LETTER FROM THE EDITOR

Welcome to Vadose Zone Journal

Rien van Genuchten

REVIEWS AND ANALYSES

The Impact of Climate Change on the Chemical Composition of Deep Vadose Zone Waters

William E. Glassley, John J. Nitao, and Charles W. Grant

Unsaturated Hydraulic Conductivity of Structured Porous Media: A Review of Liquid Configuration–Based Models

Markus Tuller and Dani Or

Dynamic Effect in the Capillary Pressure–Saturation Relationship and its Impacts on Unsaturated Flow

S. Majid Hassanizadeh, Michael A. Celia, and Helge K. Dahle

Modeling Heat, Water Vapor, and Carbon Dioxide Flux Distribution Inside Canopies Using Turbulent Transport Theories

Gabriel Katul and Mario Siqueira

ORIGINAL RESEARCH PAPERS

Fluid Flow, Heat Transfer, and Solute Transport at Nuclear Waste Storage Tanks in the Hanford Vadose Zone

Karsten Pruess, Steve Yabusaki, Carl Steefel, and Peter Lichtner

Kilometer-Scale Rapid Transport of Naphthalene Sulfonate Tracer in the Unsaturated Zone at the Idaho National Engineering and Environmental Laboratory

John R. Nimmo, Kim S. Perkins, Peter E. Rose, Joseph P. Rousseau, Brennon R. Orr, Brian V. Twining, and Steven R. Anderson

Tracer Penetration into Welded Tuff Matrix from Flowing Fractures

Qinhong Hu, Timothy J. Kneafsey, Robert C. Trautz, and Joseph S.Y. Wang

A Field Study of Water Flow and Virus Transport in Weathered Granitic Bedrock

C.S. Frazier, R.C. Graham, P.J. Shouse, M.V. Yates, and M.A. Anderson

Diffusion-Limited Mobilization and Transport of Natural Colloids in Macroporous Soil

Kirsten Schelde, Per Moldrup, Ole Hørbye Jacobsen, Hubert de Jonge, Lis Wollesen de Jonge, and Toshiko Komatsu

Stochastic Analysis of Transient Flow in Heterogeneous, Variably Saturated Porous Media: The van Genuchten–Mualem Constitutive Model

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Chloride Distributions as Indicators of Vadose Zone Stratigraphy in Palouse Loess Deposits

A.T. O’Geen, P.A. McDaniel, and J. Boll

Analytical Model for Vadose Zone Solute Transport with Root Water and Solute Uptake

G. Schoups and J.W. Hopmans

The Influence of Hydraulic Nonequilibrium on Pressure Plate Data

G.W. Gee, A.L. Ward, Z.F. Zhang, G.S. Campbell, and J. Mathison

Soil Water Retention Curve Description Using a Flexible Smooth Function

Lyle Prunty and F.X.M. Casey

Preliminary Investigations of Effluent Drainage from Mining Heap Leach Facilities

Stephanie K. Kampf, Miguel Salazar, and Scott W. Tyler

LETTER TO THE EDITOR

Letter to the Editor on A National Strategy for Vadose Zone Science and Technology

The National Vadose Zone S&T Roadmap Executive Committee

BOOK REVIEWS

Vadose Zone Science and Technology Solutions
Jan W. Hopmans

Conceptual Models of Flow and Transport in the Fractured Vadose Zone
Marco Bittelli

Flow and Transport Through Unsaturated Fractured Rock—Second Edition
Peng-Hsiang Tseng

Soil Science Simplified, Fourth Edition
Kelly D. Cherrey

Spatial Patterns in Catchment Hydrology: Observations and Modelling
Thomas Meixner

Soils in Our Environment, Ninth Edition
Markus Flury

Water Use in Crop Production
Steven R. Evett