

# PCIGR: All-in-One Analytical Services

Welcome to the Pacific Centre for Isotopic and Geochemical Research. Housed at the University of British Columbia in Vancouver, PCIGR is an all-in-one research facility that provides analytical services to investigators from academia, government and industry, both across Canada and around the world.

The facility is equipped with advanced instrumentation that is essential for research in fields such as geology, oceanography, environmental sciences, biology, engineering, and archaeology.

## Why Use PCIGR?

PCIGR provides full, end-to-end service for your analytical and research needs. Elemental and isotopic systems investigated at PCIGR include the following:

- Radiogenic isotopes for tracer studies (Pb-Pb, Rb-Sr, Sm-Nd, Lu-Hf);
- Radiogenic isotopes for geochronological studies (U-Pb; Lu-Hf in garnet);
- Transitional metal stable isotopes in geology and biology (Cd, Li, Si, Cu, Zn, Fe, Mg, Mo);
- Light stable isotopes in minerals, biologicals, waters and gases (C, N, O);
- Trace elements in rocks, minerals, soils and waters (lithophile, REE, PGE);
- In-situ analyses of solid samples (rocks, minerals, archaeological material).

## Who Uses PCIGR's Services?

Our users are wide-ranging, from students and faculty to government research scientists, environmental consultants and resource exploration companies. PCIGR welcomes sample analysis requests from various sectors and fields of study.

Academia	Government	Industry
Universities and colleges	Geological surveys	Environmental consulting
Research institutes	Oceanographic surveys	Clean technologies
Museums	Natural resources departments	Mining and metals
Non-profits	Municipal, provincial, federal	Resource exploration



Photo: D. Weis

nUBC research & development lab at PCIGR



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pcigr.ubc.ca



## Our Facilities

PCIGR's sample preparation facilities and analytical labs are housed entirely within a single building at the Department of Earth, Ocean and Atmospheric Sciences on the UBC-Vancouver campus. As a fully integrated facility, we can ensure that your samples stay safely within our chain of custody, from processing to analysis.

Our experienced team of research scientists and technicians actively monitors quality control and employs an efficient workflow. From our HEPA-filtered Class 100 clean laboratories to our nUBC research & development facility, PCIGR is ready to address your analytical needs.

## Our Instrumentation

PCIGR operates mass spectrometers and numerous peripheral instruments, in various set-ups and geometries, for a wide range of trace elemental, isotopic ratio and geochronological applications.

Quad ICP-MS	HR-SF-ICP-MS	MC-ICP-MS	TIMS	IRMS
Agilent 7700x*	Nu AttoM*	Nu Plasma 1700	Nu TIMS (2 units)	IsoPrime 100
Agilent 8900 QQQ (coming 2024)	Thermo Scientific Element2*	Nu Plasma II Nu Plasma*	VG54R VG354S	Thermo Scientific Delta V Plus (coming 2024)

Quad ICP-MS: Quadrupole inductively coupled plasma mass spectrometer (QQQ: triple-quadrupole)

HR-SF-ICP-MS: High-resolution sector field inductively coupled plasma mass spectrometer

MC-ICP-MS: Multicollector inductively coupled plasma mass spectrometer

TIMS: Thermal ionization mass spectrometer

IRMS: Isotope ratio mass spectrometer

Nu: Nu Instruments

\* In-situ analytical capability via laser-ablation

Consult our other brochures for specific capabilities, or visit our website below for more information.

- Sample Preparation Services
- Trace Element Analysis Services
- Isotopic Analysis Services
- Geochronology Services
- In-situ and Microanalysis Services

## Our Team

With backgrounds in chemistry, geology and environmental sciences, our scientific and technical team members have decades of combined experience in sample preparation, custom-designed method development, analytical instrumentation, data interpretation, and report writing. Several of our team members have published research methods in internationally peer-reviewed journals.

We look forward to consulting with you on your project.

## Our Commitment

PCIGR is committed to working with you to achieve the best outcomes for your project. Contact us with your analytical and research needs.



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