



TEXAS TECH UNIVERSITY

Davis College

Plant & Soil Science™

Candidate for the B.L. Allen Endowed Chair in Pedology

Dr. Daniel R. Hirmas

Associate Professor of Pedology

Department of Environmental Sciences

University of California-Riverside

Research Seminar:

***Integrating Climate, Landscape, and Hydrological Processes
with Quantitative Pedology***

April 18 (Monday), 8:30 to 9:30 AM; MCOM-359

Seminar Precedes the PSS Graduate Research Symposium

Teaching Seminar/Lecture:

***Soil-Biota Relationships: Vegetation and Meso, Macro, and
Mega-fauna Impacts on Soil Development***

April 19 (Tuesday), 9:00 to 10:00 AM; BPS-118

**Invites for those who would like to listen to the seminars virtually by ZOOM will be distributed through email*

Dr. Daniel Hirmas is an Associate Professor of Pedology in the Department of Environmental Sciences at the University of California-Riverside. He earned a B.A. in Biology from Texas A&M University in 1999, a M.S. in Soil Science from Texas Tech University in 2003 (under the direction of Dr. B.L. Allen), and a Ph.D. in Soil and Water Sciences from UC-Riverside in 2008. After completing his Ph.D., he held a faculty position in the Department of Geography and Atmospheric Science at the University of Kansas from 2008 to 2018 before leaving to join the faculty at UC-Riverside.

Dr. Hirmas specializes in the quantification of pedological properties and their connection to chemical, biological, hydrological and geomorphic processes driving soil genesis. He developed techniques to quantify soil morphological properties through the application of 3-D laser scanning, rapid prototyping, photogrammetry, laser diffraction, proximal hyperspectral imaging, water retention, inverse modeling of soil sensor data, and the use of advanced multivariate methods. The application of these techniques has led to a new understanding of how exogenous and endogenous properties affect soil morphology and the rate at which morphological properties, such as soil structure, develop. His work has been funded by NSF, USDA, US EPA, and the Norwegian Research Council and is published in peer-reviewed journals such as Nature, Science Advances, Earth-Science Reviews, Geology, and Soil Science Society of America Journal. Dr. Hirmas has served as Chair of the Pedology Division and Soil Mineralogy Division of the Soil Science Society of America. He has advised/co-advised 12 graduate students, taught statistics and soil science courses (including pedology and soil geomorphology) at the undergraduate and graduate levels. He was a fellow of the Center for Teaching Excellence at the University of Kansas.