Publications

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Peer reviewer for professional journals such as *Geology*, *Applied Energy, Pure and Applied Geophysics.*

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Stauffer, P.H., **A. Jordan**, D.R. Harp, G.A. Zyvoloski, H. Boukhalfa, F.A. Caporuscio, T.A. Miller, and B.A. Robinson (2014), Thermo-hydrological and Chemical (THC) Modeling to Support Field Test Design. U.S. Department of Energy Used Fuel Disposition Campaign M4FT-14LA0818064.

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Presentations

Waste Management Symposia, March 2021: “Probabilistic Groundwater Modeling of the Chromium Plume at Los Alamos National Laboratory”

Waste Management Symposia, March 2017: “Realistic Geochemical Parameter Uncertainty for Performance Assessment Modeling”

15th International Conference on the Chemistry and Migration Behaviour of Actinides and Fission Products in the Geosphere, September 2015: “Modeling Radionuclide Gas Transport Through Explosion-Generated Fracture Networks”

LANL Subsurface Flow & Transport Brown Bag Seminar Series, June 2015: “Brine and Vapor Migration Experimental Studies in Granular Salt”

New Mexico Tech EES Department Seminar, October 2014: “Simulation of Radionuclide Gas Migration from Underground Nuclear Tests”

LANL-IPGP (Institut de Physique du Globe de Paris) Workshop in Geosciences, July 2014: “Coupled Model for Thermal-Hydrological-Chemical Processes in a High-Level Radioactive Waste Repository in Salt”

Basic Research Technical Review, July 2014: “Isotopic Gas Migration from an Underground Nuclear Weapon Test Through Rock”

Poster, 2013 AGU Meeting: “Fluid Transport Driven by Heat-Generating Nuclear Waste in Bedded Salt,” **A. Jordan**, D.R. Harp, P.H. Stauffer, J. Ten Cate, Y. Labyed, H. Boukhalfa, Z. Lu, M.A. Person, and B.A. Robinson

Poster, 2013 Basic Research Technical Review: “Mathematical Representation of Isotopic Gas Migration from an Underground Nuclear Weapon Test Through Rock,” **A. Jordan**, J.K. MacCarthy, P.H. Stauffer, M.A. Person, D.N. Anderson

Poster, 2012 Monitoring Research Review: “Simulation of Radionuclide Gas Breakthrough from Underground Nuclear Explosions,” **A. Jordan**, J.K. MacCarthy, P.H. Stauffer, G.A. Zyvoloski, M.A. Person, D.N. Anderson

LANL Subsurface Flow & Transport Brown Bag Seminar Series, July 2012: “Simulation of Gas Breakthrough from Underground Nuclear Explosions”

Poster, 2012 Carbon Capture, Utilization, & Sequestration Conference: “A Method for Predicting Carbon Dioxide and Brine Leakage through Wellbores at Geologic Carbon Sequestration Sites,” **A. Jordan**, J.W. Carey, P.H. Stauffer, R.J. Pawar

Poster, 2011 AGU Meeting: “Response Surfaces for CO_2 Leakage from Geologic Storage Along Abandoned Wellbores,” **A. Jordan**, J.W. Carey, R.J. Pawar, P.H. Stauffer

Poster, 2002 Division of Planetary Sciences Meeting: “On the Plutinos and Twotinos of the Kuiper Belt,” **A. Jordan** and E.I. Chiang

Data Explorers

Air Quality Co-benefits to Decarbonizing Industrial facilities (Carbon Solutions, 2024)

U.S. EV Fast-Charging Corridor Road Map (GPI and Carbon Solutions, 2023)

LA Industrial Electrification Explorer (Carbon Solutions, 2023)

The Landscape of Clean Hydrogen (published by I^3 and Carbon Solutions, 2023)

Snow Scraper (developed with Leslie Gains-Germain, 2021; hosted by Neptune & Company)

Education

Ph.D. Hydrology, New Mexico Tech

- Dissertation: *Multiphase, Multicomponent Flow and Transport Models for Nuclear Test-Ban Treaty Monitoring and Nuclear Waste Disposal Applications*
- Areas of study: Fluid physics, groundwater and vadose zone hydrology, hydrogeochemistry, ecohydrology, surface water, numerical modeling, field methods, stable isotope geochemistry

M.S. Astrophysical, Planetary, and Atmospheric Sciences, University of Colorado, Boulder

B.S. Astrophysics, Geophysics Minor, University of California, Berkeley

Awards

- Langmuir Award for Excellence in Research, New Mexico Tech, May 2016
- LANL Distinguished Student Performance Award, 2014
- LANL Student Symposium Technical Talk Award, July 2013
- Outstanding TA award, NMT Earth & Environmental Sciences Dept., 2013
- Klumpke Roberts Award for Outstanding Scholarly Achievement, UC Berkeley Astronomy Dept., 2003