



-2018

Consultant, Researcher

- ☞ Earthquake consultant for the National Planning Administration
- ☞ Member of the Advisory Committee for Earthquake Preparedness to the Home Front Command, IDF
- ☞ Project consultation

2009-2018

Chief Geologist, Ecolog Engineering Ltd.

Project manager in the following disciplines:

- ☞ **Design of national infrastructures - roads, lifelines, power plants, ports, water supply systems etc.:**
 - Geological surveys and engineering geology
 - Seismic stability analysis for infrastructures
 - Active faulting hazard analysis, design displacements
 - Seismotectonic/PSHA analysis, site specific
 - Geology and geophysics data gathering, processing and interpretation
 - Environmental Impact Assessments
- ☞ **Urban Planning:**
 - Earthquake consultant for the National Planning Administration: formulation of "Policy for Incorporation of Seismic Consideration in Master and Urban Planning", "Policy for Licensing in Sinkhole Areas"; National prioritization of seismic hazard mapping.
 - Screening seismic studies for master and urban plans - "Seismic Appendix" (~90 plans)
 - Engineering geology consultation for urban plans
- ☞ **Hydrocarbon exploration**
- ☞ **Specials:** geological consultation for the Israeli Marine Plan (Technion), Feasibility study for earthquake early warning systems (geological survey), feasibility study for thermal power plant and for national gas storage facility.

Research:

- ☞ Proposal referee and project evaluation; Chief Scientists, Ministry of Infrastructure
- ☞ Davis and Dor (2014). Development of national seismotectonic model for seismic hazard assessment in Israel; Ministry of Housing and Construction
- ☞ Finzi et al. (2017). Analysis of earthquake scenarios in Eilat for economic damage evaluation; Arava-Dead Sea Research Center
- ☞ Avital, M., R. Kamai, M. Davis & O. Dor (2018). The effect of alternative seismotectonic models on PSHA results-a sensitivity study for two sites in Israel. Natural Hazards & Earth System Sciences, 18(2)
- ☞ Finzi et al. (2018). Evaluation of seismic activity in the Negev based on Precariously Balanced Rocks; Arava-Dead Sea Research Center
- ☞ Dor and Davis (2018). National active faulting hazard map: principles, mapping criteria and a new approach for national risk management; Ministry of Housing and Construction.

2007-2009

Post Doc Geological Sciences, Brown University, Providence, Rhode Island

Rock deformation laboratory experiments: damage evolution due to cyclic loading during earthquakes.

2008

Consultant, Structural Geologist - Capricorn Exploration, Madagascar

Structural analysis, identification of controls on the distribution of chrome ore bodies.

2002-2007

PhD Geological Sciences, University of Southern California

Thesis: Symmetry properties, pulverized rocks and damage architecture in fault zones - signatures of EQ ruptures.

Minor: GIS Project Specialist: USC GIS Distant Learning Graduate Certificate Program.

- ☞ Dor O., T. K. Rockwell and Y. Ben-Zion (2006). Geologic observations of damage asymmetry in the structure of the San Jacinto, San Andreas and Punchbowl faults in southern California: A possible indicator for preferred rupture propagation direction. Pure Appl. Geophys., 163, 301-349 DOI 10.1007/s00024-005-0023-9.
- ☞ Dor O., Y. Ben-Zion, T. K. Rockwell and J. Brune (2006). Pulverized Rocks in the Mojave section of the San Andreas Fault Zone. Earth Planet. Sci. Lett., 245, 642-654 doi:10.1016/j.epsl.2006.03.034.
- ☞ Dor, O., C. Yildirim, T.K. Rockwell, O. Emre, Y. Ben-Zion, M. Sisk and T. Duman (2008). Geologic and geomorphologic asymmetry across the rupture zones of the 1943 and 1944 earthquakes on the North Anatolian Fault: possible signals for preferred earthquake propagation direction. Geoph. J. Int. doi: 10.1111/j.1365-246X.2008.03709.x.
- ☞ Dor O., Y. Ben-Zion, J. Chester, J. Brune, T.K. Rockwell (2009). Characterization of damage in sandstones along the Mojave section of the San Andreas Fault: implications for the shallow extent of damage generation. Pure Appl. Geophys., 166, 1747-1773, DOI: 10.1007/s00024-009-0516-z.
- ☞ Rockwell, T.K, M. Sisk, G. Girty, O. Dor, N. Wechsler and Y. Ben-Zion (2009). Chemical and Physical characteristics of Pulverized Tejon Lookout Granite Adjacent to the San Andreas and Garlock Faults: Implications for Earthquake Physics. Pure Appl. Geophys. 166, 1725-1746, DOI: 10.1007/s00024-009-0514-1.

1999-2002

Consultant, Structural Geologist - Wits Basin Deep Gold Mines, South Africa

Structural analysis of active rupture zones in deep and ultra-deep (> 3 km) gold mines, correlation of deformation and strain fields with seismic and geodetic data sets.

Dor, O., Z. Reches and G. van Aswagan (2001). Fault zones associated with the Matjhabeng earthquake, 1999, South Africa. Rockburst and Seismicity in Mines, RaSiM5 (Proceedings), South African Inst. of Mining and Metallurgy, pp. 109-112.