

# Newsletter/Circulaire

## NSERC Regional Chairs for Women in Science and Engineering/ Chaires CRSNG pour les femmes en science et en génie

Volume 3, Issue 1

April 2000

### National Report from the NSERC Regional Chairs

The NSERC Regional Chairs work in five different academic areas, have very different Chair programs, and geographically are as spread out as they could be in this country. How can they possibly work together? The answer, happily, is very well. They have developed a common understanding and a common platform through biannual meetings, regular teleconferences, and frequent electronic communication.

The shared understanding enables the five to speak in unison on issues with national visibility. Two such issues have arisen recently. The strong positive response of the Chairs speaking together was aimed at mitigating what otherwise would have remained negative messages about women in science and engineering.

In January, considerable publicity embellished an attack, in a national newspaper, on NSERC's University Faculty Awards (UFA) program, which promotes the hiring of talented and productive women in tenure track positions. The Chairs' response was published in the Globe and Mail, and versions of it have appeared in other publications as well.

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### *New Frontiers, New Traditions*

*A National Conference for the Advancement of  
Women in Engineering, Science and Technology*

*July 6-8<sup>th</sup>, 2000 St. John's, Newfoundland*

The NSERC/Petro-Canada Chair for Women in Science and Engineering for the Atlantic Region, Dr. Mary Williams, together with the community organization WISE (Women in Science and Engineering) Newfoundland and Labrador, are the co-hosts of *New Frontiers, New Traditions* and are pleased to invite colleagues to attend.

The conference offers an exciting opportunity for women and men from across Canada and beyond our borders to celebrate women's contributions in science and technology and to encourage young people to bring their energy and talent to these exciting careers. It is fitting that *New Frontiers, New Traditions* is being held in this Millennium year as we acknowledge our past achievements and look to future accomplishments.

The Conference Program has been designed to be as rich and practical as possible. Keynote speakers will share their experiences and expertise in plenary sessions. They include Anita Borg, President of the Institute for Women in Technology, Palo Alto, California; Kathy Sendall, Vice-President, Engineering and Technology, Petro-Canada; and Kathy Penney, Vice-President, Jacques Whitford Environmental Ltd. Presented papers will share research results and initiatives to reach, recruit and retain women in STEM fields. Practical information on career development will be provided in seminars, and workshops will give more extensive opportunities to hear the 'voices' of experience on specific topics and engage in strategy development. There will also be time to network, share perspectives and have fun!

The NSERC/Industry Regional Chairs will be active participants giving papers and workshops and supporting colleagues from their regions to be part of the Conference. The five Chairs will be meeting on

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## Explore IT Conference for Grade 9 Girls

On November 12, 1999, grade 9 girls from schools in Calgary attended Explore IT, a hands-on Information Technology conference held conjointly at the University of Calgary and the Southern Alberta Institute of Technology. Approximately 130 girls and 30 teachers attended Explore IT at each site.

The NSERC/Petro-Canada Chair for Women in Science and Engineering (Prairie Region), Dr. Elizabeth Cannon, was Conference Convenor for the U of C site and was involved in planning approximately 30 hands-on sessions. The purpose of the Conference was to introduce and excite young women about career opportunities in the IT field. At the present time, only about 15% of the students enrolled in IT-related programs at the University are women. The goal of the Conference was to provide the students with information prior to them making key course decisions in high school.



Hands-on sessions included web page design, 'Virtual Family' Java programming, GPS satellite navigation, virtual reality workshops and Geographic Information Systems. Dr. Maria Klawe, NSERC/IBM Chair for BC and the Yukon was one of three keynote speakers who encouraged the girls to stay in math and science courses to prepare for careers in IT fields.

By all measures, the day was a success. While only 28% of the girls indicated at the U of C site that they were thinking of a career in Information Technology prior to the Conference, 73% indicated they were considering a career in IT after the day of speakers and activities. Parents and teachers both indicated that the day was a really positive experience in the girls' lives. Preparations are underway for Explore IT 2000.

More information about the Conference and its sponsors can be found at [www.explore-it.org](http://www.explore-it.org). ❖

## Virtual Family Update

SWIFT (Supporting Women in InFormation Technology) is continuing to develop their software activity, Virtual Family (VF) and to offer workshops to girls in elementary schools, high schools, and conferences for high school female students. The aim of VF is to introduce programming in a way that is appealing to girls. VF does this by incorporating the important components of electronic games that appeal to girls, namely, story line, characters, and relationships. Virtual Family is based on a family and their interactions; family members are cartoon characters that interact in animated action sequences. Each family member has their own menu where an item on the menu corresponds to an action sequence involving one or all of the family members. The program was designed so that the action sequences could be easily modified by the addition of one line of code, or created by following the format of the action sequences already coded in the program. Currently, work is being done to develop the tutorials to cover more programming lessons, and the structure and presentation of the tutorials is being re-evaluated and overhauled. The goal is to produce a self-installing CD that will allow female students the opportunity to keep using VF beyond the two hours generally allotted for a workshop.

Note: Virtual Family will be presented to delegates at the *New Frontiers, New Traditions* conference on July 6<sup>th</sup> through a two-hour hands-on workshop. ❖

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## Two new professors join the CS Department at UBC

Anne Condon, Professor, and Cristina Conati, Assistant Professor, joined the faculty of the Computer Science Department at UBC this past fall. Both were drawn to UBC by the supportive atmosphere in the department, as well as the high caliber of research in areas that are of high interest to them. Having the beautiful west coast within walking distance was, of course, an appealing feature to joining the faculty at UBC!

Anne Condon's main research area is theoretical computer science, and she is currently teaching a graduate course: Complexity of Computation. Dr. Condon is the Computer Scientist in a multidisciplinary project out of the University of Wisconsin, the

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Key points were:

- Abilities of women and men in science and engineering are equivalent;
- Diversity is a positive contribution to good science;
- Traditions which mitigate against women's participation are self-perpetuating;
- Intervention and promotion programs produce positive results;
- And hence NSERC's program serves both good science in Canada and the advancement of women.

In March, the unfortunate experience of a Canadian space scientist came to light when she emerged from an isolation experiment. The Chairs wrote a public letter to Minister John Manley, responsible for the Canadian Space Agency, to ensure that this incident would not be taken lightly. It said, in part:

*The number of women in science and engineering in Canada is growing. However, there are still many of us who understand the stresses of working in situations where women are a minority. A person working under stress, especially in high performance fields such as research, must make additional effort in order to achieve the same performance standard as her peers, and hence is continuously at a disadvantage. This subtle discrimination is not recognized or not understood by many research managers and policy makers.*

*The stress under which Dr. Lapierre worked in the space capsule was severe. She suffered sexual harassment, and then had to work for more than two months in close proximity with a crew member who had shown her personal and professional disrespect. In Dr. Lapierre's case, the discrimination was not subtle.*

*If the CSA supports equal opportunity in science and engineering for women and men, then the CSA must make it clear to all of Canada that the treatment that Dr. Lapierre suffered was wrong. The CSA should also offer Dr. Lapierre reassurance that these events will in no way diminish her credentials as a scientist.*

The Chairs would prefer positive results to negative events, and welcome opportunities to use their national voice to celebrate successes and congratulate public figures on progressive actions.

For names and more information about each of the Chairs, see the websites at the end of the newsletter. ❖

July 5<sup>th</sup>, the day before the Conference, and will also have discussions with the CCWEST (Canadian Coalition for Women in Engineering, Science and Technology) Board, to advance their work on a national level. The Chairs will also join with their constituents in regional meetings as part of the Conference itself.

We hope that you will be able to join us! Nous sommes particulièrement fières de souhaiter la bienvenue aux participants et participantes en provenance de l'extérieur de Terre-Neuve et du Labrador ainsi qu'à leur famille.

Program, sponsorship, travel and registration information is available at the website

[www.mun.ca/cwse](http://www.mun.ca/cwse). The Registration Booklet can be downloaded from the site or obtained by contacting Carolyn Emerson, Conference Chair, [emerson@enr.mun.ca](mailto:emerson@enr.mun.ca), (709) 737-7960. ❖

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## Gender Differences in Student Participation & Achievement in the Sciences: Choice or Chance?

The Prairie Chair, Dr. Elizabeth Cannon, in collaboration with Dr. Judy Lupart, Department of Educational Psychology at the U of C, has undertaken a study of grade 7 and 10 students' attitudes and experiences pertaining to math and science. The purpose of the three-year project will be: to investigate the key personal and educational factors that contribute to participation and achievement in science for both males and females; to identify the factors that most directly contribute to decisions on the part of students to pursue programs and careers in science; to explore roots of differences and similarities for males and females in early career decision-making; and to investigate parent/teacher/counselor influence on student participation in the sciences.

The initial survey of 3, 000 students is presently underway and is expected to be completed by May 2000. This information, along with course achievement data will be analyzed to examine the relationships between the factors of interest. The project, funded by the Prairie Chair and SSHRC, is the first of its kind to be done in Canada, and will follow previous work done by Dr. J. Eccles from the University of Michigan. Preliminary results will be reported on at the *New Frontiers, New Traditions* National Conference in St. John's, Newfoundland, July 6-8, 2000. ❖

## La recherche à la Chaire CRSNG/Alcan

The NSERC/Alcan Chair has been working on two research projects. The first one's results will soon be presented and the Chair has recently received a grant for the last one.

### Rapport statistique

La Chaire du Québec a terminé la rédaction d'un Portrait statistique des effectifs étudiants en sciences et en génie au Québec (1970-2000)\*. Ce rapport présente l'évolution des inscriptions et de la diplomation dans les disciplines scientifiques aux niveaux collégial et universitaire au cours des trente dernières années.

Parmi les conclusions du rapport, soulignons celle concernant la nouvelle composition sexuelle des effectifs en SNG. On retrouve en effet de plus en plus de femmes et de moins en moins d'hommes dans les effectifs inscrits dans le programme préuniversitaire en sciences de la nature au collégial. Or, les femmes et les hommes, ayant des modèles d'orientation différents, ne se dirigent pas vers les mêmes disciplines scientifiques, ce qui entraînera fort probablement une redistribution des effectifs étudiants et par conséquent, des diplômés. Le déplacement des effectifs devrait se faire vers les sciences de la vie et les sciences de la santé au détriment des sciences à fort contenu physique, tels que la physique et la plupart des programmes de génie ainsi que certains programmes des sciences appliquées, comme l'informatique et la foresterie, domaines vers lesquels les femmes se dirigent trois fois moins que les hommes.

Ce rapport s'inscrivait dans une recherche sur les systèmes de représentations sociales d'élèves du secondaire en science et technologie menée par le Centre interdisciplinaire sur l'apprentissage et le développement en éducation (CIRADE). Les résultats seront présentés à la fin avril au ministère de la Recherche, Science et Technologie, l'Association de la recherche industrielle du Québec ainsi que les médias.

\*FOISY, Martine, Yves GINGRAS, Judith SÉVIGNY et Sabine SÉGUIN (2000), Portrait statistique des effectifs étudiants en sciences et en génie au Québec (1970-2000), Québec et Montréal, Chaire CRSNG/Alcan pour les femmes en sciences et génie au Québec - CIRST, 62 p. Ce rapport est disponible en format PDF à:  
<http://www.fsg.ulaval.ca/chaire-crsng-alcan/publicat.html>.

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## Ontario News

### Pathmakers Acknowledged

The Pathmakers Program was created to encourage young people (in particular girls and young women) to stay in school and consider careers in science and engineering. Female role models (mostly post secondary students enrolled in science or engineering programs) visit elementary and secondary schools and give short presentations on education, career choices, job opportunities etc, in the fields of science and engineering. In mid February, it was announced that the Pathmakers Program was selected as the recipient of the 1999 Students Project Award for the Ontario Region in recognition of the impact the program has had in encouraging young women to pursue a career in science and engineering. In mid March, luncheons were held at both the University of Ottawa and Carleton University to give recognition to the volunteers that make Pathmakers possible. The Deans of Science and Engineering at Carleton University also attended one of the luncheons.

### Co-op Student from Newfoundland

A co-op student from Newfoundland was hired by Dr. Monique Frize as Assistant to the NSERC/Nortel Joint Chair for Women in Science and Engineering in Ontario. Karen Traverse, a second year electrical engineering student from Memorial University of Newfoundland, worked from January to late April. She assisted Dr. Frize in such activities as the planning of ICWES12, the maintenance of the Chair's website, and researching the statistics of the enrolment of women engineering students in university programs at both the undergraduate and graduate level. This work term provided Karen an opportunity to experience activities that are being carried out to promote women in science and engineering in the Ontario region; to interact with engineers in various levels of the profession; and to explore the cultural differences and similarities between Newfoundland and Ontario. Karen has enjoyed this experience from start to finish and looks forward to working with Dr. Frize again in the future.

### Ontario WISE Chapter News

Recent WISE Ottawa events included the video presentation, "Why Are Women So Strange & Men So Weird?" by Bruce Christopher. This fascinating and informative video highlights some of the differences in communication styles and thought processes of men

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Wisconsin DNA Computing Project; this position reflects another of her interest areas, biomolecular computing. As a co-chair of Computing Research Association's Committee on the Status of Women (CRA-W), and a past coordinator of CRA-W's Distributed Mentor Project, Dr. Condon has made a significant contribution to the goal of equal gender representation in Computer Science. At UBC, Dr. Condon is pursuing this goal through the development of a new introductory course in which students can learn what computation is all about and be introduced to the connections between fundamental ideas from computer science and other fields such as biology, psychology, or art. A computer science course such as this would, Dr. Condon believes, attract women who might otherwise overlook computer science as a possible career. With her background of collaboration with scientists from other disciplines, and her proven dedication to encouraging women into computer science, Dr. Condon is the perfect person to successfully integrate an innovative computer science introductory course into UBC's Computer Science curriculum. The SWIFT (Supporting Women in InFormation Technology) team is delighted to welcome Anne Condon to UBC, the Computer Science Department, and most of all, to SWIFT.

Cristina Conati's main research area is artificial intelligence, probabilistic methods for user and student modeling, and computer-based instruction. Dr. Conati is starting her first full time teaching position. She entered the department with a certain amount of trepidation; she has found the experience, however, to be very stimulating and rewarding. Since arriving at UBC Dr. Conati's interests have motivated her to start an interdisciplinary series of talks aimed at integrating cutting edge research on artificial intelligence, cognitive science and multimedia technologies to devise innovative ways in which computers can enhance education, learning and training. The TILT (Technologies for the Innovation of Learning and Teaching) seminars have stimulated discussion between people from a variety of disciplines. Dr. Conati's interests and expertise will be invaluable to E-GEMS (Electronic Games for Education in Math and Science), the sister project of SWIFT, and E-GEMS is delighted to have her join their team, and welcomes her to the Computer Science Department, and to UBC.

In the UBC Computer Science Department, Anne Condon and Cristina Conati join Maria Klawe and Gail Murphy, bringing the total number of women in the CS faculty to four, just over 13% of the

faculty. The Computer Science faculty is hopeful that a fifth woman, Karon McLean, may also soon be joining the faculty. ❖

## Havin' a Time in '99

### Provincial Guiders' Conference, Gander, Newfoundland

During the weekend of Oct. 15-17, 1999, the NSERC/Petro-Canada Chair for the Atlantic Region, the Newfoundland Science Centre and WISE Newfoundland and Labrador, partnered with the Girl Guides of Canada in participating in this provincial conference attended by 360 Guide leaders. The GGC, *a movement for girls, led by women*, represents a key audience for the CWSE as Guiders interact with 10,000 girls throughout the province, and over 100,000 nationally. Empowerment and the development of self-confidence and leadership skills in girls and young women, are shared objectives.



*Anna Kiefte of the Science Centre with hands-on fun*

Great hospitality and prominence on the program highlighted our presence at the conference, and we had many opportunities to interact with the participants. Those formal and informal interactions carried the messages of the importance of science in our everyday lives, the broad spectrum of career choices available to young women, and the leadership of women. There were also lots of fun, hands-on activities to provide resources to assist Guiders in delivering the science component of their program to their Sparks, Brownies and more senior girls. Plenary addresses, poster give-aways and playing with 'guk' contributed to our collectively havin' a time, with lots of listening, learning and laughing throughout the weekend. ❖

# The ARC (Alternate Routes to Computing) Project

**A University/Industry collaborative initiative to address the information technology skills shortage**

ARC (alternate routes to computing) is an innovative and successful pilot program combining university courses and work experience, and was jointly launched in 1998 by the University of British Columbia, Simon Fraser University and the information technology industry. It has been supported by the SWIFT Program, (Supporting Women in InFormation Technology), an initiative of the BC & Yukon NSERC/IBM Chair, Dr. Maria Klawe. This 24 month, post baccalaureate program was designed to address the urgent need for more highly skilled workers in information technology and the low participation of women in this field. The first class of 29 students, over 70% of whom are women, are currently in their last academic terms and preparing to graduate in September and December from the two institutions. Employers have been very enthusiastic about the students during their 8 month work terms and several students have already taken jobs in industry. The second class of 44 students will be starting paid co-op terms in May 2000. Although some students have left the program since its inception the percentages of continuing female students has remained at well over 50% for these first two cohorts.

Requirements for entry were designed to attract individuals with a strong academic record, demonstrated interpersonal skills, basic math and computer literacy (grade 12 math in the last two years or 4 university math courses) and an interest in a career change into information technology. Early supporters have been committed to the concept of the world of computer science being enriched by the infusion of perspectives brought by people with backgrounds from varied disciplines. People in these first two classes come with degrees and careers in law, medicine, music, art, education, social work, physics, environmental biology, and sociology, to name a few. Their average age has been 31 and 32, for the first and second cohort respectively, and the age range of all students has been between 22 and 52 years. Overall academic performance has remained high, averaging 6% higher than the average achieved by students in the regular, already highly selective, computer science program.

## Future Plans

We are particularly excited by the fact that the ARC program is likely to evolve as an important program in NewMIC (New Media Innovation Center), the new multi-university and industry research center being established in the SFU Harbour Centre Campus downtown. The research focus of NewMIC is innovative technologies for new media applications in learning, teaching, entertainment, medicine and e-commerce. In addition, NewMIC will have increasing the participation of women in information technology careers as a special theme. NewMIC is a joint initiative between UBC, SFU, the University of Victoria, the Technical University of BC, the Emily Carr Institute of Art and Design, the National Research Council, TR Labs and the BC Advanced Systems Institute. IBM, Nortel, Xerox and Lucent have already expressed their intention to be major sponsors of NewMIC, and for all four, NewMIC's focus on Women in Information Technology was a major factor in gaining their support.

Inclusion in NewMIC offers many benefits to ARC. It will provide additional visibility for the program, and will help us secure long term funding. Moreover, the research areas in NewMIC are ones that tend to be of particular interest to the kinds of students we are attracting to the ARC program.

Further details on the ARC program available from: <http://www.arc.cs.ubc.ca>, and we look forward to seeing you at the *New Frontiers, New Traditions* conference in July to share with you more of our experiences with ARC and what we learned. ❖

### ICWES12 web site

<http://www.carleton.ca/wise/icwes12/icwes12.htm>

The web site for the International Conference of Women Engineers and Scientists (ICWES12) being held in Ottawa in July, 2002 is up and running. Information about the conference, the conference organizers, transportation and Ottawa in general is available on the web site. A secured registration page is currently being developed and should be available by the fall of 2000.

Québec continued from page 4

## Projet de recherche sur la persévérance scolaire au collégial

En collaboration avec le Centre interuniversitaire de recherche sur la science et la technologie (CIRST), la Chaire du Québec a obtenu une subvention de 150 000\$ sur trois ans pour la réalisation d'une recherche portant sur les parcours scolaires en sciences et en technologies au collégial : analyse de la persévérance scolaire, des changements de programmes et de l'abandon des études. Il s'agit d'une enquête longitudinale de type qualitatif qui impliquera près de 300 entrevues avec des étudiants et étudiantes du collégial inscrits dans les secteurs scientifiques et technologiques. Les premières entrevues auront lieu en septembre prochain dans les régions de Montréal et de Québec.

Cette recherche s'inscrit dans le cadre de l'Action concertée sur la relève scientifique et technologique du Fonds FCAR. ❖

## Ontario News *continued from page 4*

and women. As a humorist-psychologist, Bruce Christopher offers solutions/preventions to the possible conflicts or misunderstandings that arise between men and women because of these differences. The video also had an enthusiastic reception from a class of 3<sup>rd</sup> and 4<sup>th</sup> year engineering students at Carleton who saw it over two lectures as part of the Professional Practice course. In February, Dr. Claudine Simson, Vice President of Disruptive Technology, Network & Business Solutions at Nortel Networks, presented a talk "Women and Technology" at a dinner hosted by WISE Ottawa-Carleton. Her talk is available on the WISE website at <http://www.carleton.ca/wise/wiseinfo.htm>. In March, there was an information session entitled "Safety for Women".

The Sudbury WISE Chapter held its inaugural meeting on January 14, 1999 with Dr. Monique Frize as a guest speaker. They also elected their executive and started planning future events. The chapter held three job-shadowing events, in January, in March and a third one, organised in conjunction with PEO Sudbury Chapter, that accommodated approximately 115 students. At this latter event, the Sudbury WISE Chapter unveiled their new display and

brochures revised with the help of orange.ink. Representatives of Sudbury WISE attended such events this past year as the PEO's bridge building competition in the new Sudbury Centre, Sudbury's City-wide Science Fair, Women in Engineering Advisory Council Annual Conference in Toronto and various high school career days. This Chapter also has a number of events planned for 2000 such as a Science Olympics. They hosted two Saturday morning CAGIS events (Canadian Association for Girls in Science) and will also be assisting the Sudbury Girl Guides in earning their Engineering Badge. (The complete Sudbury WISE newsletter can be viewed at <http://www.carleton.ca/wise/Sudbury99.html>)

## SAITWORM (Science as if the World Mattered) Conference - Toronto, May 9 -12

Claire Deschênes and Monique Frize will speak on Friday, May 12 about "Engineering as if the World Mattered: A View From Inside". Both will be attending the entire conference to be held at the Ontario Institute for Studies in Education. ❖

## International News

Drs. Frize and Deschênes are representing Canada at five major international meetings this year. As we go to press, five students from across Canada are participating in UK/Canada conference in England on Women in Science. Europe, India, and USA will be represented at the *New Frontiers, New Traditions* Conference in Newfoundland this year, and two years from now ICWES12 will be held in Ottawa. Clearly, Canada is making a contribution internationally in promoting participation by women in science and engineering.

Canada's model of five regional Chairs, co-operating to provide a national network of Chairs for Women in Science and Engineering, is unique in the world. Dr. Deschênes spoke about the NSERC/Industry Chairs in Brussels, and other countries have expressed interest in learning more about this model.

## UK/Canada Conference

WOMEN CROSSING BORDERS: WOMEN AND SCIENCE is a forum designed to bring together UK and Canadian women leading their fields in science, engineering, technology and the social sciences with educators, science

journalists, government representatives and industry. Its aims are to highlight the achievements of women in science, to engage the experts and opinion-makers in lively discussion on issues challenging women in science internationally; to encourage ongoing Canada-UK collaborations and to foster new links. It takes place May 4-5, in London, UK, and Dr. Frize is one of the feature speakers.

With the support of Canada Department of Foreign Affairs and International Trade, five Canadian students will attend this conference.

- Christina Freeborn of Newfoundland, has just completed an undergraduate Biology major at Memorial and is the WISE Summer Program Coordinator.
- Hélène Van Niewenhuyse of Québec has just finished her Bachelor's degree in Sociology at Laval and will begin a Master's degree on women and science issues next September.
- Colleen Ennett of Ottawa, an Electrical Engineering PhD student, is also the vice-president of the Ottawa-Carleton WISE Chapter.
- Crystal Nyhus is a second year computer science undergraduate at UBC in Vancouver.
- Georgia Fotopoulos is completing her Masters in the Dept. of Geomatics at the University of Calgary.

### **World Conference on Science (UNESCO-ICSU)**

As a member of the Canadian delegation, Dr. Deschênes participated in the World Conference on Science (WSC) organised by UNESCO and the International Council for Science (ICSU) from June 27 to July the 1<sup>st</sup> 1999 in Budapest. More than 1800 delegates representing 155 countries, governmental organisations, non-governmental organisations and industries attended.

Two texts were adopted by consensus: *A World Declaration on Science and the Use of Scientific Knowledge* and *A Science Agenda – Framework for Action*. Among the subjects discussed, the governments represented at the WSC agreed on the need to promote a fairer access to science

and its advantages. Therefore, strong support to increase the participation of women at all levels of science was given. The complete texts of the *Declaration* and the *Agenda*, including two paragraphs concerning women, can be found at: <http://www.unesco.org/opi/science/>.

Reports of five preliminary forums on women and science can be found at: <http://www.unesco.org/opi/science/vf/content/news/upresse>

### **Women and science: Making change happen**

Dr. Deschênes was invited to participate in the Conference *Women and Science: Making change happen*, organised by the Women and Science sector of the European Commission and held in Brussels the 3<sup>rd</sup> and 4<sup>th</sup> of April 2000. The objective of the conference was to hold a wide debate among scientists and decision makers on the basis of the ETAN report «Science Policies in the European Union: promoting excellence through mainstreaming gender equality», about the challenges of the under-representation of women in scientific research, the means and measures needed to tackle the problem. For more information on this conference or for a PDF copy of the ETAN report:

[http://www.cordis.lu/improving/src/hp\\_women.htm](http://www.cordis.lu/improving/src/hp_women.htm).

Dr. Deschênes presented the Canadian experience of this issue. She explained the legal background that permitted the creation of programs that aim to encourage women's integration into scientific fields. She also described some of the programs, with a particular attention to the five NSERC/Industry chairs. After the session, Dr. Deschênes discussed opportunities for collaboration and exchange between Canada and Europe with representatives of UNESCO and the Mission of Canada to the European Union.

For more information, see the Canada European Commission Program for Co-operation in higher Education and Training: [http://www.hrdc-drhc.gc.ca/hrdc/hrib/learnlit/policy/academic/can\\_euro](http://www.hrdc-drhc.gc.ca/hrdc/hrib/learnlit/policy/academic/can_euro).

Dr. Deschênes also described the Canadian experience while representing Canada at the UNESCO European Conference on Women in Science, a preliminary meeting to the World Conference on Science, held in November 1998, in Bled, Slovenia.

### **APEC Meeting in Asia**

March 14-16, 2000, the 18<sup>th</sup> Industrial Science and Technology Working Group (ISTWG) of the Asia Pacific Economic Conference (APEC) meeting was held in Pattaya, Thailand. Dr. Frize presented the draft final report of the AdHoc Sub Group on Gender. There was unanimity that the gender Task Force continue its work in a Phase II program with a strong recommendation for Canada to lead this activity.

### **Global Alliance Forum in Germany**

In June, Dr. Frize will attend an International Forum on "Women in Engineering and Science" in Hanover, Germany, sponsored by Global Alliance and VDI (Association of Engineers, Germany). This event will work towards building a world-wide network to diversify the workforce in the engineering and scientific professions. The forum will also focus on researching and evaluating best practices in industry and education for increasing the participation of women in the engineering and related scientific professions. For more information about this event, go to [http://www.vdi.de/wec/frauen\\_eng.htm](http://www.vdi.de/wec/frauen_eng.htm). ❖



### **WEB LINKS FOR CONTACT INFORMATION**

**Dr. Maria Klawe**

NSERC/IBM Chair for Women in Science and Engineering (BC and Yukon)  
<http://taz.cs.ubc.ca/swift/>

**Dr. Elizabeth Cannon**

NSERC/Petro-Canada Chair for Women in Science and Engineering (Prairie Region)  
<http://www.ensu.ucalgary.ca/cwse>

**Dr. Monique Frize**

NSERC/Nortel Chair for Women in Science and Engineering (Ontario)  
<http://www.carleton.ca/wise>, <http://www.genie.uottawa.ca/wise>

**Dr. Claire Deschênes**

Chaire CRSNG/Alcan pour les femmes en sciences et genie au Quebec  
<http://www.fsg.ulaval.ca/chaire-crsng-alcan>

**Dr. Mary Williams**

NSERC/Petro-Canada Chair for Women in Science and Engineering (Atlantic Region)  
<http://www.mun.ca/cwse>