

Job Advertisement:

Junior Engineer

When: Beginning summer 2022

Wage: ~\$60,000 annually

Location: 1 Research Dr, Dartmouth, Nova Scotia

About Rayleigh Solar Tech

Rayleigh Solar Tech is a Halifax, Nova Scotia based start-up which is commercializing perovskite solar cells, a new solar cell technology which has surpassed the efficiency of silicon-based cells while being inexpensive to manufacture. Perovskite solar cells are also extremely flexible allowing them to be used in innovative applications, such as electric vehicle charging and building integrated photovoltaic (BIPV), where silicon cells are impractical. Rayleigh is currently in the process of scaling up from benchtop manufacturing to at-scale manufacturing.

Role Summary

Rayleigh Solar Tech is searching for a Junior Engineer to join the Rayleigh engineering team on a full-time, permanent basis starting in summer 2022. The Junior Engineer will work to develop the encapsulation process and select materials to encapsulate Rayleigh's perovskite solar cells. The Junior Engineer will also work to bring the encapsulation process across from current equipment to new encapsulation machines as they arrive. The Junior Engineer will also assist the Product Development Engineer with modelling solar output in various applications and prototyping novel integration schemes. The Junior Engineer will also assist the Testing Engineer with testing of prototype cells, recording of test results and procuring new testing equipment. The Junior Engineer will also work to support Rayleigh science staff as needed. The successful applicant will report to the Product Development Engineer and will work closely with the Testing Engineer develop perovskite PV for novel applications.

Responsibilities

- Develop and characterize the top conductive contact of flexible perovskite solar cells
- Carry out experiments to evaluate material properties and overall solar cell performance
- Production of top contact material for industrial manufacturing trials
- Small scale deposition prototyping to assist in design of manufacturing trials
- Assist with researching and sourcing new potential additives to improve material performance
- Assist with experimental design for mechanical testing of developed materials

Qualifications

- Recent graduate (0-2 years experience) in Mechanical or Electrical Engineering
- Interest in material properties and how they influence performance
- Ability to independently design and carry out experiments
- Good organization and data keeping practice
- Comfortable working on hands-on projects
- Comfortable working independently in a rapidly changing environment
- Interest in material properties and performance
- Interest in solar photovoltaics

Bonus Points

- Wet lab experience - good sample handling and chemical safety practices
- A passion for innovation and sustainability
- Previous experience with solar photovoltaic systems
- Previous experience with battery electric vehicles

Please submit your resume and cover letter to marshall.quinn@rayleighsolartech.com

Rayleigh Solar Tech is an equal opportunity employer prizing diversity and inclusion. We are committed to treating all employees and applicants with respect and dignity. If you require assistance and/or reasonable accommodation due to a disability during the application or the recruiting process, please contact marshall@rayleighsolartech.com.