



Alberta Ingenuity Graduate Student Scholarship in Nanotechnology

>PROGRAM OBJECTIVE

Alberta Ingenuity has partnered with Alberta Advanced Education and Technology (AET) to manage a \$3 million scholarship program for graduate students in nanotechnology fields at Alberta universities. These scholarships are intended to help Alberta attract and retain world class Master's and Doctoral students in these fields.

This program will:

- Further frontier nanotechnology research in Alberta at the highest levels of excellence
- Train highly qualified personnel who drive Alberta's future innovation economy
- Create networks of highly qualified people around the world who are linked to Alberta's research institutions
- Create and enable strategic linkages with global leaders in priority areas for Alberta
- Encourage a sustainable culture of intellectual and entrepreneurial excellence

There are two categories of scholarships within this program:

- Nanotechnology Automatic Top-Up awards for Canada Graduate Scholarship (CGS) recipients
- Provincially evaluated awards for all other students

>DEFINITION OF NANOTECHNOLOGY

Nanotechnology is a broad enabling discipline crossing research fields including, but not limited to, chemistry, physics, computer science, biology, mathematics, all areas of engineering and medicine and encompasses social, legal, and ethical aspects.

For the purpose of this competition, the definition of nanotechnology is as follows:

"Nanotechnology is the understanding and control of matter at dimensions of the order of 1 to 100 nanometres. Encompassing nanoscale science, engineering and technology, nanotechnology involves imaging, measuring, modeling, and manipulating matter at this length scale to enable novel applications.

With particular reference to topics at the interface of nanotechnology and the life sciences, studies that use tools and concepts to study biology at the nanoscale; that propose to engineer biological molecules toward functions different from those they have in nature; or that manipulate biological systems by methods other than traditional

molecular biological, synthetic chemical, or biochemical approaches, are classified as nanotechnology projects.”

Applicants must identify if their proposal is related to nanotechnology. The Alberta Ingenuity Nanotechnology Panel will confirm the application’s relevance to a nanotechnology area.

>NANOTECHNOLOGY AUTOMATIC TOP UP AWARDS

Students currently holding a Canada Graduate Scholarship at an Alberta university in the area of nanotechnology research who do not hold the Alberta Ingenuity Graduate Student Scholarship in Nanotechnology are eligible for a Nanotechnology Automatic Top-Up award. Please complete and send the Nanotechnology Auto Top-Up Form to Alberta Ingenuity to initiate payment.

- Nanotechnology Auto Top-Up Form may be found on our website. Follow the links to the Graduate Student Scholarships Forms and Guidelines Section.

Automatic top-up scholarships have a value of at least \$10,000 per year (see Stipend chart below) and match the CGS award in duration. In addition, each student will also receive an annual research allowance of \$5,000.

>PROVINCIALY COMPETITIVE AWARDS

Students who do not hold a Canada Graduate Scholarship must apply for funding through Alberta Ingenuity’s annual scholarship competition.

Applications for Alberta Ingenuity Graduate Student Scholarship in Nanotechnology are evaluated by the Alberta Ingenuity Nanotechnology Review Panel. The final outcomes of the panel are compiled with the outcomes of the four other review panels used in the Alberta Ingenuity Graduate Student Scholarship program: Engineering, Life Sciences, Physical Sciences and ICT.

The number of scholarships in nanotechnology awarded each year depends on the quality of the applications received and the value of each scholarship stipend.

>TIMELINE

Application Deadline:	December 1, 2009
Announcement of Results:	mid-March (first release of award offers) March 31 (release of remaining result letters)
Scholarship start dates:	May 1, September 1 or January 1 (see <i>Start Date</i>)

>ELIGIBILITY

The award is open to candidates entering or currently in a full-time graduate program at an Alberta university in a science or engineering-related discipline working towards a research-based master's or doctoral degree.

Master's students

- As of December 31, 2009, eligible students will have completed not more than 12 months of a master's program.

Doctoral students

- As of December 31, 2009, eligible students will have completed not more than 24 months of a doctoral program.
- For doctoral students who transfer from a master's program prior to completing the master's degree, eligibility is calculated starting from the first academic session in which you were registered in a doctoral program

Candidates from outside Alberta or Canada are eligible, provided they meet all eligibility requirements for admission to an Alberta university. The candidate should contact the universities for information on those requirements.

When candidates have interrupted their training for parenting or other reasons, it is possible to have the program start date for eligibility adjusted upon request. Candidates should contact Alberta Ingenuity to explain any special circumstances prior to submitting an application, to determine if they are eligible.

>SPONSORING SUPERVISOR

A faculty supervisor possessing both a record of productive research in a science or engineering discipline and sufficient resources to ensure the satisfactory conduct of the research must sponsor the candidate.

>TERM OF AWARD

Master's students

Master's funding will not extend beyond the 28th month of a master's program.

1. *New master's student* (at deadline, student is not registered in a master's program)
Award term: 24 months
Funding can be extended if the student registers in a doctoral program during the first 24 months of funding. Support is available for a total of 48 months.
2. *First year master's student* (at deadline, student is registered in an master's program and has completed up to 12 months)

Award term: 12 months

Funding can be extended if the student registers in a doctoral program during the first 12 months of funding. Support is available for a total of 48 months.

Doctoral students

1. *New doctoral student* (at deadline, student is not registered in a doctoral program but has completed a master's degree prior to starting PhD or was admitted directly into PhD after completing a bachelor's degree.)
Award term: 48 months
2. *First year doctoral student* (at deadline, student has completed up to 12 months of PhD program)
Award term: 36 months
3. *Second year doctoral student* (at deadline, student has completed between 12 and 24 months of PhD program)
Award term: 24 months

Award terms for students who transfer from a master's program into a doctoral program without completing a master's degree will be based on the start date of the master's program.

>REPORTING

Scholarships are renewable upon submission of satisfactory annual progress reports.

>START DATE

New graduate students with a program start date of January 1, 2010 or later can take up the award in May, September or January following the offer of award.

Existing graduate students with a program start date prior to January 1, 2010 can take up the award in May or September following the offer of award.

>LOCATION OF AWARD

Scholarships are valid only at an Alberta university.

>APPLICATION PROCESS

Submit one original COMPLETE application by the deadline. Forms are available from www.albertaingenuity.ca. Follow the links to the Alberta Ingenuity Graduate Student

Scholarship Forms and Guidelines Section. Further instructions are provided on the application form.

>REVIEW PROCEDURE AND SELECTION CRITERIA

The Alberta Ingenuity Graduate Student Scholarship Review Committee reviews all applications and evaluates them based on the excellence of the student and the proposed research.

Detailed criteria are available from www.albertaingenuity.ca. Follow the links to the Alberta Ingenuity Graduate Student Scholarship Forms and Guidelines Section.

>STIPEND

Automatic Top-Ups

CGS AWARD	CGS VALUE (per year)	NANO STIPEND (per year)	TOTAL (per year)
CGS M (Master's)	\$17,500	\$12,500	\$30,000
CGS D (Doctoral)	\$35,000	\$10,000	\$45,000

Provincially competitive awards

OTHER AWARD	OTHER AWARD (per year)	NANO STIPEND (per year)	TOTAL (per year)
PGS M (Master's)	\$17,300	\$12,700	\$30,000
None (Master's)		\$30,000	\$30,000
PGS D (Doctoral)	\$21,000	\$15,000	\$36,000
None (Doctoral)		\$36,000	\$36,000

The full stipend for a master's student is \$30,000 per year and the full stipend for a doctoral student is \$36,000 per year.

The amount of the stipend may be affected by other sources of income as follows:

- **Other major peer-reviewed graduate awards (such as NSERC CGS, Vanier CGS, PGS, IPS or Ralph Steinhauer Award of Distinction):**
Students who hold another major, peer-reviewed graduate award will be awarded an Alberta Ingenuity Incentive Award, if allowed by the other funding agency. The Alberta Ingenuity Incentive Award is worth at least \$10,000 per year for the duration of the outside award. The stipend will increase to the full amount of \$30,000 or \$36,000 per year when the other funding ends.

For students holding the NSERC Vanier CGS award, Ingenuity will provide a research allowance of \$5,000 as a supplement to your Vanier award.

- **Other awards:**
Students offered an Alberta Ingenuity Graduate Student Scholarship in Nanotechnology may receive an unlimited number of awards from other sources, as

long as the value of any other single award does not exceed \$12,000. The value of the other award will be determined by the amount provided to the student after the Ingenuity award has been implemented.

All students, regardless of awards held or applied for, follow the same application process and are reviewed in competition with the other applications.

>RESEARCH ALLOWANCE

A yearly allowance of \$5,000 will be administered by the supervisor and may be used by the student for the following purposes:

- Travel expenses for relocation
- Travel expenses to attend scientific meetings
- Purchase of scientific materials, books, periodicals and journals
- Supplies and expendables
- Computer hardware and software
- Costs for the use of libraries, computer and animal facilities
- Costs associated with the publication of research results

All purchased scientific and computer materials become the property of the institution. The research allowance may not be used for hospitality or entertaining expenses.

>CONDITIONS OF AWARD

Please refer to the *Alberta Ingenuity Graduate Student Scholarship in Nanotechnology Handbook* for regulations about holding the award, such as payment of awards, registration status, acknowledging support, leaves, changes, terminations, etc. The manual is available on our website.