

The Importance of Collecting Women in STEM Archives



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Motivation for Preserving Archives

Women in science and technology (S&T) have been invisible for a long time in science history, or their contributions have been ignored

Today, when facing worrisome societal changes, it is essential to preserve this part of the history of women and their contributions in S&T

The best way to achieve this is to deposit information and documents in institutional archives.

Content of the presentation

1. The Canadian Archive of Women in STEM portal
2. Examples of their content: The ICWES Conference information
3. The book on the history of the ICWES conferences
4. Analysis follow-up



1. Portal of the Canadian Women in STEM Archives

Collaboration: University of Ottawa Library, CIWES-ICFIS, and Library and Archives Canada

Objectives :

- Encourage women in STEM and related organizations to donate their documents or make them available on the portal
- Ensure free access to the documents, several of which are digitized and indexed
- Increase awareness on the importance of the history of women in STEM
- Encourage young people to study and work in STEM fields through the presentation of inspiring role models



Workshop 2019-10-04, U. of Ottawa

As of April 13, 2025,
there were: 512
entries on the portal,
in English and French

1. Portal of the Canadian Women in STEM Archives

Collaboration University of Ottawa, CIWES-ICFIS, and Library and Archives Canada

Examples :

- Fonds CIWES-ICFIS : CA 10-165
- Fonds INWES : CA 10-125
- Fonds AFFESTIM : CA 10-164
- Fonds Elsie Gregory MacGill : CA F 4526
- Fonds Monique Frize : CA 10-123
- Fonds Claire Deschênes : CA 10-195

- [Files of ICWES Conferences: CA 10-166](#)

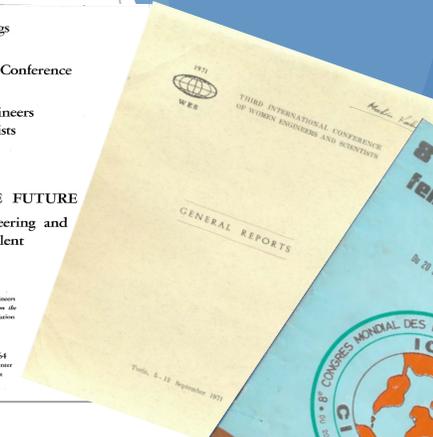
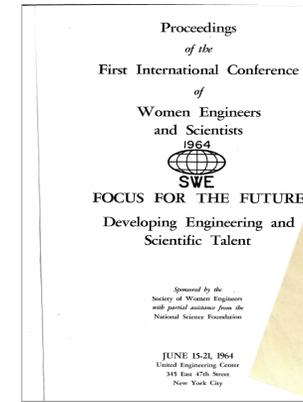
See https://femmes-en-stim-women-in-stem.uottawa.ca/index.php/?sf_culture=en



2. Fonds of the International Conferences on Women Engineers and Scientists (ICWES)



- First ICWES conference, June 1964 in New York
- 486 women met to present their work in science or engineering and to network
- The ICWES conferences were held every three years or so until now
- Hundreds of documents over a 60 years period



Content, ICWES conferences 1964 - 2008

| ICWES # | Year | Place | Nb of participants | Nb of Countries |
|---------|------|-----------------------|--------------------|-----------------|
| I | 1964 | New York, USA | 486 | 35 |
| II | 1967 | Cambridge, UK | 307 | 35 |
| III | 1971 | Turin, Italy | 233 | 32 |
| IV | 1975 | Cracow, Poland | 618 | 30 |
| V | 1978 | Rouen, France | 146 | 30 |
| VI | 1981 | Bombay, India | 394 | 17 |
| VII | 1984 | Washington, DC, USA | 1204 | 13 |
| VIII | 1987 | Abidjan, Ivory Coast | 221 | 24 |
| IX | 1991 | Warwick, UK | 466 | 42 |
| X | 1996 | Budapest, Hungary | 82 | 21 |
| XI | 1999 | Chiba, Japan | 349 | 38 |
| XII | 2002 | Ottawa, Canada | 550 | 49 |
| XIII | 2005 | Seoul, South Korea | 743 | 49 |
| XIV | 2008 | Lille, France | 481 | 60 |
| XV | 2011 | Adelaide, Australia | | |
| XVI | 2014 | Los Angeles, USA | | |
| XVII | 2017 | New Delhi, India | | |
| XVIII | 2021 | Coventry, England | | |
| XIX | 2023 | Auckland, New Zealand | | |

3. Book on ICWES conferences

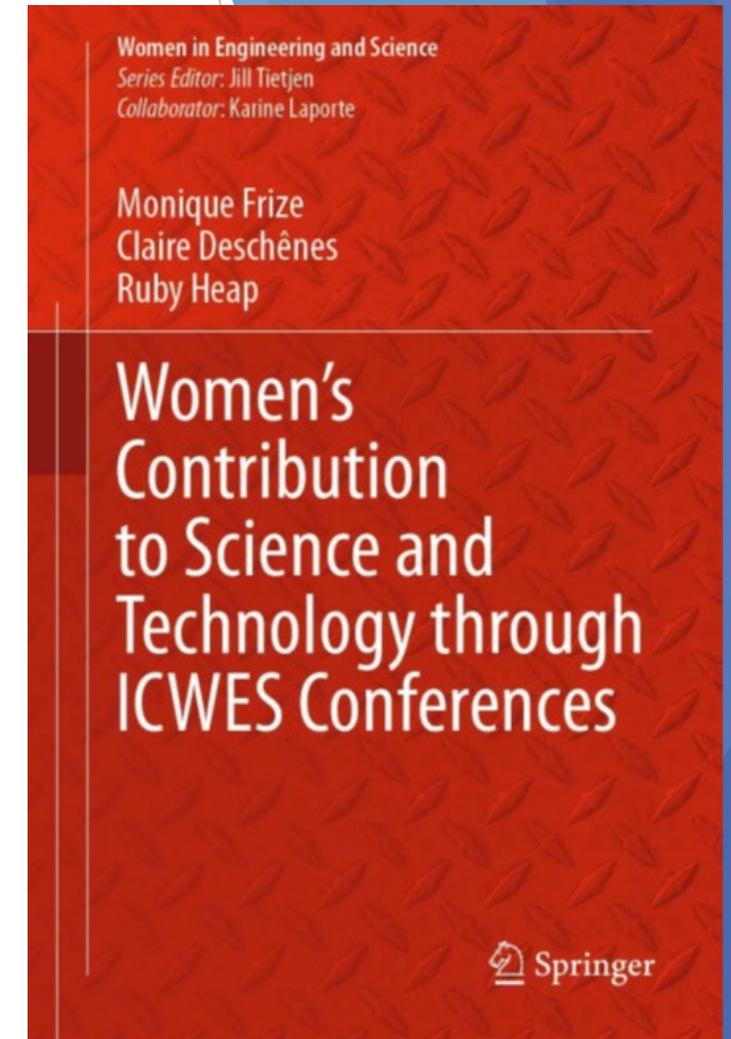
“Women’s Contribution to Science and Technology through ICWES Conferences”

Frize M., Deschênes C, Heap R., with the collaboration of Karine Laporte

Springer, 468 pages, DOI 10.1007/978-3-031-33800-7

Content:

- 14 chapters on ICWES-I to ICWES-XIV
- 1 chapter on the qualitative analysis of ICWES-I to ICWES-XII
- 3 chapters on not-for-profit organizations, INWES and CIWES-ICFIS



ICWES-I to -XII quantitative data

394 articles on gender, 612 on science and technology (S&T)

90% of the scientific articles were by women in S&T

Principal themes:

Basic human needs (care)

Biology and microbiology

Computer advances

Natural resources and energy

Aboriginal women in S&T

Physical sciences and mathematics

Health and medicine

Communications

Industrial development

Feminism and S&T (INWES XII)

The conferences created a dialogue between North-South and East-West, and promotes transfer of information from and to international bodies such as UNESCO.

Worrying questions:

An increasing population, malnutrition, diseases, the environment, climatic change.



Evolution of concerns about the environment

- ▶ 1964, ICWES-I, New York, main theme: “Focus on the future - Engineering and scientific talents”
 - > Human needs in view of changing demographics
- ▶ 1991, ICWES-IX, UK, main theme: “Communication”
 - > sustainable development
- ▶ 1999, ICWES-XI, Japan, main theme: “S&T for global ecology”
 - > climate change
- ▶ 2002, ICWES-XII, Ottawa, main theme: “Women in a knowledge-based society”
 - > different impact of climate change on women and men

“There will not be climatic justice without a gender justice”

SWE Journal after ICWES-XIV (2008)

4. Researchers are invited to continue the analysis

Interesting questions arising from ICWES conferences:

- Main contributions by delegates at ICWES on S&T topics and on gender in the past 60 years
- Global representation of the contributions and evolution over time.
- Dialogue North-South and East-West
- Relationship between science and society
- Impact of the conferences on the participation of women in S&T over time



ICWES-XIII, Seoul 2005 South Korea,
Monique Frize at the opening ceremony



ICWES-XIII Seoul 2005,
Gender session, Ruby Heap, Monique Frize

Quote from the conclusion of the book “Women’s Contributions to Science and Technology Through ICWES Conferences”:

“This book builds on the collective memory of women in STEM. It provides relevant information on the internationalization of their community and creation of regional networks through INWES. It assesses continuity and changes in the dialogues between North and South, East and West. It attests to the development of knowledge and technologies by women in a short but exciting period, as well as their concerns for negative aspects brought by S&T development to the human populations and the environment”. (page 417)



INWES 2nd board meeting,
Paris, 2003



ICWES-XIV Lille 2008,
Monique Frize, Paula Leventman, Misa
Gratton, Anna Szemik-Hojniak

