METALLURGIST

Location: On-Site (Chattanooga, TN)

Type: Full-Time

WHO WE ARE

Kunin Technologies is revolutionizing the critical mineral supply chain by implementing advanced separation systems with traditional unit operations to capture value from overlooked resources. Ore grades are falling globally, and conventional extraction leaves recoverable metal in material that mines and refineries write off as waste. Tailings, effluents, and legacy sites hold real value that existing separation technology can't reach economically.

Utilizing Kunin Technologies' proprietary mass manufacturable nano-separation systems, significantly more value can be produced from each resource, reducing waste, and unlocking domestic critical mineral production. Kunin is developing metal recovery flowsheets and reprocessing facilities from operating refinery effluents, decades-old tailings stockpiles, and even centuries-old Superfund sites.

Kunin is a team of process engineers, polymer scientists, and organic chemists with a 10k sq. ft. hydrometallurgical and organic synthesis lab in Chattanooga, TN. Kunin is pushing forward metal recovery projects across scandium, gallium, germanium, copper, cobalt, rhodium, and gold.

To achieve metal abundance, humanity must bring separation science down its own Moore's Law: fix the idiot cost index for micro and nano scale separation materials. This requires mass manufacturing novel ion-exchange media form factors which previously struggled from high costs.

WHAT YOU'LL LEAD

You run the metallurgical testwork that decides whether a Kunin project survives its next stage gate. Working under the Principal Metallurgist, you turn a feed sample and a question into a test program, execute it in Kunin's Chattanooga laboratory or at a partner laboratory, and report a result the engineering team can design from. This includes:

- Planning and executing bench-scale hydrometallurgical testwork: leaching, solid-liquid separation, ion exchange, solvent extraction, precipitation, and crystallization.
- Preparing and characterizing samples: sub-sampling, head assays, size distributions, and the chain of custody that keeps a result defensible.
- Closing mass balances on every test and flagging the ones that do not close before they reach a report.
- Operating and maintaining laboratory equipment: reactors, columns, filters, mixer-settlers, and the analytical instruments the program depends on.
- Writing test procedures, maintaining laboratory records, and producing the data packages behind stage-gate reports.
- Supporting pilot campaigns on site and at partner facilities, including shift coverage during continuous runs.

WHO YOU ARE

- Bachelor's degree in metallurgical, chemical, or mineral processing engineering and 2 to 6 years of hydrometallurgical or mineral processing testwork.
- Experimentalist fluent in leach, ion exchange, and solvent extraction bench testing with careful control of pH, temperature, and reagent addition.
- Skilled in laboratory data handling: mass balances, recovery calculations, and clean spreadsheets or scripts that someone else can audit.
- Comfortable with analytical techniques (ICP, titration, XRD) and knows when a number should not be trusted.
- Excited about working hard to push projects farther, faster in an early-stage startup environment with extreme autonomy, opportunity, and high expectations.
- Team player who keeps the laboratory safe, the records complete, and the Principal Metallurgist informed.

COMPENSATION

This role will pay $95,000 - $130,000 depending on experience, plus equity. Health, Dental, and Vision benefits included.

ADDITIONAL REQUIREMENTS

- Must be willing to relocate to Chattanooga, TN and available to travel to partner sites and laboratories in the United States and Canada for sampling and pilot campaigns. Relocation support will be provided.

Chattanooga is more beautiful than expected, and Tennessee has no income tax.

- Extended hours and weekends frequently required to support critical project milestones.

WORK AUTHORIZATION

- Kunin will do whatever it can to secure work authorization for the right candidate.

"The Whole World Is Ion-Exchange And The Rest Are Merely Details!"

Dr. Robert Kunin of Rohm and Haas, The Pioneer of the Ion-Exchange Industry, 1951