

**UNIVERSITY OF OTAGO**  
**ŌTĀKOU WHAKAIHU WAKA**

**JOB DESCRIPTION**

**ROLE TITLE: Core Repository & Instrumentation Specialist**

**DEPARTMENT: Geology – Otago Repository for Core Analysis (ORCA)**

**SCHOOL / DIVISION:** Sciences

**REPORTS TO:** ORCA Manager

**DIRECT REPORTS (FTE):** 0.0 FTE

**INDIRECT REPORTS (FTE)** 0.0 FTE

**1. PRIMARY PURPOSE OF THE ROLE:**

Provide technical support for the day-to-day operation of the Otago Repository for Core Analysis (ORCA) within the Department of Geology. The role supports the operation of specialised analytical instrumentation, collections handling, sample processing, and established QA/QC and compliance procedures under the direction of the ORCA Manager.

**2. ACCOUNTABILITIES:**

- Operate and maintain ORCA core-scanning and analytical instrumentation, including the Geotek MSCL, Geotek Boxscan, Itrax XRF core scanner, and Labconco freeze dryer. This includes instrument set-up, routine calibration checks, routine troubleshooting, and arranging servicing or repairs as directed.
- Acquire and process analytical data from ORCA instrumentation, including routine data reduction, file management, metadata entry, and QA/QC checks, in accordance with established ORCA procedures.
- Maintain and update ORCA sample and metadata records, including sample registration, tracking, and linkages between samples, cores, images, and analytical datasets, following established procedures.
- Curate and organise physical collections, including cores, core boxes, subsamples, and associated materials, using established storage, labelling, and inventory procedures.
- Undertake core handling and sampling activities including receiving cores, initial inspection and documentation, splitting, sub-sampling, labelling, packaging, and preparing samples for internal analysis or external shipment in accordance with SOPs.
- Support teaching and research activities hosted in ORCA, including preparation of laboratory and teaching spaces, set-up of demonstrations or practical classes, and technical support during teaching and workshops.
- Provide user support and routine training for students, staff, and approved external users of ORCA facilities and datasets, including equipment inductions, safe-work practices, and guidance on established workflows.

- Maintain and update SOPs, user guides, and workflow documentation, and contribute to revisions of procedures and risk assessments as directed.
- Assist with field operations linked to ORCA programmes, including preparation, maintenance, mobilisation/demobilisation, and inventory management of field and vessel equipment, and participation in fieldwork as required.
- Assist with documentation and record-keeping required for compliance processes associated with receipt, storage, and movement of samples and materials.
- Maintain a safe, clean, and functional working environment, including routine housekeeping of laboratory and warehouse spaces, safe chemical and waste handling where relevant, and reporting hazards, incidents, or equipment faults.
- Assist with facility communications, visits, and open days as required.

### 3. KEY RELATIONSHIPS:

Internal Academic staff, technical staff, departmental administrator, students, Property Services, Purchasing personnel, PCard administrators, Health and Safety personnel

External Suppliers, contractors, analytical support providers and approved facility users

### 4. QUALIFICATIONS & EXPERIENCE:

#### Essential

- BSc in Geology, Earth Science or similar field
- Experience operating and maintaining scientific instrumentation or equivalent laboratory equipment
- Good organisational skills and attention to detail
- Ability to work effectively with students and staff

#### Preferred

- Postgraduate qualification in a geoscience discipline or equivalent relevant experience
- Experience in curatorial, laboratory, or repository work
- Experience with sample/data record management

### 5. TECHNICAL SKILLS & KNOWLEDGE:

#### Essential

- Good communication and interpersonal skills
- Basic computing and data-handling skills
- Ability to follow procedures accurately
- Ability to work independently on routine technical tasks and know when to refer issues to the ORCA manager

### 6. SPECIAL REQUIREMENTS:

- Occasional work outside normal hours to support field and laboratory teaching
- Participation in fieldwork as required

### 7. DIRECT BUDGET ACCOUNTABILITY:

- Ordering and purchasing of laboratory and curatorial materials through University systems as directed

**8. MĀORI STRATEGIC FRAMEWORK**

Act in a manner consistent with the principles and implications, as well as the University's commitment to the Treaty as articulated in the Māori Strategic Framework.

**9. PACIFIC STRATEGIC FRAMEWORK**

Act in a manner consistent with the strategies and goals contained in the University's Pacific Strategic Framework, role-modelling and promoting Pacific values, equity and diversity principles and cultural safety practices.

**10. HEALTH & SAFETY:**

Act and work in a manner compliant with current health and safety at work legislation and University procedures, frameworks and guidelines. Be a role model for safe behaviour and practices, share the responsibility to prevent harm and contribute to a safe campus and work environment, including raising workplace health and safety concerns for self, students, visitors and other staff.

**11. SUSTAINABILITY**

Act in a manner consistent with the University's sustainability commitments; role-modelling sustainable practices, with a particular emphasis on minimising the environmental impact of day-to-day activities.