



## **Nuclear Engineer – Research Scientist**

Hopewell Designs, Inc. has an opening for a Nuclear Engineer to support modeling and experimental investigation of radiation effects for our products. In this role you will apply a multi-faceted set of skills as part of an interdisciplinary team to study radiation effects and shielding for new and existing irradiator products. You will perform modeling / simulation and / or experiments to aid in the development of beta, gamma, x-ray, and neutron irradiator systems.

We are one of the foremost companies in the world supplying irradiators for calibrating instrumentation for radiation protection and research. We are a small company but expanding and require a self-motivated, dynamic, and resourceful Nuclear Engineer to help us grow.

Previous experience in the nuclear industry and experience working with radioactive sealed sources, linear accelerators, or other radiation producing devices is highly desirable.

### ***Responsibilities:***

- Assists the engineering department with product designs to determine the amount of radiation delivered to a material, dosimeter, or device under test using calculations to ensure it meets the specification.
- Analyzes radiation shielding to determine the effectiveness and to ensure the radiation levels outside the shielding are safe and meet the end goal for the project.
- Offers technical expertise in radiation physics for radiation shielding and comes up with shielding solutions.
- Technical writing of publications, white papers, and reports.
- Performs characterization of radiation reference fields (gamma, beta, neutron, and x-ray) and prepares technical reports.
- Performs research on the radiation effects for devices and writes technical papers on findings for use in Sales and Marketing.
- Assist Sales and Marketing with proposals, shielding analysis, brochures, and technical documents to promote products.
- Follows procedures for the safe handling of radioactive sources and x-ray devices.
- Training of customers on the safe use of irradiator systems and ancillary equipment.

### ***Qualifications:***

- Master's degree or PhD in nuclear engineering, nuclear technology, medical physics, or related field in natural sciences or engineering or equivalent experience in the nuclear field or health physics.
- Must possess an intermediate to advanced skill level in computational modeling using MCNP including variance reduction techniques.
- 5-10 years of experience in the nuclear industry performing nuclear engineering related work.
- Previous experience working with sealed sources and/or radiation generating devices (irradiators, x-ray systems, linear accelerators), is a plus.
- Experience with one or more following highly desired: portable hand-held radiation detectors, numerical analysis, radiation modeling operational health physics, x-ray technology, and linear accelerator development.
- Proficient in MS Excel, MS Word, and MS PowerPoint.
- Must have effective written and verbal communication skills.
- Primary work location is Alpharetta, Georgia. Some domestic and international travel is required.

**Physical Demands and Work Environment:**

- Job operates in our Alpharetta facility and laboratory environments at customer sites.
- May work in environments where elevated levels of radiation are present and work near devices that contain radioactive materials or produce radiation when energized.
- Use of personal protective equipment may be required including, but not limited to, radiation dosimetry, safety glasses, hard hat, hard toed shoes, and rubber gloves.
- Light to medium level work.

**Background on Hopewell Designs, Inc.**

Founded in 1994, Hopewell Designs is the national leader in manufacturing Automated Irradiator Calibration Equipment and supplies quality equipment world-wide for the nuclear industry. We also manufacture a broad range of Shielding and Storage products for the nuclear power, oil well logging, and medical industries.

Our customers include Department of Energy (DoE) laboratories, Department of Defense (DoD) facilities, the National Institute of Standards and Technology (NIST), nuclear power plants, university research laboratories, private industries, and international calibration facilities.

To learn more about Hopewell Designs, please visit [www.hopewelldesigns.com](http://www.hopewelldesigns.com). We have a great work environment where innovation and creativity are rewarded and where hard work leads to growth and responsibility. If you are looking for a great place to work where you will be challenged to be your best, send us your resume.

Qualified applicants: forward your resume with salary history by email to [careers@hopewelldesigns.com](mailto:careers@hopewelldesigns.com).

NO PHONE CALLS! NO RECRUITERS!

Company:	Hopewell Designs, Inc.	Location:	Alpharetta, GA 30004
Salary/Wage:	Based on Experience	Status:	Full Time, Employee
Job Category:	Nuclear Engineer	Relevant Work Experience:	5-10 Years
Career Level:	Intermediate	Education Level:	PhD or Master’s with experience