NUSANO

Job Title: **Beamline Instrumentation Physicist/Engineer**
Competitive salary (commensurate with experience) + full benefits
Location: Salt Lake City, Utah (remote work considered)
Start date: ASAP
To Apply: Email resume and cover letter to **recruiting@nusano.com**

Position Summary:

The Instrumentation Physicist/Engineer will lead the design, development, testing, and installation of Nusano's diagnostic systems. They will translate high-level specifications driven by physics and operational requirements into specifications for devices to be installed on the accelerator beam line. This position will interface with Nusano's internal science and engineering staff in addition to a number of external consultants and vendors.

Responsibilities:

- Design, specify, develop, and manage procurement of particle beam measurement systems for the Nusano accelerator
- Analyze results of particle beam measurements and draw conclusions
- Analyze physics and engineering problems using traditional analytical methods as well as simulations
- Work with the engineering team to translate the physics of particle beam measurement into devices to be deployed on the Nusano accelerator
- Work with the controls team to integrate the measurement systems into the accelerator control system and provide troubleshooting support as needed
- Review and approve specifications for internal and external production
- Interface with Nusano consultants and scientific literature to bring their knowledge and experience into Nusano

Minimum Requirements:

- Master's degree in Physics, Electrical Engineering, or closely related field
- Minimum of three years of professional experience
- Experience designing, simulating, constructing, and testing particle beam measurement systems or other similar devices (RF antennas, particle detectors)
- Experience with analyzing measurements and drawing conclusions based on data
- Experience with signal processing and conditioning
- Familiarity with 3D CAD software for model visualization
- Ability to analyze physics and engineering problems, develop a solution, and deploy that solution for timely results

Preferential Experience:

- More than five years of professional experience
- Work with high-intensity ion sources
- Hands on experimental work
- Programming in EPICS
- Experience with vacuum systems in scientific or industrial settings
- Experience with schematic capture/PCB layout software

- Experience leading system development in scientific of industrial settings
- Experience with diagnostic devices used to tune and commission RF accelerating structures

Physical Requirements:

- Work to be conducted in both an office environment and the production facility.
- Must be able to sit for long periods of time. Frequent use of computer with repetitive use of keyboard, mouse and manual dexterity.
- 2-4 weeks of travel per year for visiting vendors and attending conferences

About Nusano:

We are an early phase company committed to advancing the way radioisotopes are made. Nusano represents the first true turning point in the history of the field of radioisotope manufacturing since the advent of the cyclotron. By augmenting a standard linear accelerator with a proprietary high-current multiparticle ion source, our solution can generate radioisotopes with a very high yield and specific activity and is poised to become the state-of-the-art technology.

Our technology is uniquely suited for the generation of therapeutic radioisotopes. These radioisotopes, while historically challenging to produce in quantities and for the cost that allow for robust growth of the field, are on the precipice of widespread clinical use for personalized cancer therapy. Nusano is uniquely positioned to support and foster the growth of this important application.

Nusano is founded on the idea that the greatest scientific asset isn't raw material or technology but vision — and the freedom to follow that vision wherever it leads. So while the treatments of tomorrow will surely be built on advanced physics and sophisticated chemistry, they'll be driven by creativity and fueled by spontaneity. In the world our technology enables, neither will have limits.