

Liran Goren - CV

PERSONAL DETAILS

Surname: Goren
First name: Liran
Date of Birth: May 2nd, 1976
Nationality: Israel
Marital Status: Married
Affiliation: The Department of Environmental Sciences and Energy Research, Weizmann Institute of Science, Rehovot 76100, Israel.
Position: PhD student
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EDUCATION

Graduate studies

PhD program in the Department of Environmental Sciences and Energy Research. Feinberg Graduate School, Weizmann Institute of Science. **2005-present**

Advisor: Prof. Einat Aharonov.

Thesis topic: High pore fluid pressure in porous rocks and soils: generation, dissipation and geodynamic effects.

Research Interest:

- Mechanics and kinematics of landslides.
- Mechanics of saturated granular material with applications to soil liquefaction and motion along faults.

M.Sc. degree in the Department of Environmental Sciences and Energy Research. Feinberg Graduate School, Weizmann Institute of Science. **2002-2005**

Thesis advisor: Prof. Einat Aharonov.

Thesis topic: Passive margin ductile deformation: a new mechanism for subduction initiation.

Thesis grade: 95

Courses grade average: 95.9

Undergraduate studies

B.Sc. degree (Summa Cum Laude) in Geological and Environmental Sciences. Ben Gurion University of the Negev, Israel. (Grades average: 95.93) **1998-2002**

B.Sc. degree (Magna Cum Laude) in Computer Science. Ben Gurion University of the Negev, Israel. (Grades average: 91.44) **1998-2002**

TEACHING EXPERIENCE

Teaching Assistant in the course "Numerical modeling of environmental sciences". Graduate level course at the Feinberg Graduate School, Weizmann Institute of Science. **2008**

Teacher in the Science Excellence course (8th-10th graders). Young at Science, Weizmann Institute of Science. **2008-2009**

AWARDS AND HONOR:

Excellency prizes from the Department of Geological and Environmental Sciences, Ben Gurion University of the Negev.	1999, 2001, 2002
Excellency prizes from the Department of Computer Science, Ben Gurion University of the Negev.	2000, 2002
Wolf prize for excellence.	2000
Rieger-JNF Fellowship for Environmental Studies.	2006, 2008
Dr. Peretz Grader Award of the Israeli Geological Society.	2009

PUBLICATIONS

Published

- L. Goren, E. Aharonov and M. H. Anders (2010), Thermo-poro-mechanical effects in landslides dynamics. *In: Meso-Scale Shear Physics in Earthquake and Landslide Mechanics*. Edt. Y. Hatzor, J. Sulem and I. Vardoulakis. CRC Press. (Peer Reviewed)
- N. Makedonska, L. Goren, D. Sparks and E. Aharonov (2010), What controls the effective friction of shearing granular media? *In: Meso-Scale Shear Physics in Earthquake and Landslide Mechanics*. Edt. Y. Hatzor, J. Sulem and I. Vardoulakis. CRC Press. (Peer Reviewed)
- L. Goren and E. Aharonov (2009), On the stability of landslides: A thermo-poro-elastic approach. *Earth and Planet. Sci. Lett.*, 10.1016/j.epsl.2008.11.002.
- L. Goren, E. Aharonov, G. Mulugeta, H. A. Koyi and Y. Mart (2008), Ductile deformation of passive margins: A new mechanism for subduction initiation, *J. Geophys. Res.*, 113, B08411, 10.1029/2005JB004179.
- L. Goren and E. Aharonov (2007), Long runout landslides: The role of frictional heating and hydraulic diffusivity, *Geophys. Res. Lett.*, 34, L07301, 10.1029/2006GL028895.
- Y. Mart, E. Aharonov, G. Mulugeta, W. Ryan, T. Tentler and L. Goren (2005), Analogue modeling of the initiation of subduction, *Geophys. J. Int.*, 160, 1081-1091.

Submitted

- L. Goren, E. Aharonov, D. Sparks and R. Toussaint, Pore pressure evolution in deforming granular material: A general formulation and the infinitely stiff approximation. Submitted.
- L. Goren, E. Aharonov and M. H. Anders, The long runout of the Heart Mountain Landslide: A chemo-thermo-poro-elastic mechanism. Submitted.

PRESENTATIONS IN CONFERENCES, SEMINARS AND MEETINGS:

Invited

- (2009) L. Goren and E. Aharonov. Thermo-poro-elastic effects in landslides dynamics. Department of Geophysics and Planetary Sciences, Tel-Aviv University.
- L. Goren, E. Aharonov, G. Mulugeta, H. A. Koyi and Y. Mart. Ductile deformation of passive margins: a new mechanism for subduction initiation.
(2009) Ben-Gurion University of the Negev.
(2009) Israel Geological Society Annual Meeting.
(2008) Israel Geological Institute.
- (2007) L. Goren, E. Aharonov, D. Sparks and R. Toussaint. Modeling soil liquefaction. Invited group meeting. Université Louis Pasteur, Strasbourg, France.
- (2007) L. Goren and E. Aharonov. On the stability of landslides. Invited group meeting. Université Louis Pasteur, Strasbourg, France.
- (2005) L. Goren, E. Aharonov and Y. Mart. Modeling of low angle subduction initiation by

ductile deformation. Department of Environmental Sciences and Energy Research, Weizmann Institute of Science.

Contributed

- (2009) L. Goren, E. Aharonov and M. H. Anders. The long runout of the Heart Mountain Landslide: A chemo-thermo-poro-elastic approach. Israel Geological Society Annual Meeting.
- (2009) L. Goren, E. Aharonov, D. Sparks and R. Toussaint. Grain scale modeling of grain - pore pressure interactions along shear zones. Batsheva seminar on shear physics at the meso-scale in earthquake and landslide mechanics, Israel.
- (2008) L. Goren and E. Aharonov. On the stability of landslides: A thermo-poro-elastic approach. Israel Geological Society Annual Meeting.
- (2008) L. Goren and E. Aharonov. Towards understanding of soils liquefaction induced by irreversible granular matrix deformation. Israel Geological Society Annual Meeting.
- (2007) L. Goren and E. Aharonov. The role of permeability in controlling the stability of large landslides. Conference on Active Research by Environmental Science Students, Weizmann Institute of Science.
- (2006) L. Goren and E. Aharonov. Shear heating as a mechanism for long run-out landslide. The International Union of Geodesy and Geophysics, 26th Conference on Mathematical Geophysics, Israel.
- (2006) Goren L., E. Aharonov, G. Mulugeta, H. A. Koyi and Y. Mart. Ductile deformation of passive margins: a new mechanism for subduction initiation. European Geosciences Union General Assembly, Vienna, Austria.

ADDITIONAL ACTIVITIES:

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| Organizer of the Student Seminar Forum, the Department of Environmental Sciences and Energy Research, Weizmann Institute of Science. | 2007-2009 |
| Lecturer in a series of popular science lectures given by the faculty of the Department of Environmental Sciences and Energy Research. Lecture topic: Plate Tectonics. | 2006-2008 |