



Perovskite PV Scientist

About SunDensity

SunDensity is an award-winning, fast growth, photonic smart coating and nanomaterials company located in Rochester, NY – the world capital for optics research and innovation, and in Toronto, Canada – an international hub for investment and research collaboration. The company develops coatings and materials for utility, commercial and residential solar panels that improve power output and provide green energy solutions at a lower overall cost. Our proprietary coatings are also designed for low-emissivity and solar control architectural and residential glass applications, specifically to reduce heat-gain and make buildings more energy efficient. These technologies help to combat climate change and reduce carbon emissions.

We've received significant venture funding to develop our technology and scale-up operations. We value team members that are passionate, team-oriented, diligent, and accepting of other people's differing points of view. Our team of sharp and diverse individuals is expanding and we're looking to hire full-time Perovskite PV Scientists for both our Rochester, NY and Toronto, ON laboratories.

Primary Job Responsibilities:

- You will apply your strong knowledge in research, development, and scaling of thin film deposition technology to create perovskite thin films by means of solution-processed roll-to-roll compatible coating technologies based on slot-die coating.
- You will conduct research into the development and improvement of ink formulations, film formation, and cell efficiency and stability
- You will continuously evaluate and scale our coating technology, optimize the equipment, and determine latest production specifications of the industry.
- You will apply your knowledge in photovoltaics to assess your coating process parameters and optimize these to realize the desired large-area solar cell performance.
- You will work with our team to design and implement the most efficient large-area solar cell layouts and architectures.
- You will plan and manage design of experiments (DOE) on a daily basis. As such, you will work with our team to execute fabrication of the solar cells.
- You will establish and conduct strict quality control programs throughout the ink fabrication and coating processes to ensure consistency and adherence to standards for raw materials, products and waste products or emissions.
- You will work closely with our experienced senior team on short and long-term planning of the technology roadmap.
- You will train staff and interns on best practices of materials processing.
- You will create and maintain standard operating procedures and written records to ensure high work reproducibility with high degree of quality and reliability.



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Requirements:

- You have a PhD in Chemical Engineering, Nanotechnology Engineering, Process Engineering, or Materials Engineering.
- You have extensive experience in the fabrication of photovoltaic thin films by means of roll-to-roll compatible slot-die coating, ideally applied to perovskite ink formulations.
- You have a strong fundamental understanding of photovoltaic technology
- You have substantial knowledge of materials, methods, and tools used in photovoltaic device fabrication and processing.
- You have experience in handling and fabricating air and moisture-sensitive inorganic, organic, and organometallic nanomaterials and inks.
- You have outstanding organizational skills and the ability to prioritize tasks in a fast-paced, demanding environment.
- You are a team player, and have worked in a team of driven scientists and engineers.
- You have excellent communication skills among colleagues, industry, and suppliers.
- You excel in data analysis and are familiar with data and inventory tracking.

This is a full-time position with benefits. Benefits include healthcare, dental, short-term disability, long-term disability, Stock Options, and a 401K plan as well as very generous paid vacation time. SunDensity offers a collaborative and flexible working environment. This is an exempt position and with an annual salary of \$110,000 - \$160,000 depending upon qualifications.

Interested and qualified candidates are invited to email a resume and cover letter to kara@sundensity.us

For information regarding our organization, please visit [SunDensity](#).

SunDensity is an equal opportunity employer and will consider all positions equally without regard to race, color, religion, gender identity, sexual orientation, national origin, age, disability, genetic information, marital or veteran status or any other protected class as provided in the Americans with Disabilities Act.