

Israel
Member of ICHMT, AIHTC
(1) Overview

(Israel Standard Time, IST: UTC+2, Population: 9.5 million)

1. Major Societies

There are no organizations strictly related to heat and mass transfer. AEAI – The Association of Engineers, Architects and Graduates in Technological Sciences in Israel is the national umbrella organization representing its members in Israel. The Association aims to foster the development and improvement of human resources and technological expertise in all fields of industry. <https://www.aeai.org.il/about-english/> https://en.wikipedia.org/wiki/Association_of_Engineers_in_Israel Within the Association of Engineers there are professional societies in various technological fields, including Mechanical Engineering and Chemical Engineering.



2. Major Meetings

There are no national meetings on heat transfer and thermal sciences, but these subjects are integrated in the following annual or bi-annual major meetings held in Israel, where special tracks and sessions on heat and mass transfer are included and presented prominently:



ICME - Israeli Conference on Mechanical Engineering
 IICHE - Meeting of the Israel Institute of Chemical Engineers
 IMEC - Israeli Materials Engineering Conference
 COMCAS – International Conference on Microwaves, Communications and Electronic Systems.



3. Major Journals

There are no Israeli journals on heat and mass transfer. Israeli researchers in all fields of science and engineering publish their works in well-established English-language international journals and serve on their editorial boards.

4. Education (Undergraduate/Graduate School)

- Elementary School, 6 years; Junior High School, 3 years; High School, 3 years.
- Undergraduate Studies in Engineering, 4 years (Undergraduate Studies in Sciences, 3 years).
- In general, the first semester starts in late October (after the Jewish Holy Days), while the second semester starts in late February.
- Most of undergraduate education is carried out by using English-language textbooks.
- Senior students engage in final projects (undergraduate theses) by doing experimental/theoretical studies under their supervisors from academia or industry.
- Master course is usually 2 years, for outstanding students there are fast Bachelor-Master tracks (5 years), a thesis is mandatory.
- Doctor course is 4 years for full-time students, and may take more time. There are direct Master-Doctor tracks for outstanding students.

5. University System

- The Council for Higher Education (CHE) is the official authority for higher education in Israel and determines policy for the higher education system.
- The CHE was founded pursuant to the Council for Higher Education Law, 1958, as an independent and unaffiliated statutory corporation. It was established in order to separate Israel's political system from its higher education system, to prevent interference with academic freedom.
- In Israel, higher education may be obtained from universities or colleges (the latter usually do not have advanced degrees, and cannot award Ph.D. in any case).
- According to CHE, there are ten universities in Israel.
- The academic ranks are lecturer, senior lecturer, associate professor and full professor.
- At all ranks, faculty members are usually independent and run their own research group (similar to the US university system).
- Tenure is commonly awarded after 5-7 years since the appointment.
- The mandatory retirement age for faculty members is 68. Usually, the retired professors are awarded an "emeritus/ emerita" title, and continue active research.



6. Foundations of Scientific Research

- The Israel Science Foundation is the main body supporting breakthrough basic science in Israel, based on scientific excellence within the different fields of knowledge, in a wide variety of funding opportunities.
- The Ministry of Science, Technology and Space promotes projects to encourage research and is focused on leading strategic infrastructure research.
- The Israel Innovation Authority, an independent publicly funded agency, was created to provide a variety of practical tools and funding platforms aimed at effectively addressing the dynamic and changing needs of the local and international innovation ecosystems.
- The Ministry of Energy is responsible for all of Israel's energy sectors and its natural resources, including electricity, fuel, LPG, natural gas, conservation of energy, petroleum explorations, minerals, earth science and marine research and more.



7. Major Public/Private Research Institutes

- Most major laboratories in thermal sciences and heat transfer are in the universities.
- Active research in thermal field takes place also in the Nuclear Research Center Negev and in the defense sector companies.

8. Addendum

Hebrew (עברית, [iv'rit] or [Siv'rit]) is a Northwest Semitic language of the Afroasiatic language family. Modern Hebrew is the official language of the State of Israel. Hebrew serves as the only truly successful example of a dead language that has been revived.



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