

# Indigenous.Link

Canada's fastest growing Indigenous career portal, Careers.Indigenous.Link is pleased to introduce a new approach to job searching for Indigenous Job Seekers of Canada. Careers.Indigenous.Link brings simplicity, value, and functionality to the world of Canadian online job boards.

Through our partnership with Indigenous.Links Diversity Recruitment Program, we post jobs for Canada's largest corporations and government departments. With our vertical job search engine technology, Indigenous Job Seekers can search thousands of Indigenous-specific jobs in just about every industry, city, province and postal code.

Careers.Indigenous.Link offers the hottest job listings from some of the nation's top employers, and we will continue to add services and enhance functionality ensuring a more effective job search. For example, during a search, job seekers have the ability to roll over any job listing and read a brief description of the position to determine if the job is exactly what they're searching for. This practical feature allows job seekers to only research jobs relevant to their search. By including elements like this, Careers.Indigenous.Link can help reduce the time it takes to find and apply for the best, available jobs.

The team behind Indigenous.Link is dedicated to connecting Indigenous Peoples of Canada with great jobs along with the most time and cost-effective, career-advancing resources. It is our mission to develop and maintain a website where people can go to work!

Contact us to find out more about how to become a Site Sponsor.

Corporate Headquarters:

Toll Free Phone: (866) 225-9067 Toll Free Fax: (877) 825-7564

L9 P23 R4074 HWY 596 - Box 109

Keewatin, ON P0X 1C0

## **Job Board Posting**

Date Printed: 2024/04/28



### Postdoctoral Fellow, Device Integration Of Atomic Quantum Dots

Job ID F7-39-F9-66-83-BD

**Web Address** 

https://careers.indigenous.link/viewjob?jobname=F7-39-F9-66-83-BD

**Company** The National Research Council Of Canada

**Location** Edmonton, Alberta

**Date Posted** From: 2021-06-02 To: 2021-07-02

Job Type: Full-time Category: Miscellaneous

Job Start Date Unknown

**Job Salary** From \$56,374 To \$159,364 Per Annum.

**Languages** English

#### **Description**

The incumbent will be involved in research to advance strategies to develop macro-scale to atom-scale electrical connections to thereby achieve quantum transport measurements through atom defined structures. The project will involve nanofabrication to create specialized silicon samples with Macro-to-Atom contacts for the printing of atomic circuitry. Fabrication will involve optical, e-beam and/or scan probe based lithography as well as encapsulation methods to protect circuity. Electrical measurements of unique samples, sample preparation methods, doping of hydrogen terminated silicon, the development of unique hardware and software solutions for STM and/or other lithography may be performed depending on the incumbent's qualifications. The project will deliver high-impact publications by tackling the challenging issues with connecting to and addressing atomic circuitry created on hydrogen terminated silicon surfaces.

#### **Experience**

• Expertise in cleanroom fabrication (EBL, Photo-lithography, dry and wet etching, thin films deposition) will be preferred.

• Experience in layout design, fabrication process optimization and design of experiments will be preferred.

• Previous hands-on expertise in materials characterization techniques (AFM, SEM, FIB, TEM) will be preferred.

#### **Credentials**

Candidates should have obtained a PhD (or equivalent) within the past three years (PhD received on or after July 1, 2018) or expect to complete their PhD within 6 months of appointment.

#### **Education Requirements**

Ph.D. in Physics, Chemistry, or a relevant Engineering discipline will spearhead a project team that will draw on techniques from lithographic processes on various length scales from micron to nanometer.

#### How to Apply

In order to be considered for the program please include the following in your application, please

note that you will need to attach the required documents as per the list below when submitting your application. Failure to do so will result in your application being excluded from searches.

• Resume

• Statement of Interest in the project (maximum one page in length)

• PhD Transcript - an electronic copy is sufficient, it does not have to be an official version.

• List of Publications

When submitting your application you can include the required documents in any attachment field such as «Second language evaluation results» or «Other attachments»

In addition, applicants who best meet the requirements of the position will be asked to provide three letters of recommendation at a later stage of the competition process.