

ALSO IN THIS ISSUE**Recipients of 2021 VZJ Editor's Citation for Excellence Named**

The *Vadose Zone Journal* editorial board has selected four individuals for recognition for excellence in performing their work as associate editors. The recognition is based on their efforts in establishing a quality review process—for timely and professional manuscript editing, for fair and rigorous integration of reviewer comments, and for overall excellence in managing a professional review process. The Editorial Board has also chosen four individuals for the Editor's Citation for Excellence in Review. Members of the VZJ Editorial Board want to express their deepest appreciation for these associate editors and volunteer reviewers, who have benefited our journal, our community, and our sciences through their outstanding work.

ASSOCIATE EDITOR EXCELLENCE AWARD**Nick Jarvis**

Nicholas Jarvis graduated in Environmental Sciences at the University of East Anglia (UK) before gaining a PhD at the University of Aberdeen in Scotland (Soil Science Department). He then did postdoctoral research at Cranfield University (UK) before moving to the Department of Soil and Environment at the

Swedish University of Agricultural Sciences in Uppsala (Sweden), where he became Professor of Soil and Environmental Physics in 1995. Research interests include soil water flow and the supply of water to plants and the interrelationships between soil structure and transport and transformation processes in soil, especially preferential flow, soil carbon dynamics, and pesticide fate.

Helen Dahlke

Helen E. Dahlke, PhD, is an Associate Professor in Integrated Hydrologic Sciences in the Department of Land, Air and Water Resources at the University of California, Davis. Dr. Dahlke's research focuses on surface water–groundwater interaction, water resources management, vadose zone transport processes,

and applications of DNA nanotechnology in hydrology. Since joining UC Davis, most of her research has focused on assessing the feasibility of using agricultural landscapes for intentional groundwater recharge. She has given over 150 presentations and TV and radio interviews on groundwater recharge opportunities in California. In 2016, Dr. Dahlke gave a Science Briefing titled “Water security in the West” in Washington D.C. to members of the House and Senate, the Congressional Research Service, U.S. Global Change Research Program, Department of the Interior, U.S. Department of Agriculture, and the Office of Management and Budget. Before joining UC Davis she was a postdoc at Stockholm University, Sweden. Dr. Dahlke holds a PhD in Environmental Engineering from Cornell University. Dr. Dahlke was a USDA Think Water Fellow in 2017.

Todd Caldwell

Todd Caldwell is a research hydrologist with the U.S. Geological Survey in the Nevada Water Science Center located in Carson City. He is currently the technical lead on water balance measurements in the Next Generation Water Observing Systems Program, which is expanding soil moisture and ET data collection nationally. His research combines field

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measurements and remotely sensed data with numerical modeling of unsaturated zone processes related to drought, groundwater recharge, and other water resource issues.

Quirijn de Jong van Lier



Quirijn graduated in 1988 with an MSc in Soil Science from Wageningen University, the Netherlands. In 1994 he finished his PhD at the University of São Paulo (USP), Brazil. After his PhD, he stayed in Brazil and has worked at the USP campus in Piracicaba since 1998.

His contributions to soil science are focused on the understanding, measuring, and modeling of physical processes in the soil and in the soil–plant–atmosphere system. As such, part of the research efforts focuses on the modeling of root water uptake and how we can understand crop water limitations as a function of soil hydraulic properties. This line of research has led to a mechanistic transpiration reduction function incorporating soil hydraulic properties and root characteristics. To apply these models, Quirijn worked on the measurement of soil physical properties, especially hydraulic properties in the dry range of tropical soils. To do so, he pioneered an inverse modeling method of evaporation monitored by determining the attenuation of a collimated gamma radiation beam and made novel determinations of these properties in soils from several Brazilian biomes. Throughout his career, Quirijn has advised 12 MS Students, 20 PhD students, 8 Postdocs, and 2 Visiting Scientists.

EDITOR'S CITATION FOR EXCELLENCE IN REVIEW

Edwin Cey



Dr. Edwin Cey is an Associate Professor in the Department of Geoscience and Director of the Natural Sciences program at the University of Calgary (Canada). He holds a degree in Agricultural and Bioresource Engineering from the University of Saskatchewan and MSc and PhD

degrees in Earth and Environmental Sciences from the University of Waterloo. Edwin has more than 25 years of experience as a hydrogeologist in both academia and industry examining diverse water resources issues across Canada, with particular expertise in preferential subsurface flow, solute and microbial transport, and frozen ground conditions. Much of

his published research focuses on improving process understanding in the vadose zone and groundwater systems through applied field, laboratory, and numerical experiments.

Horst Gerke



Horst H. Gerke is senior scientist and head of the Working Group “Hydropeology” (since 2018) with the Leibniz Centre for Agricultural Landscape Research (ZALF) Müncheberg, Germany, with research focusing on soil physics and soil hydrology. He earned a Diploma in Agriculture (1980) and

a PhD in forestry (1987), both from the University of Göttingen. He was postdoc at the Technical University of Braunschweig (1987–1989) and the U.S. Salinity Laboratory, USDA-ARS in Riverside, CA (1990–1992), visiting scientist at the Earth and Environmental Sciences Department of the University of Waterloo, Canada (1996), earned a postdoctoral lecture qualification (*Venia Legendi*) in Environmental Sciences at the University of Cottbus (2004) and in Soil Science at the Agricultural Faculty of the University of Kiel (2015). He served the German Soil Science Society as Vice-Chair and Chair of “Commission I” Soil Physics (2002–2005) and as vice president (2012–2015). His main research interest is preferential flow and transport processes in structured and heterogeneous soils.

Tetsu Tokunaga



Tetsu Tokunaga received his PhD in soil science (1986, University of California, Berkeley). He has since worked at Lawrence Berkeley National Laboratory (1993, Staff Scientist; 2001, Senior Scientist; 2019, semi-retired) where he applies his background in soil physics in related fields including groundwater

hydrogeology and multiphase flow, environmental biogeochemistry, and reservoir engineering. He has identified the role of water films in unsaturated flow and transport, developing scaling relations between permeability and imbibition, determined the Bond number limit of classical unsaturated hydraulic scaling, and derived the gas free-path distribution basis for diffusion in porous media. His experimental work has included refining calculations of subsurface flow and transport in snowmelt-recharged hillslopes, quantifying vadose zone recharge in semi-arid wetlands and floodplains, developing novel approaches to tensiometric fluid potential measurements, synchrotron X-ray-based methods to

measure water films at controlled capillary/disjoining pressures (under high pressure supercritical CO₂ confinement, and at atmospheric pressure), and developing synchrotron X-ray-based methods to investigate reactive transport of metals and radionuclides (chromium, uranium, vanadium, and selenium) in variable redox sediments.

Reimund Rötter



his PhD from University of Trier and was part of the CT de

Dr. Reimund P. Rötter is Professor of Tropical Plant Production and Agrosystems Modelling at Georg-August-University of Göttingen, Germany, since 2016. He is an agronomist, agroecologist, and agrosystems modeler with >25 years of work experience in Africa, Asia, and Europe. He received

Wit Wageningen modeling school until 2007. Thereafter he served as a professor of agrosystems analysis in Finland with focus on climate change and agriculture until 2015. He has over 130 peer-reviewed publications and is an internationally leading authority in the agricultural system modeling community.