass spectrometer measurement, sediment core recovery, soil stratigraphy, ice core analysis and archive, microfossil selection and preparation, hyperspectral core imaging and hand-held XRF.

Registration and full programme:

<http://www.gns.cri.nz/qtshortcourse> (active from 1 July)

- early registration \$240 incl GST [1-31 July]
- standard registration \$300 incl GST [1-4 August]
- refunds available until 31 July
- limited to 30 participants, minimum participants 20

Enquiries: QT_shortcourse@gns.cri.nz