

LISANE PICARD, GÉNIE MÉCANIQUE, UNIVERSITÉ DE SHERBROOKE



### PRIZES:

- 5 CASH PRIZES OF \$5000
- 1 CASH PRIZES OF \$3000
- 14 CASH PRIZES OF \$2000
- 3 CAREER DEVELOPMENT TRIPS IN THE AMERICAS OR BELGIUM
- 3 PAID WORK PLACEMENTS

### CONTEST 2003-2004

DEADLINE: FEBRUARY 13, 2004



# EXCELLENCE in science

[chapeaufilles@meq.gouv.qc.ca](mailto:chapeaufilles@meq.gouv.qc.ca)

## Québec



Centre des syndicats du Québec



Fédération des travailleurs et travailleuses du Québec



Agence Québec Wallonie Bruxelles pour la jeunesse



Éditeur: CREQO / 1-888-235-2352 pour les jeunes en recherche de stage au Québec



Chaire Marianne-Marschal



GlaxoSmithKline



Over  
**\$100 000**  
in prizes!

# EXCELLENCE in science

The **Ministère de l'Éducation (MEQ)** and the **Ministère du Développement économique et régional** will award 10 cash prizes of \$2000, one cash prize of \$3000 and four cash prizes of \$5000 to female science or engineering students. Eleven more prizes will be awarded by the following partners:

Agence Québec Wallonie Bruxelles  
pour la jeunesse (AQWBJ)

Centrale des syndicats du Québec (CSQ)

Confédération des syndicats nationaux  
in collaboration with the Fédération nationale  
des enseignantes et enseignants du Québec (CSN)  
and the Fédération des professionnelles (CSN)

Chaire CRSNG/Alcan pour les femmes  
en sciences et génie au Québec

Chaire Marianne-Mareschal de l'École  
Polytechnique de Montréal

Fédération des travailleurs  
et travailleuses du Québec (FTQ)

GlaxoSmithKline

Ministère de l'Agriculture, des Pêcheries  
et de l'Alimentation

Ministère du Développement économique et régional

Ministère de l'Environnement

Ministère des Ressources naturelles,  
de la Faune et des Parcs

Office Québec-Amériques pour la jeunesse (OQAJ)

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Ministère de l'Éducation, 2003 — 03-00705  
ISBN 2-550-41735-6  
Legal Deposit — Bibliothèque nationale du Québec, 2003

*The Ministère de l'Éducation, in collaboration with the Ministère du Développement économique et régional, is inviting women enrolled in selected branches of the pure sciences, in the information sciences or in engineering to take part in the Excellence in Science Contest.*



**T**his year, a large number of students are eligible for the contest. In fact, **five new disciplines** have been added in order to promote the participation of women in the work force in male-dominated scientific or technological fields (see list of eligible programs in Section 1).

This contest, held in Québec university-level institutions, is intended specifically for women enrolled in programs leading to a bachelor's degree in a field of science where women account for less than a third of enrollments.

The contest, which is part of the *Hats Off to You!* competition, is organized by the MEQ's Secteur de la formation professionnelle et technique (vocational and technical training division) with the financial support of the MEQ's Secteur de l'enseignement supérieur (higher education division).

Like the *Hats Off to You!* competition for women in vocational and technical training programs, the *Excellence in Science Contest* is aimed at getting women to expand their career options and at encouraging those training for nontraditional occupations to persevere until they earn their diploma.

### Awards Ceremony

The winners of the *Excellence in Science* contest will receive their prizes at the provincial awards ceremony for the *Hats Off to You!* competition to be held in May 2004.



## Section 1 Eligibility Requirements

- Candidates must have attended a university-level institution in Québec in 2003-2004 and have been enrolled full-time in one of the following programs:

### PURE SCIENCES

5215	Biophysics
5240	Physical sciences
5243	Meteorology and atmospheric sciences
5244	Geology (mineralogy)

### APPLIED SCIENCES

5340	Information sciences
5350	Engineering
5352	Aerospatial, aeronautical and astronautical engineering
5353	Agricultural engineering, rural engineering
5354	Food engineering
5356	Chemical engineering
5358	Civil, construction and transportation engineering
5359	Electrical, electronic and communication engineering
5360	Mechanical engineering
5361-	Geological engineering
5363	Industrial and administrative engineering
5364	Metallurgical and materials engineering
5368	Mining engineering
5369	Engineering physics
5371	Surveying
5373	Computer and information systems engineering
5375	Forestry engineering, forestry and silviculture

Note: The disciplines in red are new additions to the 2003-2004 contest.

- There is no age limit for participating in the competition. However, special eligibility requirements may apply to certain categories, namely category 4, Career Development Trips Outside Québec. Candidates must therefore carefully read over the eligibility requirements described in this brochure.
- Previous winners do not qualify for this year's contest, unless they have changed fields of study.
- Candidates cannot claim more than one prize.

## Section 2 Portfolio

Candidates must submit the following:

- 1 a duly completed registration form (see page 13)
- 2 a personal introduction of no more than two pages (see Section 3, Personal Introduction)
- 3 a short essay of no more than one page relating to the category entered; in this essay, the candidate outlines the reasons for her choice by answering the relevant questions listed in this brochure; candidates interested in several categories must write an essay for each category entered
- 4 a résumé
- 5 a copy of the most recent transcript issued by the university attended

### Section 3

## Personal Introduction

#### Presentation Requirements

- The personal introduction must be no more than two pages long, double-spaced, printed on one side on white letter-sized paper (no binding, gluing, spiral binding, cardboard cover, stapling, etc.).
- The short essay for the thematic categories must be no more than one page long.
- Besides the items listed under Section 2, no other item (object, photograph, special document, etc.) will be accepted for the purposes of evaluating portfolios.

Note: Candidates whose personal introductions do not meet these standards will be disqualified.

#### The personal introduction must include the following information:

- 1 Personal history, education and work experience
  - *What are the highlights of your personal, academic or working life?*
- 2 Your personal or career objectives
  - *What are your goals for the future in your chosen occupation?*
- 3 Your reasons for choosing a traditionally male-dominated occupation
  - *What motivated you to choose a traditionally male-dominated occupation?*
  - *What do you feel you have at stake in making this choice?*
  - *What aptitudes or personal qualities do you have that will allow you to achieve personal fulfillment in an occupation where women are a minority?*
  - *What strategies do you use that will help you persevere and succeed in an occupation traditionally reserved for men?*
- 4 Your knowledge of your chosen occupation
  - *What do you know about your chosen occupation, the duties involved and the related working conditions?*
  - *Which of your actions or achievements demonstrate your commitment to society, the community, labour unions or any other area related to your chosen occupation?*

- 5 Your reasons for entering the contest

- *Give your reasons for entering the contest. Why do you believe you should be selected to participate?*

NOTE: Candidates wishing to enter one or more thematic categories must, in addition to their personal introduction, write a short essay no longer than one page, in which they answer the questions in the following pages.

### Section 4

## Selection Criteria

#### Portfolios will be assessed according to the following criteria:

- submission of a complete portfolio
- quality of the presentation
- compliance with instructions
- clarity of the personal introduction and short essay
- authenticity and persuasiveness of the personal introduction and short essay
- relevance of the reasons for entering the contest
- academic achievement

### Section 5

## Application Process and Deadline

#### The candidate must:

- prepare her portfolio (registration form, personal introduction, short essay, résumé and copy of most recent university transcript)
- indicate which of the thematic categories she intends to compete in by checking off the appropriate boxes on the registration form
- send her portfolio to the following address by **February 13, 2004**:

#### *Excellence in Science Contest*

Ministère de l'Éducation  
1035, rue De La Chevrotière, 12<sup>e</sup> étage  
Québec (Québec) G1R 5A5  
Telephone: (418) 646-2846  
Fax: (418) 643-1926  
E-mail: chapeaufilles@meq.gouv.qc.ca

# Cash Prizes

## Excelle Science

The **Ministère de l'Éducation** will be awarding five prizes of \$2000 and two prizes of \$5000, and the **Ministère du Développement économique et régional** will likewise be awarding five prizes of \$2000 and two prizes of \$5000. In addition, **GlaxoSmithKline** will be awarding one prize of \$5000.

**REQUIREMENTS** Candidates must be enrolled in one of the programs listed in Section 1. In addition, they must submit a portfolio that meets the requirements outlined in Section 2 and write a personal introduction of no more than two pages in which they answer the questions listed in section 3.

They must also write a short essay of no more than one page in which they answer the following questions about the involvement of women in scientific occupations:

- *What do you think about the fact that women are underrepresented in scientific or technological careers?*
- *In your opinion, what factors prevent greater numbers of women from entering the sciences?*
- *What measures could be taken to encourage girls in this regard or to provide them with more opportunities to enter scientific careers?*
- *Were you encouraged to pursue this path? If so, how?*
- *What do you think about the image that researchers currently have?*

## Next Generation

The **Ministère de l'Éducation** and the **Ministère du Développement économique et régional** will be jointly awarding a prize of \$3000 to a first-year female student enrolled in one of the programs listed in Section 1.

**REQUIREMENTS** Candidates must satisfy the general contest requirements set out in Sections 1 and 2 and write a personal introduction according to the instructions outlined in Section 3.

They must also write a short essay of no more than one page in which they answer the following questions about the new generation of women in the sciences:

- *In your opinion, what factors prevent greater numbers of women from entering the sciences?*
- *In your opinion, what measures should be taken to ensure that there is a new generation of women in the sciences?*
- *Were you encouraged to pursue this path? If so, how?*

## Agriculture

The **Ministère de l'Agriculture, des Pêcheries et de l'Alimentation** will be awarding a prize of \$2000 to a female student enrolled in agricultural engineering, rural engineering (5353) or food engineering (5354).

**REQUIREMENTS** Candidates must submit a portfolio in accordance with the requirements set out in Section 2 and write a personal introduction of no more than two pages that answers the questions set out in Section 3.

They must also write a short essay of no more than one page on agri-foods that answers the following questions:

- *How will the competencies you have acquired during your training prepare you to work in the field of agri-foods?*
- *What is your current involvement in the field?*

## Equity

The **Fédération des travailleurs et travailleuses du Québec (FTQ)** will be awarding one cash prize of \$2000 to a candidate who left an unstable job (part-time, on call, on contract, temporary, etc.) to train or retrain for a traditionally male-dominated occupation or trade.

**REQUIREMENTS** Candidates must meet the general eligibility requirements set out in Sections 1 and 2, and submit a personal introduction in accordance with the requirements set out in Section 3.

Candidates must also write a short essay no longer than one page on their past, present and future experiences with union, social or volunteer involvement, answering each of the following questions:

- *Why did you choose to train or retrain for a male-dominated occupation or trade?*
- *How will your experience and training help you:*
  - *enter the job market and stay there?*
  - *keep your job?*
  - *improve your own situation as well as working conditions for women in general?*

**NOTE :** The jury of the Fédération des travailleurs et travailleuses du Québec (FTQ) reserves the right not to award a prize if all the requirements are not satisfied.

## Cultural or Native Community

The **Confédération des syndicats nationaux (CSN)** will be awarding a prize of \$2000 to a woman who has chosen a nontraditional occupation and who is either a Native person or someone who regards herself as a member of a cultural community.

**REQUIREMENTS** Candidates must satisfy the general contest requirements set out in Sections 1 and 2 and write a personal introduction according to the instructions outlined in Section 3.

They must also write a short essay of no more than one page in which they answer the following questions about the involvement of women from cultural communities in nontraditional occupations:

- *As a member of a cultural community, what obstacles did you have to face?*
- *Were you encouraged to fulfill your ambition? If so, how?*
- *What motivated you to choose a nontraditional occupation?*

## Perseverance

The **Centrale des syndicats du Québec (CSQ)** will be awarding a prize of \$2000 to the female student who has shown exceptional perseverance in learning a traditionally male-dominated occupation.

This award recognizes perseverance in the achievement of career goals, highlighting the candidate's efforts to enter a nontraditional occupation. It is not designed to reward those who have overcome physical or social handicaps, unless these handicaps are directly related to the chosen occupation.

**REQUIREMENTS** Candidates must satisfy the general contest requirements set out in Sections 1 and 2, and submit a personal introduction in accordance with the requirements set out in Section 3.

Candidates must also write a short essay no longer than one page that describes their perseverance in learning their occupation or trade, while answering the following questions:

- *What obstacles did you encounter and how did you overcome them?*
- *How did you motivate yourself to persevere in pursuing your career goals? Describe your experience.*

category

2

## Career Development Trips Outside Québec

### Career Development Trips to Wallonia or Brussels

Two bursaries will be awarded by the **Agence Québec/Wallonie Bruxelles pour la jeunesse (AQWBJ)** for career development trips to Wallonia or Brussels.

These bursaries will allow the best candidates in this category to do a work placement with a company connected to their field of study. Each trip will last four weeks, will be supervised by the AQWBJ and will take place between September 2004 and August 2005.

#### EACH BURSARY INCLUDES:

- exemption from the registration fees for the AQWBJ program, the identification of a suitable company, an information session, and completion of the administrative formalities for obtaining a work permit and temporary visa for Wallonia or Brussels
- a \$700 allowance for round-trip air transportation between Montréal and Brussels
- a total living allowance of \$1000 paid by AQWBJ

Further information on the AQWBJ is available at [www.aqwbj.org](http://www.aqwbj.org).

#### ELIGIBILITY

Candidates must:

- be between 18 and 30 years of age at the time of the work placement
- be a Canadian citizen or a permanent resident and have resided in Québec for at least one year

**CONDITIONS** Candidates must satisfy the general contest requirements set out in Sections 1 and 2 and write a personal introduction according to the instructions outlined in Section 3.

They must also write a short essay of no more than one page in which they answer the following questions:

- *Why did you decide to apply for a career development trip to Wallonia or Brussels?*
- *How will your participation in a working trip to Wallonia or Brussels help improve mutual understanding between two French-speaking communities and encourage cooperation in an increasingly international environment?*
- *How will this experience help you enhance your skills and further your professional development?*

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## Career Development Trips in the Americas

Financial assistance for a career development trip will be provided by the **Office Québec-Amériques pour la jeunesse (OQAJ)** to the best candidate in this category. This stay (e.g. work placement, applied research practicum) will last from 4 to 12 weeks and must be related to the selected candidate's field of study.

### EACH OQAJ PRIZE INCLUDES:

- round-trip transportation between Montréal and the destination for the career development trip in the Americas
- a local transportation allowance for candidates who live far from the departure airport
- a living allowance of \$1500 paid by the OQAJ
- travel insurance

Further information on the OQAJ is available at <[www.oqaj.gouv.qc.ca](http://www.oqaj.gouv.qc.ca)>.

### RESPONSIBILITIES OF THE SELECTED CANDIDATE

The selected candidate is entirely responsible for finding a host organization for her career development trip, as well as for following the administrative procedures related to the requirements for entering the destination country (obtaining a temporary visa or any other formality) within the required time. The OQAJ is in no way responsible for the procedures involved in obtaining temporary visas or for paying any costs related to it.

Selected candidates must complete their career development trip within 12 months after they are awarded this prize (i.e. before May 2005).

### ELIGIBILITY

Candidates must:

- be between 18 and 35 years of age at the time of the career development trip
- be a Canadian citizen or permanent resident and have resided in Québec for at least one year
- have the language skills necessary for the career development trip (specify languages spoken - English, Portuguese, Spanish).

**REQUIREMENTS** Candidates must satisfy the general contest requirements set out in Sections 1 and 2 and write a personal introduction according to the instructions outlined in Section 3.

They must also answer the following questions:

- *How is this experience likely to help you enhance your skills and further your career development?*
- *How will your participation in a career development trip in the Americas help to improve mutual understanding and develop a cooperative relationship between Québec and the host country?*

## Paid Work Placements

### Work Placement in the Environmental Sector

A paid work placement worth approximately \$6500 will be awarded by the **Ministère de l'Environnement (ME)**.

The 12-to-15-week work placement must be a compulsory part of the selected candidate's program or carry credits toward her diploma, further to an agreement between the ME and the educational institution. The selected candidate is responsible for making sure that her educational institution will recognize the work placement as part of her program. The selected candidate may opt for a \$2000 cash prize instead of the work placement.

Candidates must be enrolled in one of the following programs:

5215	Biophysics
5350	Engineering
5358	Civil engineering
5360	Mechanical engineering
5363	Industrial and administrative engineering
5364	Metallurgical and materials engineering
5368	Mining engineering
5371	Surveying
5375	Forest engineering, forestry and silviculture

Further information on the Ministère de l'Environnement is available at [www.menv.gouv.qc.ca](http://www.menv.gouv.qc.ca).

**REQUIREMENTS** Candidates must satisfy the general contest requirements set out in Sections 1 and 2 and write a personal introduction according to the instructions outlined in Section 3.

They must also write a short essay of no more than one page in which they answer the following questions about environmental protection:

- *How will the skills acquired in your university program help you become professionally involved in environmental protection?*
- *How are you currently involved in environmental protection?*

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## Work Placement in the Natural Resources Sector

A paid work placement worth approximately \$5000 will be awarded by the **Ministère des Ressources naturelles, de la Faune et des Parcs**.

Lasting approximately 15 weeks, this work placement will be awarded to the best candidate in this category and will carry credits toward her diploma, further to an agreement with the educational institution. The selected candidate is responsible for making sure that her educational institution will recognize the work placement as part of her program.

Candidates must be enrolled in one of the following programs:

5358	Civil, construction and transportation engineering
5364	Metallurgical and materials engineering
5368	Mining engineering
5369	Engineering physics
5371	Surveying
5375	Forest engineering, forestry and silviculture

Further information on the Ministère des Ressources Naturelles is available at [www.mrnfp.gouv.qc.ca](http://www.mrnfp.gouv.qc.ca).

**REQUIREMENTS** Candidates must satisfy the general contest requirements set out in Sections 1 and 2 and write a personal introduction according to the instructions outlined in Section 3.

They must also write a short essay of no more than one page in which they answer the following questions about natural resources:

- *How will the skills acquired in your university program help you become professionally involved in areas related to natural resources?*
- *How are you currently involved in these areas?*

## Work Placement in a University Research Laboratory

A paid work placement worth \$5000 will be awarded by the **Chaire CRSNG/Alcan** and the **Chaire Marianne-Mareschal**. The work placement will be hosted by a research laboratory at Université Laval, in Québec City, or at the École Polytechnique, in Montréal, during the summer term. The selected candidate will be assigned to a laboratory according to her field of specialization.

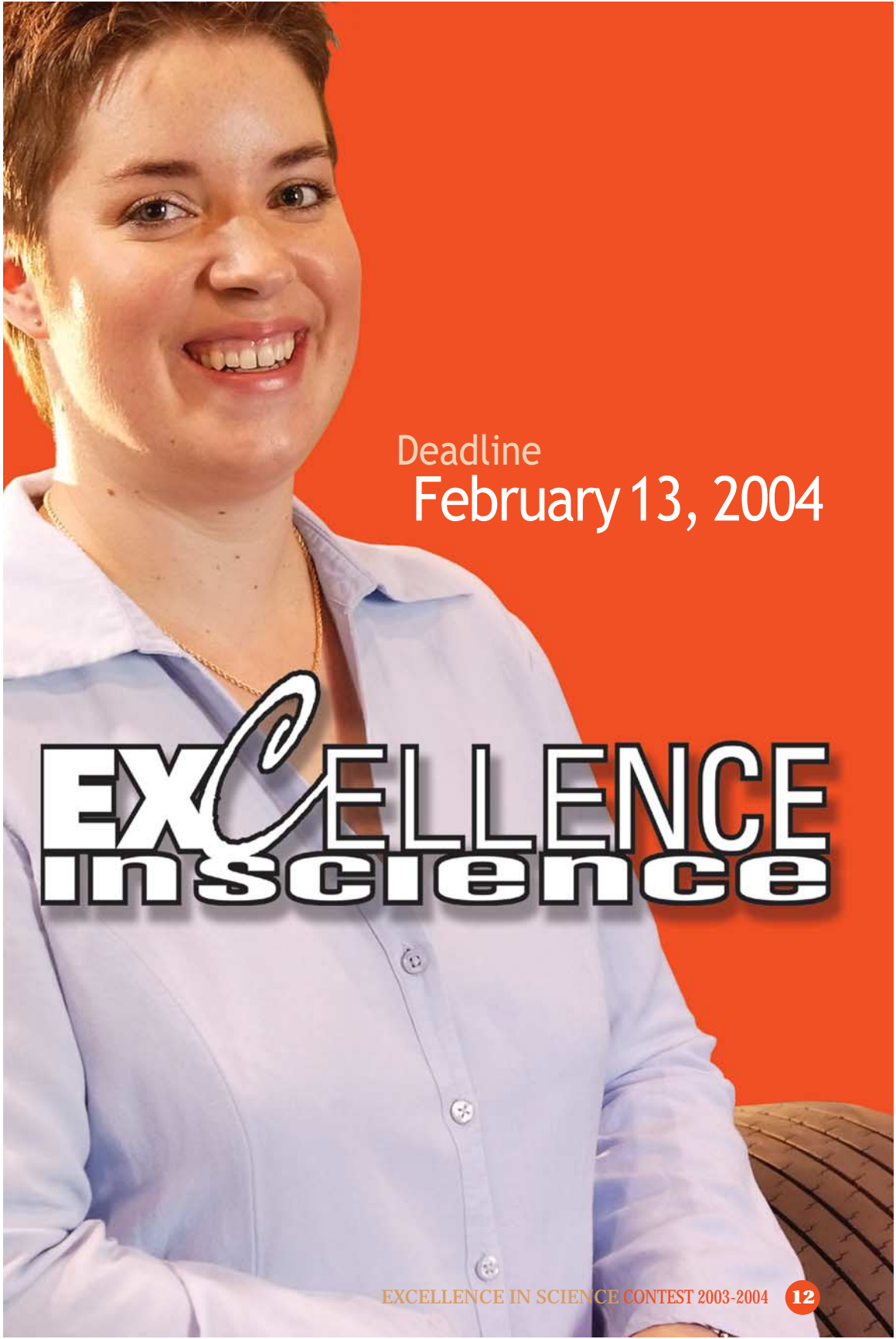
Further information on these two research chairs is available at the following Web addresses:

- [www.chairemm.polymtl.ca](http://www.chairemm.polymtl.ca)>
- [www.fsg.ulaval.ca/chaire-crsng-alcan](http://www.fsg.ulaval.ca/chaire-crsng-alcan)>

**REQUIREMENTS** Candidates must satisfy the general contest requirements set out in Sections 1 and 2 and write a personal introduction according to the instructions outlined in Section 3.

They must also write a short essay of no more than one page in which they answer the following question about applied research:

- *How will this experience help you enhance your skills and further your career development?*



Deadline  
February 13, 2004

# EXCELLENCE in science







## CANDIDATE'S CONSENT

I hereby authorize the MEQ to release my personal introduction to researchers for the purposes of conducting an analysis of the texts submitted to the (Excellence in Science) contest. My consent is given on the condition that my anonymity be respected.

I understand that refusal to sign this authorization will in no way affect the assessment of my candidacy.

(VALID UNTIL JULY 2005)

SIGNATURE : \_\_\_\_\_ DATE : \_\_\_\_\_

**Further information on the  
*Excellence in Science Contest*  
may be obtained from your educational institution or by writing to:**

### *Excellence in Science Contest*

#### **Ministère de l'Éducation**

Secteur de la formation professionnelle et technique  
et de la formation continue

Direction de la formation continue et du soutien

1035, rue De La Chevrotière, 12<sup>e</sup> étage

Québec (Québec) G1R 5A5

Telephone: (418) 646-2846

Fax: (418) 643-1926

E-mail: [chapeaulesfilles@meq.gouv.qc.ca](mailto:chapeaulesfilles@meq.gouv.qc.ca)

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## Québec



Centre des syndicats  
du Québec



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