Chair Objectives:

- Develop, implement, and communicate strategies to raise participation rates, viz.
  - To encourage careers, increase enrolment, increase profile, improve retention, eliminate roadblocks, and promote integration
- Provide role models
- Have regional and national impact on opportunities for women in science and engineering

Current Chairs

<table>
<thead>
<tr>
<th>Region</th>
<th>Chair holder &amp; University</th>
<th>Corporate Sponsor</th>
<th>Term</th>
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</table>
| Atlantic   | Dr. Cecilia Moloney
Memorial University
Electrical & Computer Engineering | Petro-Canada                  | 2004-2009 |
| Quebec     | Decision pending                          |                               |            |
| Ontario    | Dr. Valerie Davidson
University of Guelph
Biochemical Engineering          | Hewlett-Packard (Canada)      | 2003-2008 |
| Prairie    | Dr. Julita Vassileva
University of Saskatchewan
Computer Science                | Cameco                        | 2005-2010 |
| BC & Yukon | Dr. Anne Condon
University of British Columbia
Computer Science                | General Motors of Canada      | 2004-2009 |

NSERC Contact: Anne Alper
Research Partnerships Program
Tel.: (613) 996-6521 E-mail: anne.alper@nserc.ca
Outreach Activities

- **Partnerships:** With WISE Newfoundland and Labrador; ongoing logistical and financial support of WISE Summer Student Employment Program (WISE SSEP), now in 2006 in its 17th year of operation. More information available [www.cdli.ca/wise/ssep/index.html](http://www.cdli.ca/wise/ssep/index.html)

- **Workshops and Lectures:** “The Graduate Student Leader” to be given at the CCWESTT 2006 Conference, Calgary, June 2006; Visit to Memorial University in February 2006 by Dr. Vicky Hipkin, Program Scientist for Planetary Science of the Canadian Space Agency, who spoke about her work on the Phoenix mission to Mars.

- **Student Groups:** Ongoing support to student groups at Memorial University, e.g. WISE UP (Undergraduate Project) and WISE GSS (Graduate Student Section).

Communications and Networking

- **CWSEA Lectures:** Keynote address by Cecilia Moloney at the “Women in the Atlantic Academic Tundra: Thriving and Surviving” conference, Mount Allison University, March 3-4, 2006; Second annual lecture by Cecilia Moloney at Memorial University, “Women Doing Science in a Nelson Man-of-War”, October 26, 2005.

- **Meetings:** One-year update meeting with industrial sponsor Petro-Canada, June 30, 2005; With national group of CWSEs: November 2005 (Guelph), April 2006 (tele-conference).

- **Committees and Reports:** Input to Memorial University’s response to provincial White Paper on Post-Secondary Education, with reference to recruitment, retention, and scholarships for women in engineering, applied science, and technology.

- **Publicity:** New logo (see above), abbreviation CWSEA (said C-W-C), brochure ([available](http://www.engr.mun.ca/~cmoloney/CWSE/Pubs/CWSEAbrochure06a.pdf)), and website [www.cwsea.ca](http://www.cwsea.ca)

- **Participation on Councils and Boards:** Women’s Studies Council, Memorial (Cecilia Moloney), Women in Resource Development Committee & WISE NL (Caroline Koenig).

Research


- **Research Supported:** Drs. Anne-Marie Laroche and Jeanne D’Arc Gaudet, l’Université de Moncton, 2006 project “Validation of a novel pedagogical tool on the perception regarding science, technology, engineering, and mathematics in New Brunswick francophone students”.

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**CWSEA Team with Contact Information**

- Cecilia Moloney, Ph.D., Chair: [cmoloney@engr.mun.ca](mailto:cmoloney@engr.mun.ca), Tel. (709) 737-8961
- Caroline Koenig, C.E.T., Assistant to the Chair: [koenig@engr.mun.ca](mailto:koenig@engr.mun.ca), Tel. 709-737-7960
- Mercia Conway, B. Sc., WISE SSEP Program Administrator, [mercia@engr.mun.ca](mailto:mercia@engr.mun.ca), (709)737-8935
Outreach & Networks:

Science & Technology Consortium (Actua, CCWESTT, Lakehead University, Ontario Chair for Women in Science & Engineering, Ryerson Discover Engineering, WiSE Sudbury)

- Ready, SET, Go! Workshops (with Ryerson Discover Engineering) – 52 Workshops in 18 High Schools across SW Ontario; approximately 1000 students
- Youth S&T Outreach Program (Actua, Lakehead University, Ontario Chair for Women in Science & Engineering, Ryerson Discover Engineering)

ONWIE (Ontario Network of Women in Engineering)

- Go ENG Girl! - 700 girls Gr. 7 - 10 & 500 parents attended programs at 13 locations in Ontario (2006 – October 14th)
- “Communication and Gender in the Engineering Faculty” Workshop presented with Ann Holmes at 2 engineering faculties
- “Women in Engineering and Science: How we can increase female enrolment” Presentation at Dialogue 2006 (Conference for Ontario guidance counsellors)

One-Day Events Included

- E-lab (electronics/robotics lab for Gr. 8-10 girls); WISE Girl Guides’ Science &Technology Badge Program; Women Scientists: Comparing Japanese and Canadian Experiences workshop with Dr. Misako Kato, Ochanomizu University, Japan – Recipient of the WISET Fellowship from the Royal Society of Canada; “Choosing an engineering career” presentation at National Conference of Women in Engineering

Research:

Research Development Initiative (SSHRC program – 2 year award)

- National graduate student survey (online) - Fall 2006
- Workshop (Fall 2005) to develop survey and research agenda for letter of intent for the SSHRC Community University Research Alliance (CURA) program

Community University Research Alliance Application

- 5 year research program to address the under-representation of women in science and engineering (Letter of Intent submitted May 2006)

Contact Info:  www.soe.uoguelph.ca/webfiles/cwse
Valerie Davidson vdavidso@uoguelph.ca  519 824-4120 ext. 54367
Janice DeMoor jdemoor@uoguelph.ca  519-824-4120 ext. 53674
1. **Web-presence** for the Chair is established at [http://wise.usask.ca](http://wise.usask.ca)

2. **Saskatchewan Science Network** (SSN) is a grassroots initiative involving faculty from the Universities of Regina and Saskatchewan, the Royal Saskatchewan Museum and the Saskatchewan Science Center to link resources, activities and stakeholders interested in science outreach in Saskatchewan. The initiative is supported by the Chair by funding the development of the website, which is the central point sustaining the network. The announcement of the network is planned for September 2006.

3. **Science Ambassadors** – an initiative for outreach in aboriginal communities originated in the Saskatchewan team of the NSERC CRYSTAL project. The main idea is that engineering and science graduate students in their 2nd year spend up to two months in northern communities, where they assist science teachers by preparing materials, helping students, and finding creative and culture-related ways of explaining science concepts. The Chair has found sponsors for the initiative and is the main contact person in the negotiations. The first batch of students will go north this fall.

4. **ScienceQuest** - an initiative at the Montgomery Public School in Saskatoon. A field-based science program is proposed for students of Grade 8 highlighted by "hands on", out of school experiences intended to fuel a passion for science and learning. The goal is to have 60% female and representative aboriginal participation from public schools across the city study at Montgomery school for the year. This will allow engaging students in science and discovery exactly at the age when negative attitudes towards science are formed among females. The role of the Chair is to help in establishing contacts with volunteers from University and Industry to provide guidance in field and lab-visits, guest lectures, suggesting activities etc.

5. **A study of the Climate and Attitudes** in Pursuing Science and Engineering Careers for Undergraduate Students at the University of Saskatchewan was prepared in cooperation the Departments of Social Psychology and Sociology. The online questionnaire follows a standard methodology and received 250 responses. The results will be presented in a report to the Deans and will be used to inform decisions about curriculum revision and improving the undergraduate experience. If successful, similar studies will be suggested to the other Prairie Universities.
The goal of Jade Project is to increase the participation and success of girls and women in the physical sciences and engineering, particularly computer science. Careers in these fields provide incredible opportunities to understand our world, to develop new technologies that improve our quality of life, and to enjoy the creative, logical, and collaborative nature of science and engineering work. Yet, the participation of women in these fields is very low.

Our projects aim to change the way that computer science is taught, to provide research opportunities for undergraduate students, and to build a network of leaders to effect change. Our focus is in British Columbia and the Yukon, although our program for undergraduate researchers is for women across Canada, and materials developed as part of the project are available to all. Specific projects are:

**Jade Treasures:** The goal of the Jade Treasures Project is to provide materials for high school students that dispel common myths about the field of computer science.

**Connecting with Computer Science Course:** In this interdisciplinary college-level course, we introduce computer science principles through applications in the arts, psychology, and biology.

**Canadian Distributed Mentor Project:** Coordinated by Dr. Faith Ellen Fich at U. of Toronto, the CDMP supports outstanding undergraduate women in Computer Science and related fields to travel to Canadian research institutions for a summer of research and mentoring.

**Jade Bridges Programme:** Bridging across the province, we will seed new projects in B.C. and the Yukon that are aimed at increasing the participation of women in Science and Engineering. Project leaders form a regional network.

Jade, the official gemstone of British Columbia, is renowned for its beauty and strength, and indicates preciousness in Chinese culture. We hope that our project will touch the lives of many women, inspiring them to try something different, satisfying, and very rewarding.

The Jade Project is generously funded from 2004-2009 by the Natural Sciences and Engineering Research Council of Canada, as part of their NSERC Chairs for Women in Science and Engineering program, and by General Motors Canada. Additional support is provided by the Computing Research Association's Committee on Women in Computing and by the Computer Science Department at U. of British Columbia.

More information is available at [www.jadeproject.ca](http://www.jadeproject.ca)