

CRC Tier II in Computational Physics (Biomedical Physics, Biophysics, Condensed Matter, Quantum Materials)

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Application deadline: September 15, 2019

Concordia University seeks to appoint a Canada Research Chair (CRC) Tier 2, a research intensive tenure-track faculty position, in Computational Physics in one of the following sub-fields: Biomedical Physics, Biophysics, Condensed Matter, and Quantum Materials. We are firmly committed to the principle of inclusive excellence. We very strongly encourage members of the four federally designated groups to self-identify (women, indigenous people, people with a disability, visible minorities). The selected candidate will receive a tenure-track faculty appointment in the [Department of Physics](#), in the [Faculty of Arts and Science](#), and is expected to become a member of the Centre for Research in Molecular Modeling (CERMM) at Concordia. We offer a world-class and diverse academic environment, including state-of-the-art research facilities and a dynamic research community. Concordia is located in Montreal, Quebec, Canada which is a highly sought after destination by students at all levels. Both the University and our governments offer many programs to promote a productive and sustainable work-life balance.

We are looking for excellent candidates with research experience in a subfield of computational physics such as (but not exclusively): Biomedical Physics and Imaging, Molecular and Cell Biophysics, Electro-optics of Materials, Quantum Materials. Experience, or a strong interest, in using artificial intelligence (AI) methods and multi-scale modeling in computational physics/biophysics would be an asset. The [Department of Physics](#) at Concordia has research strengths in biophysics (biomedical imaging, and molecular biophysics) and condensed matter physics (theoretical/experimental quantum materials, flexible optoelectronics, and photonics). The [Centre for Research in Molecular](#)

[Modeling \(CERMM\)](#) has substantial research strengths in molecular modeling and simulations across the disciplines of physics, biophysics, chemistry, biochemistry, biology, chemical engineering and materials science.

Qualified candidates will have a PhD in physics, biomedical engineering, biophysics, or a related field, and have relevant postdoctoral experience. They will also have a peer-reviewed publication record showing creativity, impact, and productivity in their field of research – taking into consideration leaves and special situations. The selected candidate will be expected to develop a strong independent research program, supervise several graduate students, secure significant external funding, and establish collaborations with some members of the Department of Physics and CERMM, as well as with external partners. Other Concordia research centers include the PERFORM Preventive Health and Biomedical Imaging Centre, the CeNSR Center for Nanoscience Research, and the CENPARMI Center for Pattern Recognition and Machine Intelligence. The Montreal research ecosystem is very rich in possible collaborations with several major universities and centers with major strengths in biomedical physics, condensed matter, and artificial intelligence. The candidate will be expected to teach in the Department of Physics at both the graduate and undergraduate level.

About the Canada Research Chair Program

The [Canada Research Chairs Program](#) is a national strategy that invests approximately \$265 million per year to attract and retain the world's most accomplished and promising minds. The goal of the CRC program is to ensure that Canadian universities "achieve the highest levels of research excellence to become world-class research centres in the global, knowledge-based economy." CRC positions at Concordia offer an attractive salary, an annual operating research fund, reduced teaching loads, and the opportunity to apply for research infrastructure through the Canada Foundation for Innovation (CFI) John R. Evans Leaders Fund (JELF). Tier 2 CRCs are awarded for five (5) years and may be renewed.

Candidates eligible for Tier II chair positions must be excellent emerging scholars within 10 years of their highest degree at the time of nomination (exclusive of career interruptions). Potential Tier II candidates who are more than 10 years from their highest degree should take note that certain career interruptions may still make them eligible for

nomination. Potential candidates are encouraged to submit a formal justification by means of the Tier II Justification Assessment Form, which will be considered in the review of applications. Please consult the Canada Research Chairs [website](#) for full program information, including further details on eligibility criteria and acceptable justifications to the extension of the eligibility term.

Notwithstanding the above and irrespective of their submission of a formal justification, candidates are encouraged to share any career interruptions or personal circumstances that may have had an impact on their career goals (such as the decision to have a family, eldercare, illness, and so forth) in their letter of application. These will be carefully considered in the assessment process.

Application and Appointment Process

Subject to budgetary approval, we anticipate filling this position at the rank of Assistant Professor; appointments at the rank of Associate Professor may be considered based on previous experience. The expected start date for this position is January 1st 2020 or August 1st 2020. Review of applications will continue until the position is filled. The selected candidate will be required to work with the Department and the Faculty to prepare the formal CRC nomination according to the CRC program guidelines. The University will submit the nomination to the CRC Secretariat at the earliest opportunity.

Applications must consist of: a cover letter (that states if candidates are, or are not, Canadian permanent residents or citizens); a current curriculum vitae (including a description of any career interruption(s) and impact(s) thereof), copies of three (3) representative publications, a five (5) page outline of the proposed research program, a one page statement outlining their perspective on and experience with diversity and inclusion in student training, as well as a brief statement of teaching philosophy/interests (if available, attach teaching evaluations). Designated and minority group applicants are strongly encouraged to self-identify in their cover letters. Candidates must also arrange to have three (3) letters of reference submitted directly online by their Referees.

Applications and letters of reference must be submitted electronically via the site [AcademicJobsOnline.org](https://academicjobsonline.org), at: <https://academicjobsonline.org/ajo/jobs/13665> Inquiries about the position should be directed to Dr. Alexandre Champagne (Chair, Dept. of Physics, a.champagne@concordia.ca).

Persons with disabilities who anticipate needing accommodations for any part of the application process may contact, in confidence, Nadia Hardy, Vice-Provost, Faculty Development and Inclusion at vpfdi@concordia.ca or by phone at 514.848.2424 extension 4323.