

Canada Member of ICHMT, AIHTC, ASTFE (1) Overview

(From UTC-3:30 to UTC-8, Population: 38 million)

1. Major Societies

Canadian engineers and researchers in the field of heat transfer can be members of the Canadian Society for Mechanical Engineering (CSME), where they can be active participants in the Heat Transfer Technical Committee and the Advanced Energy Systems Technical Committee. Engineers and researchers in the field of mass transfer are more often chemical engineers and therefore can be members of the Canadian Society for Chemical Engineering (CSCHE).

Due to its close proximity with the United States, many engineers and researchers in the fields of heat and mass transfer are also members of the American Society of Mechanical Engineers (ASME) and its Heat Transfer Division, the American Society of Thermal and Fluids Engineers (ASTFE) and the American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE).

2. Major Meetings

The CSME holds a Congress annually, typically in June. A Heat Transfer Symposium is part of the Congress.

Full conference papers or abstract are required, leading to oral presentations.

Place: moves from coast to coast annually. The next one in June 2022 to be held in Edmonton, Alberta.

Period: three to four days in June

The CSCHE holds a Conference annually, typically in October.

Full conference papers or abstract are required, leading to oral presentations.

Place: moves from coast to coast annually. The next one in October 2022 to be held in Vancouver, BC.

Period: four to five days in October

3. Major Journals

CSME

Transaction of the Canadian Society for Mechanical Engineering (4 issues per year)

<https://cdnsiencepub.com/journal/tcsme>

CSCHE

The Canadian Journal of Chemical Engineering (12 issues per year)

<https://onlinelibrary.wiley.com/journal/1939019x>



4. Awards

- The Jules Stachiewicz Medal is awarded alternately by the CSME and the CSCHE on a yearly basis for outstanding contributions to the Heat Transfer discipline in Canada.

This medal was established in 1978 to honour Professor Jules Stachiewicz who was a professor in Mechanical Engineering (1950-76) and Chair of the Department at McGill University from 1972 until his death in 1976.

5. Education (Undergraduate/Graduate School)

- Education is either in English or French; with textbooks in both languages.
- Elementary School, 6 years; Secondary School (through 1 or more Schools), 5 to 6 years depending on the Province; CEGEP (In Québec), 2 years, Undergraduate Engineering University, 4 years.
- School year in elementary and secondary schools runs from early September to late June. University terms run from September to December (Fall term), January to April (Winter term) and May to August (Summer term).
- A large teaching emphasis is placed on Engineering Design in University Engineering programs. And each program is regularly accredited through the Canadian Engineering Accreditation Board (CEAB).
- Research-based Master's degree have a typical duration of 2 years, while Doctorate program now take an average of 4 to 5 years to complete.
- A push is underway in Canadian universities to increase the percentage of women in the programs to 30% by 2030.

6. University System

- Engineering programs are offered at more than 30 Universities in the country.
- Most university professors are also researchers, and they are ranked at one of three level: professor, associate professor, and assistant professor.
- Every professor, irrespective of rank, can supervise graduate student and apply for independent research funding.
- Most engineering university professor are also required to be professional engineers recognized through a provincial engineering association or order.

7. Common Scientific Research Funding Agencies

- Natural Science and Engineering Research Council (NSERC) of Canada
- Canadian Foundation for Innovation (CFI) (Infrastructure funding)
- Public and Private Research Chairs
- MITACS

Some Canadian Provinces also have their own funding agencies.

8. Major Federal Public Research Institutes

- National Research Council (NRC) laboratories
- Natural Resources Canada
- Canadian Space Agency
- Canadian Nuclear Laboratories (CNL)

Some Canadian Provinces also run their own research laboratories.

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