RESEARCH ASSOCIATE IN MESOSCOPIC AND NANOSCALE THERMAL TRANSPORT PHENOMENA

The Stewart Blusson Quantum Matter Institute at UBC is seeking PhD-level scientific research staff to support activity in the investigation of thermal transport phenomena. Relevant effects include the transfer of phonons, photons, and electrons, and particular emphasis is placed on exploiting low-dimensionality and quantum confinement in nanostructures. This multi-year position as a Research Associate will play a leadership role in SBQMI's recently launched Grand Challenge investigating Disorder as a Design Principle of New Functional Materials. The role will therefore not only support SBQMI's interest in studying energy transfer, but also connect to a range of experimental techniques suited to the growth of the relevant materials, such as molecular beam epitaxy and pulsed laser deposition, while also coordinating activities within the wider Grand Challenge team. The successful candidate will work with the Principal Investigators and other researchers to exploit existing characterization systems based on vacuum, optics, and electronic instrumentation, as well as further develop the capabilities of this infrastructure and new experimental techniques.

The successful candidate will conduct research projects that extend SBQMI's expertise in the study of thermal transport phenomena; contribute to writing and publishing articles in top-tier journals; train and mentor SBQMI students; act as coordinator for material synthesis and characterization efforts; and collaborate with other national and international academic institutions, and government and industry organizations.

SBQMI is a world-leading venture into research of systems and phenomena involving quantum materials. We believe in the power of collaboration to fuel the search for creative solutions and, in addition to building a strong interdisciplinary team of experimentalists and theorists from physics, chemistry and engineering, have established strong and active partnerships with TRIUMF, the Canadian Light Source, the Max Planck Society, and many other world leading institutions.

The successful candidate will thrive in our collegial culture and will have the following qualifications:

- Fundamental knowledge of mesoscopic and nanoscale thermal transport phenomena;
- Experience with advanced thermal and optical characterization systems;
- Ph.D. in Condensed Matter Physics or other area relevant to the research pursuits of SBQMI;
- Minimum of 3 years of experience in a research, or research and development, environment;
- Publications in reputable scientific journals;
- Experience mentoring students or staff;
- Capacity to pursue independent research;
- Ability to manage large research programs.

If you are interested in this exciting opportunity to push the boundaries of knowledge and create

world changing devices, submit an application through www.facultycareers.ubc.ca/38435. Application closing date is October 30, 2020.

Salary will be commensurate with qualifications and experience. UBC offers a competitive benefits package including extended medical, dental, life insurance, and pension.

The Grand Challenge project is also recruiting for Postdoctoral Researcher positions. For more information about these positions and about the Grand Challenge, see: https://qmi.ubc.ca/disorder-and-entropy-design-principles

For more information about SBQMI: www.qmi.ubc.ca

For more information about Vancouver: http://www.tourismvancouver.com/

Equity and diversity are essential to academic excellence. An open and diverse community fosters the inclusion of voices that have been underrepresented or discouraged. We encourage applications from members of groups that have been marginalized on any grounds enumerated under the B.C. Human Rights Code, including sex, sexual orientation, gender identity or expression, racialization, disability, political belief, religion, marital or family status, age, and/or status as a First Nation, Metis, Inuit, or Indigenous person. All qualified candidates are encouraged to apply; however Canadians and permanent residents of Canada will be given priority.