Eyal Shalev (Stanislavsky)

Curriculum Vitae
2013

Geological Survey of Israel
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Education:

Ph.D. 2004	Hydrogeology, Geophysics: Johns Hopkins University, USA. Thesis*: Applications of poroelasticity theory and finite element modeling to seismically-induced flow in thrust fault environments.*
M.Sc. 1999	Hydrogeology: Hebrew University of Jerusalem, Israel. Thesis: *Paleohydrological modeling of brine, oil and gas migration at the Dead Sea Rift*.
B.Sc. 1997	Geology: Hebrew University of Jerusalem, Israel.

Appointments:

2004 –present	Researcher at the Geological Survey of Israel

Honors and Awards:

The Shraga-Dicker Award, Hebrew University, Jerusalem, 1999.
Krieger School of Arts and Sciences Fellowship, 1999.
Department of Energy Outstanding Contributions in Geosciences Research, 2001.
Christina Balk Fellowship, Johns Hopkins University, 2002.

Publication:

1. **Shalev, E**., and Lyakhovsky, V., The processes controlling damage zone propagation induced by wellbore fluid injection, *Geophys. J. Int.*, 193, 209-219, 2013
2. **Shalev, E**., and Lyakhovsky, V., Modeling Reservoir Stimulation induced by wellbore fluid injection, Proceedings of the thirty-eighth workshop on geothermal reservoir engineering, Stanford University, 2013
3. Kafri, U., **Shalev, E.,** Lyakhovsky, V., Wollman, S., and Yechieli, Y., Numerical Modeling of Seawater Intrusion into Endorheic Hydrological Systems, : Hydrogeology J., in press, 2013
4. **Shalev, E**., Lyakhovsky, V., Weinstein, Y., and Ben-Avraham, Z., The thermal structure of Israel and the Dead Sea Fault, *Tectonophys.*, in press, 2013
5. Roded, R., **Shalev, E.,** Katoshevski, D., Basal heat-flow and hydrothermal regime at the Golan–Ajloun hydrological basins, *J. Hydrol.*, 476, 200-211, 2013
6. **Shalev, E**., and Lyakhovsky, V., Viscoelastic damage modeling of sinkholes formation, *J. Struct. Geol*. 42, 163-170, 2012
7. Yechieli,Y., Kafri, U., and **Shalev, E.,** 2012, The effect of climate and anthropogenic sea level changes on Israeli coastal aquifers, in Treidel, H., Martin-Bordes, J. L., and Gurdak, J. J. (eds.), Climate Change Effects on Groundwater

Resources, A Global Synthesis of Findings and Recommendations, pp. 205-223, *CRC Press/Balkema,* Leiden, The Netherlands

8. Oz, I., **Shalev, E.,** Gvirtzman, H.,Yechieli, Y., and Gavrieli, I., Groundwater flow patterns adjacent to long-term stratified (meromictic) lake, *Water Resour. Res*., 47, doi:10.1029/2010WR010146, 2011
9. Weinberger, R., Sneh, A., and **Shalev, E**. The fault beneath their feet: How the Israelites found water inside Hazor. Biblical *Archaeol. Review*, 36, 65-67, 2010
10. Sneh, A., Weinberger, R., and **Shalev, E.,** The Why, How, and When of the Siloam Tunnel Reevaluated, *BASOR*, 57-65, 2010
11. Yechieli,Y., **Shalev, E**.,Wollman, S., Kiro, Y., and Kafri, U., Response of the Mediterranean and Dead Sea coastal aquifers to sea level variations, *Water Resour. Res*., 46, doi:10.1029/2009WR008708, 2010
12. **Shalev, E.,** and Gvirtzman H, 2009, Brine migration from the Dead Sea basin, Melach Haaretz, 4, 106-120 (in Hebrew)
13. Yechieli , Y.,Kafri, U.,Wollman, S.,**Shalev, E.,** Lyakhovsky, V., The effect of base level changes and geological structures on the location of the groundwater divide, as exhibited in the hydrological system between the Dead Sea and the Mediterranean Sea, *J. Hydrol.*, 378, 218–229, 2009
14. **Shalev, E.,** A. Lazar, S. Wollman, S. Kington, Y. Yechieli, and H. Gvirtzman, Biased Monitoring of Freshwater-Saltwater Mixing Zone in Coastal Aquifers, *Ground water*, 47, 49-56, 2009
15. Kiro, Y., Y. Yechieli, V. Lyakhovsky, **E. Shalev,** and A. Starinsky, Time response of the water table and saltwater transition zone to a base level drop, Water Resources Research, 44, doi:10.1029/2007WR006752, 2008
16. Weinberger, R., A. Sneh, and **E. Shalev**, Hydrogeological insights in antiquity as indicated by Canaanite and Israelite water systems, *J. Archaeol. Sci.*, doi: 10.1016/j.jas.2008.06.024, 2008.
17. **Shalev, E.**, and Y. Yechieli, The mechanism of the discharge of the thermal springs along the western shore of the Dead Sea, *Isr. J. Earth Sci.*, 56, 19-27, 2007
18. Gvirtzman, H., **E. Shalev**, O. Dehan, and Y. Hazor, Large-scale infiltration experiments into unsaturated stratified loess sediments: monitoring and modeling, *J. Hydrol.*, 349, 214-229, 2007
19. **Shalev, E.,** V. Lyakhovsky, and Y. Yechieli, Is Convective Heat Transport Significant at the Dead Sea Basin?, *Geofluids*, **7**, 292-300, 2007.
20. **Shalev, E**., V. Lyakhovsky, and Y. Yechieli, Salt dissolution and sinkhole formation along the Dead Sea shore, *J Geophys. Res.*, 111, B03102, doi:10.1029/2005JB004038, 2006.
21. **Stanislavsky, E**., and G. Garven, A theoretical model for reverse water-level fluctuations induced by transient permeability in thrust fault zones, *Earth Planet. Sci. Lett.*, 210, 579-586, 2003
22. **Stanislavsky, E**., and G. Garven, The minimum depth of fault failure in compressional environments, *Geophys. Res. Lett.*, 29(24), doi: 10.1029/2002GL016363, 2002

23. Hurwitz S, **E. Stanislavsky**, V. Lyakhovsky, and H. Gvirtzman, Transient groundwater-lake interactions in a continental rift; Sea of Galilee, Israel, *Geol. Soc. Am. Bull., 112, 1694-1702*, 2000
24. Gvirtzman H, and **E. Stanislavsky**, Large-scale flow of geofluids at the Dead Sea Rift, *J. Geochem. Explor., 69, 207-211*, 2000.
25. Gvirtzman H, and **E. Stanislavsky**, Palaeohydrology of hydrocarbon maturation, migration and accumulation in the Dead Sea Rift, *Basin Res., 12, 79-93*, 2000.
26. **Stanislavsky, E**, and H. Gvirtzman, Basin-scale migration of continental-rift brines: Paleohydrologic modeling of the Dead Sea basin, *Geology*, *27, 791-794*,1999.