

# Rayleigh Solar Tech Inc.

1 Research Drive, Dartmouth NS, B2Y 4M9  
rayleighsolartech.com

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## Job Description: Solar PV Research Scientist

### About Rayleigh Solar Tech

Rayleigh Solar Tech Inc. (Rayleigh) is a Halifax, Nova Scotia based Startup which is commercializing perovskite solar cells, a new solar cell technology which has comparable efficiency to silicon-based cells while being much more inexpensive to manufacture. Perovskite solar cells can also be fabricated to be flexible and semi-transparent. Rayleigh is currently in the process of scaling up from benchtop to large-scale manufacturing.

To support current and future industry collaborations, Rayleigh has built a pilot manufacturing facility in their space in Dartmouth, NS. A key part of this facility is the sheet coater and newly installed semi-industrial slot-die coater. Rayleigh is searching for a Research Scientist with sheet coating or slot die coating experience to be responsible for running the sheet coater and optimizing perovskite recipes on it.

### Role Summary

This research position offers the opportunity to address the last barriers to commercialization including device optimization and sheet coating recipe optimization to produce next generation solar cells that utilize Rayleigh's novel thin film perovskite technology.

### Responsibilities

- Deposition and characterization of perovskite thin film solar cells
- Development of perovskite ink formulations for most efficient large-area solar cell layouts
- Development of alternative designs and process recipes to enable large scale high-yield fabrication with minimum defect density and optimized uniformity
- Assessment of quality (optical, structure, surface roughness, ...) of fabricated films
- Assessment of reliability, stability, and robustness (thermal, environmental, mechanical) of fabricated films

### Qualifications

- PhD in Physics, Chemistry, Chemical Engineering or relevant Applied Sciences.
- Experience with the design, fabrication and characterization of perovskite solar cells.
- Experience in the fabrication of perovskite thin films by means of roll-to-roll compatible slot die coating or sheet coating.
- Self-motivated with the ability to align priorities in accordance with business goals and meet deadlines in a fast-paced environment.
- Good written and verbal communication skills

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## Why work with us?

Rayleigh employees enjoy a number of benefits including:

- Health and dental insurance
- Paid vacation
- Inspiring work environment
- Free parking on-site

**To apply:** Please submit a CV and cover letter to Irina Valitova, [irina@rayleighsolartech.com](mailto:irina@rayleighsolartech.com)