

Roy Haggerty

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EDUCATION

Stanford University, Stanford, California; 1990-1995

- PhD, Hydrogeology, Dept. Applied Earth Sciences, 1996.
- MS, Hydrogeology, Dept. Applied Earth Sciences, 1993.

University of Alberta, Edmonton, Canada; 1986-1990

- BSc with Honors in Geology, with First Class Honors, 1990. *Dean's Silver Medal* (2nd-highest 4-yr avg. GPA in Science)

EMPLOYMENT HISTORY & SERVICE

Associate Professor, Geosciences, Oregon State University; 1996-present (Assistant Professor 1996-2002; Adjunct in Civil Engineering, 1999-present). Director of Geology program (2003-present). 19 peer-reviewed publications, 11 conference or government publications, 2 computer codes with user manuals, 26 abstracts, 44 lectures in 6 countries, PI on approx. \$1,000,000 in grants (NSF, DOE, Sandia National Labs, Swedish Nuclear Fuel and Waste Management Co., Oregon state agencies, USGS). Taught Hydrogeology, Groundwater Hydraulics (Civil Engineering), Advanced Solute Transport, Fluids in Geologic Proc., Earth's Surface as well as other courses on ad hoc basis. Short course on Mass Transfer at Danish Technical University, Summer 1997. Associate Editor for *Water Resources Research*. Member American Geophysical Union.

Director, Geology Program, 2003-present. Dept. of Geoscience, Oregon State University

Visiting Scientist, 2000, Div. of Water Resources Engineering, Royal Institute of Technology, Stockholm, Sweden

Teaching Assistant, Dept. Applied Earth Sciences, Stanford University; 1990, 92

Chairperson, Stanford Alpine Project, Stanford University; 1992-93. Fundraised, organized, co-lead 3-week geologic field trip through Canadian Cordillera for 15 students & 6 guides. *Outstanding Teaching Assistant Award, Stanford U.*, 1993, for this.

Field Geologist, Noranda Exploration Co., Ltd., Winnipeg, Canada; May-September, 1989.

Field Geologist, Gamsan Resources, Edmonton, Canada; May-August, 1988

JOURNAL PUBLICATIONS SINCE 2000

Haggerty, R., Harvey, C. F., Schwerin, C. F. v. & Meigs, L. C. What controls the apparent timescale of solute mass transfer in aquifers and soils? A comparison of diverse experimental results. *Water Resources Research* (in press).

Gooseff, M. N., S. M. Wondzell, R. Haggerty, J. Anderson, Comparing transient storage modeling and residence time distribution analysis in geomorphically varied reaches in the Lookout Creek Basin, Oregon, USA, *Advances in Water Resources* 26, 925–937, 2003.

Cliff, J.B., P.J. Bottomly, R. Haggerty, and D. D. Myrold, Modeling the effects of diffusion limitation on nitrogen-15 isotope dilution experiments with soil aggregates, *Soil Sci. Soc. Am. J.*, 66(6), 1868-1877, 2002.

Geiger, S., R. Haggerty, J.H. Dilles, M.H. Reed, and S.K. Matthai, New insights from reactive transport modelling: the formation of the sericitic vein envelopes during early hydrothermal alteration at Butte, Montana. *Geofluids* 2(3), 185-201, 2002.

Bremer, C. W., P. U. Clark, R. Haggerty, Modeling the subglacial hydrology of the late Pleistocene Lake Michigan Lobe, Laurentide Ice Sheet, *GSA Bull.*, 114(6), 665-674, 2002.

Cvetkovic, V., and R. Haggerty, Transport with multiple -rate exchange in disordered media, *Phys. Rev. E*, 65(5), DOI 10.1103/PhysRevE.65.051308, 2002.

Haggerty, R., S. M. Wondzell, and M. A. Johnson, Power-law residence time distribution in the hyporheic zone of a 2nd-order mountain stream, *Geophys. Res. Lett.*, 29(13), DOI 10.1029/2002GL014743, 2002.

Haggerty, R., S. W. Fleming, L. C. Meigs, and S. A. McKenna, Tracer tests in a fractured dolomite, 2., Analysis of mass transfer in single-well injection-withdrawal tests, *Water Resources Research*, 37(5), 1129-1142, 2001.

McKenna, S. A., L. C. Meigs, and R. Haggerty, Tracer tests in a fractured dolomite, 3., Double porosity, multiple-rate mass transfer processes in two-well convergent-flow tests, *Water Resources Research*, 37(5), 1143-1154, 2001.

Fleming, S. W., and R. Haggerty, Modeling solute diffusion in the presence of pore-scale heterogeneity: Method development and an application to the Culebra Dolomite Member of the Rustler Formation, New Mexico, USA, *Journal of Contaminant Hydrology*, 48, 253-376, 2001.

Schroth, M. H., J. D. Istok, and R. Haggerty, In-situ evaluation of solute retardation using single-well push-pull tests, *Advances in Water Resources*, 24, 105-117, 2000.

Haggerty, R., S. A. McKenna, and L. C. Meigs, On the late-time behavior of tracer test breakthrough curves, *Water Resources Research*, 36(12), 3467-3479, 2000.

COLLABORATORS (LAST 48 MONTHS): SM Wondzell (US Forest Service); Charles Harvey (MIT); Lucy Meigs (Sandia Nat'l Labs); Brian Wood, Enrique Thomann, Ed Waymire (all OSU), Vladimir Cvetkovic (KTH).

ADVISORS: Steven Gorelick, Paul Roberts, Tom Hewitt, Brian Wagner (MS, PhD); Bruce Nesbitt (BS)

ADVISEES (PRIMARY): Post-doc – Michael Gooseff. MS - Sean Fleming, Justin Iverson, John Pearch, Rob Healy, Mike Kelley, Claudius Freiherr von Schwerin, Sebastian Geiger. BS – Justin LaNier, Ken Kokkeler, Justin Iverson, Matthew Johnson.