

CURRICULUM VITAE

Andrew Trautz, M.S.

PhD Candidate, Environmental Engineering Science
Colorado School of Mines, Golden, Colorado, USA

Colorado School of Mines
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EDUCATION:

COLORADO SCHOOL OF MINES – Golden, Colorado
PhD in Environmental Engineering Science, August 2012 – Present
Advisers: Tissa Illangasekare, Kathleen Smits

COLORADO SCHOOL OF MINES – Golden, Colorado
M.S. in Environmental Science and Engineering, August 2011 – May 2012
Cumulative GPA: 3.88

UNIVERSITY OF CALIFORNIA BERKELEY – Berkeley, California
B.S. in Environmental Engineering Science, August 2007 – May 2011
Cumulative GPA: 3.38

QUALIFICATIONS AND SKILLS:

- Leadership experience in small and large group (>50 people) settings
 - Strong oral communication skills
 - Project management skills including preparation of business proposals, reports, presentations, and deliverables for environmental consulting firm's clients
 - Experienced in research database construction and compilation
 - Strong technical writing skills
 - Experienced in writing business proposals, environmental site closure reports, quarterly and semi-annual groundwater monitoring reports
 - Knowledge and practice in digital geological field mapping
 - Practiced in interpreting soil bore logs and creating geological cross sections over wide range of scales
 - Skilled in groundwater contouring and post-well sampling data analysis
 - Experienced in laboratory experimentation simulating subsurface soil-water evaporation using porous media wind tunnel facilities
 - Adept user of office and visual software: Microsoft Access, Excel, PowerPoint, Publisher, Word, Adobe Illustrator, Photoshop, Acrobat, Dreamweaver
 - Strong engineering software background: AQTESOLVD, COMSOL Multiphysics, MATLAB, MODFLOW; knowledge of C++, Fortran
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WORK EXPERIENCE:

Graduate Student Research Assistant – Colorado School of Mines, Golden, CO
August 2012 – Present

Technical Intern – ARCADIS, Highlands Ranch, CO
October 2011 – August 2012

- Analyzed groundwater and soil boring data
- Worked on environmental site closure request reports and contract proposals

Student Intern – Electrical Power Research Company (EPRI), Palo Alto, CA
July 2010 – June 2011

- Worked with AMEC Geomatrix in editing and assembling the Central Eastern United States Seismic Source Characterization Report for the DOE and NRC

May 2008 – December 2008

- Coordinated with a team of four contractors to update the Utility Requirement Document, the set of rules and regulations that must be followed for the construction of all new nuclear power plants.

Student Intern – Lawrence Berkeley National Laboratory, Berkeley, CA
June 2006 – August 2006

- Studied elemental phosphorus' polytypes at the Advanced Light Source center
 - Performed diamond anvil corrections to data and tetrahedral rotation calculations
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HONORS, AFFILIATIONS:

- American Geophysical Union member (current)
 - American Water Works Association member (current)
 - Eagle Scout Award (2006)
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PUBLICATIONS:

Trautz, A., K.M. Smits, P. Schulte, and T.H. Illangasekare (2012). Experimental and numerical application of the sensible heat balance and heat-pulse methods to determine in situ soil-water evaporation, *Vadose Zone J.*, *in review*.

CONFERENCE PROCEEDINGS:

Trautz, A., K.M. Smits*, P. Schulte, and T.H. Illangasekare. (2012). Estimation of soil-water evaporation from bare soils using sensible heat balance and heat-pulse methods; experimental and modeling study, Gordon Research Conference, Flow through Permeable Media, Les Diableretes, Switzerland, July 2012.

* Presenter