

Curriculum Vitae Elad David

HIGHER EDUCATION Weizmann Institute of Science, Rehovot, Israel
AND TRAINING Ph.D., Planetary Science
March 2023 - present
Advisor: Prof. Oded Aharonson
Title of Ph.D. Thesis Proposal: “*The Seasonal CO₂ Cycle on Mars at Past and Present Climates*”

Weizmann Institute of Science, Rehovot, Israel
M.Sc., Planetary Science
September 2021 - March 2023
Advisor: Prof. Oded Aharonson
Title of M.Sc. Thesis: “*The Effect of Ground Ice Redistribution on the Martian Paleo-CO₂ Cycle*”

Hebrew University of Jerusalem, Jerusalem, Israel
B.Sc., Chemistry and Biology, *cum laude*
September 2017 - August 2021
“Etgar-Chemistry” and “Amirim-Natural Sciences” honors programs

PROFESSIONAL AND EDUCATIONAL EXPERIENCE
Davidson Institute of Science Education
2021 - present
Chemistry, geology laboratory for high school students
Telescopic observations for general audience and students
Development of space-oriented educational programs

Weizmann Institute of Science
2022
Member of the organizing committee of the 13th Earth and Planetary Science Student Conference

Research Assistant
2018-2020
The Alexander Silberman Institute of Life Science, Hebrew University of Jerusalem
PI: Dr. Liraz Chai

“Atid” educational program
2013-2014
Volunteering in assistance in studies for underprivileged high school students

AWARDS AND HONORS
Student Travel Award
Planet Mars VI Workshop, Les Houches, 2025

Mars Program Office Student Travel Award
8th International Conference of Mars Polar Science and Exploration, 2024

Ramon Scholarship for Space-oriented Internships
Israel Space Agency, 2023, Internship subject: basic analysis of geospatial data from the Mars Climate Sounder, PI: Prof. Paul Hayne, University of Boulder, Colorado
Additionally, participated in the observational campaign of the occultation of asteroid (269) Justitia

Prize for Incoming M.Sc. Students for Excellence in Undergraduate Studies, Maurizio Dwek Research School of Chemical Sciences, Weizmann Institute of Science, 2020

Prize for Excellence in Undergraduate Studies for Intelligence Corps Alumni
Jacob Brandis Memorial Foundation, 2020

“Amos de-Shalit” Summer School for Outstanding Undergraduate Students
Weizmann Institute of Science, 2019

“Amirim-Natural Sciences” honors scholarship

Hebrew University of Jerusalem, 2018-2020, Project subject: amyloid fibers in the bacterial extracellular matrix, PI: Dr. Liraz Chai, title: “*Isolation of Functional Amyloid Fibers from a Bacterial Biofilm*”

Department of Genetics Grant for Summer Internships

Hebrew University of Jerusalem, 2018, Internship subject: effects of mutation on meiosis in *C.elegans*, PI: Dr. Yonatan Tzur

Dean’s list

Hebrew University of Jerusalem, 2017-2018, 2019-2020

**CONFERENCES
AND MEETINGS**

Department of Geophysics, Tel Aviv University

November 2025

Seminar presentation, “*CO₂ ice on Mars - Past and Present*”

Planet Mars VI Workshop

March-April 2025, Les Houches, France

Poster presentation, “*The Effect of Ground Ice Redistribution on the Martian Paleo-CO₂ Cycle*”, “*The Albedo of CO₂ Ice from MCS Measurements*”

8th International Conference of Mars Polar Science and Exploration

July 2024, Whitehorse, Canada

Oral presentation, “*The Bidirectional Reflectance of Seasonal CO₂ from MCS Measurements*”

54th Lunar and Planetary Science Conference

March 2023, Woodlands, Texas

Oral presentation, “*The Effect of Ground Ice Redistribution on the Martian Paleo-CO₂ Cycle*”

7th Mars Atmosphere Modeling and Observations Workshop

June 2022, Paris, France

Poster presentation, “*The Effect of Ground Ice Redistribution on the Martian Paleo-CO₂ Cycle*”

53rd Lunar and Planetary Science Conference

March 2022, Woodlands, Texas

Poster presentation, “*The Effect of Ground Ice Redistribution on the Martian Paleo-CO₂ Cycle*”

PUBLICATIONS LIST **The Seasonal Evolution of the Optical Properties of Northern CO₂ ice on Mars from MCS Measurements**

E. David, P. O. Hayne, O. Aharonson

In prep., December 2025

Occultation-based Size and Shape of (269) Justitia

M.W. Buie, P. Hayne, H. Al-Mazmi, M. Landis, W. Bottke *et al.* (contributed as a co-author)

The Planetary Science Journal

March 2025

The Effect of Ground Ice Redistribution on the Martian Paleo-CO₂ Cycle

E. David, O. Aharonson, E. Vos, N. Schorghofer

Journal of Geophysical Research - Planets

December 2024