

## **Postdoctoral position: Highly Flexible Silicon Solar Cell Development**

The successful candidate will be working on a multi-disciplinary collaboration between Simon Fraser University (SFU), University of British Columbia (UBC), and Solar Earth Technologies. You will be fully integrated into the Solar Earth collaborative culture and can expect to meet regularly with industry leaders and experts in the field of photovoltaics, as you devise new ways to integrate thin film technology into heterojunction Si photovoltaic cells.

Solar Earth Technologies Ltd. is a clean energy technology Research and Development company based in the lower mainland of Vancouver, that develops novel technologies in the field of photovoltaic solar roads & pathways and the future of paved surfaces. With our hardened solar modules, that can withstand vehicle loads, Solar Earth Technologies Ltd. is set to revolutionize the construction and energy industries.

This collaboration between Simon Fraser University (SFU), the University of British Columbia (UBC) and Solar Earth Technologies to develop novel solar cell solutions has resulted in an opening for a postdoctoral researcher. You will be expected to lead a flexible silicon solar cell technology development program that is already under progress with the goal of first-authored journal publications and patents.

Ideally you will be a recent Ph.D. graduate with expertise in microfabrication, semiconductor device physics, and electrical characterization. You will work primarily in the Burnaby campus lab of SFU under the direct supervision of Dr. Adachi in the School of Engineering Science with some device characterization taking place at Solar Earth Technologies. You will regularly interact with academic collaborators at UBC (Dr. O'Leary) and industry experts from Solar Earth Technologies Ltd.

The position involves the development of highly flexible silicon based solar cells by plasma enhanced chemical vapor deposition (PECVD) using heterojunction Si device architectures, and may involve the development of graphene electrodes, light-management using nanostructures, or other material systems.

### Desired Qualifications:

- Expertise in microfabrication in a cleanroom environment (thin film deposition, wet etching, photolithography, film thickness measurements)
- Expertise in semiconductor device physics with an emphasis on device design
- Expertise with characterization of electrical devices and thin film materials (electrical conductivity measurements, electrical measurements of devices)
- Demonstrated communication skills
- Ability to work independently and with a team

Start date: Dec. 2018 or early 2019.

Salary and benefits will be in line with SFU and NSERC guidelines.

Please apply electronically by sending your resume and a document summarizing your research and career interests to:

Dr. Michael Adachi (Email address: [mmadachi@sfu.ca](mailto:mmadachi@sfu.ca)).

SFU is an equal opportunity employer and encourages applications from women, minorities and first nations. Preference will be given to Canadian citizens and permanent residents.