

# NSERC Alliance – Alberta Innovates (AI) Advance grants

Overview	
Duration	Up to 24 months
Application deadline	Until available funding is awarded
Application forms	<ul style="list-style-type: none"><li>NSERC Alliance - Alberta Innovates (AI) Advance grants</li><li>Form 100A – personal data form</li><li>Form 101 – application for a grant</li></ul> <p>Guidance on this page takes precedence over other Alberta Innovates or NSERC program descriptions and instructions. Find additional guidance on the <a href="#">PDF forms and instructions</a> page. To create or access an application, log in to the <a href="#">online system</a>.</p>
For more information	Contact the <a href="#">Prairies</a> Regional Office

## Context and objectives

The 2020/2021 NSERC Alliance – Alberta Innovates Advance grants call invests in projects that, in alignment with Alberta’s innovation and technology strategies, advance discoveries to develop emerging technologies that can generate economic, environmental, health and social benefits for Albertans and Canadians.

The priority emerging technology target areas of this call—information and communications technologies (ICT) and advanced materials and manufacturing technologies (AMM)—offer transformational promise not only to challenges across Alberta’s existing sectors, but for entry into wider global markets as well, and their development provides the foundation for job creation and economic diversification into nascent industries in Alberta.

Funding is available to NSERC eligible researchers at [Alberta-based universities](#) to help those who have made promising discoveries conduct the research needed to advance to the development stage, which could eventually lead to commercialization. Projects must advance technologies’ readiness level toward future market opportunities within priority emerging technology target areas of this call. The principal investigator must hold an active peer-reviewed grant from NSERC as primary applicant at the time of application. See the detailed description of the [priority emerging technology target areas](#).

Individual proposals can request up to \$150,000 per year and can be for up to two years in duration. A maximum of \$100,000 per year will be provided by Alberta Innovates, and NSERC will match the Alberta Innovates contribution at a ratio of 50% up to a maximum of \$50,000 per year.

Project funding is intended to help bridge the gap between academic research and technology validation (typically, technology readiness levels [\[TRL\] 2 to 4](#)) that could later lead to technology transfer activities and commercialization. Funding can be used to engage and train undergraduates, graduate students, postdoctoral fellows, research associates and technicians on projects, as well as for operational and equipment costs. Project funding will support activities such as (but not limited to)

- scientific technology assessment
- characterization of the invention
- proof-of-concept experimentation
- testing potential to work in a laboratory environment
- data gathering
- interaction with industry
- identification of a “business/market advisor” who could be part of the team in future projects; e.g., NSERC Idea to Innovation (I2I) grant, phase I

Projects will advance technologies toward an identified technical goal and envisioned future market opportunity, supporting work in university labs that can begin from the conceptual research stage (beginning from TRL 2), up to testing/validation of laboratory prototypes (TRL 4).

Key goals of the NSERC Alliance – Alberta Innovates Advance grant are to improve the direction of research efforts that could lead toward technology transfer and commercialization in Alberta, to increase the development of emerging technologies with market potential and/or solutions to end-user challenges and to develop an enhanced skill and knowledge base (highly qualified personnel [HQP]) for Alberta companies.

Technologies successfully developed in this program may be further advanced to market through other supports, including [Alberta Innovates' Entrepreneurial Investments](#) programs or federal programs like [NSERC I2I grants](#). Researchers are encouraged to discuss with the industry liaison office (ILO) at their institution.

NSERC Alliance – Alberta Innovates Advance grant project objectives:

- develop and advance discoveries in emerging technologies where a potential local/global market application has been identified (typically, within the TRL 2 to 4 range)
- train HQP in emerging technologies ready for industry

- move research from ideation toward proof-of-concept/prototype validation, and encourage HQP to do so as well
- start discussions with potential partners and explore future commercialization paths

Alberta Innovates will support a project only if it is aligned with the priority emerging technology target areas of this call and if the technology/project represents a credible Alberta-developed solution to a future market opportunity, as assessed by Alberta Innovates.

## Equity, diversity and inclusion

NSERC is committed to excellence in research and research training for the benefit of Canadians. Achieving a more equitable, diverse and inclusive Canadian research enterprise is also essential to creating the excellent, innovative and impactful research necessary to seize opportunities and respond to global challenges. See [Guide for applicants: Considering equity, diversity and inclusion in your application](#). Explaining how you have considered equity, diversity and inclusion in your training plan is mandatory. Please consult [Equity, diversity and inclusion in your training plan](#).

### Applicants

- You (principal investigator [PI]) must hold an active NSERC peer-reviewed grant when you apply. You must meet NSERC eligibility criteria when you apply and when funding is released.
- You must be a faculty member from one of the [NSERC eligible Alberta-based universities](#).

## Partners

Partner organizations that are recognized for cost-sharing with NSERC are not required for proposals under this call. However, potential end-users for the technology being advanced should be identified in the proposal. Please ensure that you add Alberta Innovates as a joint funding partner to this application and provide the name and email of the Alberta Innovates Advance program manager as the contact for Alberta Innovates.

## Apply

To start the application process for an NSERC Alliance – Alberta Innovates Advance grant, applicants must contact the [Alberta Innovates Advance program manager](#) to obtain the proposal template and ensure that the proposed project is aligned with the priority emerging technology target areas of this call. After receiving confirmation from Alberta Innovates that the proposed research is aligned with program requirements, the applicant completes the NSERC application (without submitting it) and generates a PDF version of it with the preview function in NSERC's online application system. The applicant then completes the Alberta Innovates application form in the Alberta Innovates [SmartSimple](#)

portal. The applicant must attach the PDF of the NSERC application as part of the Alberta Innovates application.

Alberta Innovates will complete the partner organization form once it has reviewed and assessed the details submitted through the Alberta Innovates SmartSimple portal. Once the partner form has been completed by Alberta Innovates, the application can be submitted to NSERC.

Submit your completed application through NSERC's online system.

To start the NSERC application, go to the online system and create a new Form 101. When creating a new Form 101 – Grant, select *Research partnerships*, then *Alliance*. Next, from the *Type of call* field, select *AI Advance* from the drop-down menu. The proposed cost-sharing ratio for this application is 100%.

There are three components to this NSERC Alliance – Alberta Innovates Advance grant application: proposal, applicant and partner organization information. All three components need to be completed and submitted for the application to be considered complete. Guidance on this page takes precedence over other NSERC Alliance descriptions and instructions.

- **Proposal:** Complete an application for a grant (Form 101) using the *Proposal* template. Provide responses in place of *INSERT YOUR TEXT HERE* using a maximum of **five** pages. Figures and tables are welcome. References are not required. The funding requested in this proposal cannot represent a budgetary or conceptual overlap with any other funding support currently held or applied for. The [instructions for completing an Alliance grant application](#) provide additional guidance for questions not addressed on this page.
- **Applicant:** Submit a [Personal data form with Common CV attachment](#) for the applicant and all co-applicants.
- **Partner organization information:** Please ensure that you add Alberta Innovates as a joint funding partner to this application and provide the name and email of the Alberta Innovates Advance program manager as the contact for Alberta Innovates. Your contact person will be invited through the online system to provide information about the partner organization following the *Partner organization instructions*.

## Evaluation criteria

Applications are evaluated using the following four equally weighted criteria. The proposal must address all of the criteria and sub criteria to be considered for funding.

Relevance and outcomes:

- significance of the intended outcomes and of the economic, social and/or environmental benefits for Canada and Alberta

- need for original research to address the topic and the potential for developing and advancing new technologies
- extent to which the strategy to apply the research results is likely to achieve the intended outcomes

#### Quality of the proposal:

- clarity of the objectives and deliverables; appropriateness of the scope and size of planned activities to achieve the expected outcomes; justification for the planned expenditures
- inclusion of how sex, gender and diversity considerations will be addressed in the research design, if applicable
- appropriateness of the identified indicators and methods for monitoring progress during the project and for assessing outcomes afterwards

#### Project team and training opportunities:

- appropriateness of academic researchers' expertise and, where applicable, that found within the partner organizations, both for carrying out the planned research activities and in mentoring trainees
- opportunities for enriched training experiences for research trainees (undergraduates, graduates, postdoctoral fellows) to develop relevant research skills as well as professional skills such as leadership, communication, collaboration and entrepreneurship
- consideration of equity, diversity and inclusion in the training plan

#### Future market opportunity:

- clarity of the proposal presenting the technology solution (product), who would need it, in what form and how it could be brought to the end-users/market
- positioning of the proposed technology compared to other potential solutions; description of why and how it could compete
- positioning of the strengths and potential advantages that favour an Alberta-developed solution

Please consult the merit indicators for further details.

## Funding

All project expenditures are subject to the principles and directives governing the appropriate use of grant funds as outlined in the [Tri-agency guide on financial administration](#). The agreement must be aligned with [NSERC's Policy on intellectual property](#), which promotes the use and/or exploitation of knowledge and open access to results of research funded by NSERC.

## Reporting

You will be informed of reporting requirements and the corresponding schedule when you are notified of your award. NSERC and Alberta Innovates will strive to streamline their reporting requirements to lessen the burden on participants. An annual presentation to demonstrate progress will be required by Alberta Innovates.