ROCKXTRACT®

ULTRA-LOW-CARBON CEMENT MATERIALS

Junior Cement & Materials Engineer

Help build the next generation of low-carbon cement
More than 80% lower carbon than Portland cement
Ambient-temperature chemistry. No conventional kiln. No calcination.

About RockXtract

Concrete is the most widely used building material on Earth. Its key ingredient, cement, is responsible for roughly 8% of global CO_2 emissions.

RockXtract is changing how cement is made.

We have developed a fundamentally different route to cement production that eliminates the conventional kiln. No calcination. No fossil fuel combustion. No 1,400°C furnace. Instead, we use rock, a proprietary activator and ambient-temperature chemistry to produce a cementitious binder with more than 80% lower carbon emissions than Portland cement.

We are a small, venture-backed deep-tech company entering the next stage of our journey: turning a breakthrough chemistry into products, intellectual property, certification and ultimately commercial-scale manufacturing.

We are building our founding technical team in Christchurch. The people who join us now will have an unusually large influence on what RockXtract becomes, from the materials we develop and the data we generate, to the facilities we build and the products we take to market.

How we work

We move quickly and learn by doing. We take ideas from the bench into increasingly realistic conditions, test them rigorously, learn from the results and iterate. The goal is not research for its own sake, it is to develop materials that can meet customer requirements, pass certification and work at commercial scale.

We are building a zero-harm culture from day one. Every experiment, process and decision starts with identifying and controlling risk.

The role

As a **Junior Cement & Materials Engineer**, you will help keep RockXtract's facility running safely, smoothly and reliably. You will play a hands-on role in preparing materials, managing specimens, maintaining equipment and ensuring our samples and data are accurate and traceable.

This is an opportunity to join our founding technical team, build practical experience in cement and materials development, and grow with the facility as it expands.

What you'll do

- Prepare, batch, cast and cure specimens for materials testing.
- Follow testing procedures and curing regimes, handling specimens carefully to ensure consistent, reliable results.
- Support performance and durability testing for certification and customer validation.

- Assist with testing material properties such as setting, strength development and dimensional stability.
- Operate, maintain and help calibrate laboratory equipment.
- Keep accurate, traceable sample and data records so every result can be trusted.
- Help manage sample logistics, including shipments to and from external laboratories.
- Keep the facility stocked, organised and running smoothly.
- Support the wider technical team with experiments, testing and practical materials development tasks as the programme grows.
- Help establish and improve RockXtract's Christchurch laboratory, equipment and testing capability as our needs evolve.
- Champion safe ways of working, making safety the first priority in every activity.

What you'll bring

We are looking for someone who is technically rigorous, hands-on and motivated by difficult materials problems. You will ideally have:

Essential

- An MSc in chemistry, materials science, engineering or a related field. A relevant bachelor's degree with hands-on experience is also welcome.
- A careful, methodical approach to hands-on work and sample preparation.
- A safety-first mindset and the discipline to follow procedures consistently.
- Confidence with digital record-keeping and a commitment to accurate, traceable data.
- Familiarity with analytical techniques such as XRD, SEM, ICP or particle-size analysis is a plus.
- Some experience with statistical analysis, Python or R is welcome.
- Reliability, attention to detail and the discipline to follow protocols carefully.
- A team-first, commercially aware attitude, suited to a small, hands-on team moving quickly from laboratory development towards real-world scale.

A strong plus: experience using AI tools to support experimental workflows or data analysis.

Early in your career? That's absolutely fine. We value attitude, care and a willingness to learn over years on a CV. Prior hands-on experience is an advantage, not a requirement, and your role will grow with the company.

Why join us

- Founding-team impact. Join an early-stage deep-tech company developing a fundamentally new approach to cement.
- Skin in the game. As an early employee, you will be eligible to participate in our employee share option plan (ESOP).
- Real ownership. Take responsibility for work that directly supports the development and commercialisation of a new cement technology.
- Room to grow. We are building for the long term, and your skills, scope and responsibility will grow with the company.
- Exceptional mentorship. Learn alongside a world-class technical team, including advisors with R&D leadership experience at major global cement producers.

- Real-world impact. Help advance a radically lower-carbon approach to one of the world's most important industrial materials.

The details

- Full-time, two-year fixed term. The role is funded for two years, with the potential to extend subject to securing our next funding round, which we are actively pursuing.
- Based at our Christchurch facility.
- Starting as soon as possible.
- Reporting to our scientific leadership.
- NZD **70,000–85,000**, depending on experience.

How to apply

If you're excited by the challenge of developing a fundamentally new approach to cement, send your CV and a few lines about why this role interests you to **info@rockxtract.com**. We review applications as they arrive, so it pays to be early.

RockXtract is an equal opportunity employer. We welcome applicants of all backgrounds, genders, ages, ethnicities and abilities, and we encourage you to apply even if you don't meet every requirement.