Through a principles-based approach, *Unsaturated Soil Mechanics* provides a thorough grounding in unsaturated soil mechanics principles and phenomena from three fundamental perspectives: thermodynamics, mechanics, and hydrology.

In a progressive and interrelated format with logic, physical reasoning, and mathematical rigor, *Unsaturated Soil Mechanics* examines the fundamental principles of unsaturated soil mechanics, illustrates the application of these principles to stress and flow phenomena in unsaturated soil, and demonstrates and evaluates the measurement and modeling techniques commonly used to quantify the state and material variables required to describe these stress and flow phenomena.

*Unsaturated Soil Mechanics* offers one focused volume uniting the microscopic physical basis and the macroscopic thermodynamic framework for pore water retention and the state of stress in unsaturated soil. Complete with extensive sample problems, this accessible text brings together the rapid advances in research in unsaturated soil mechanics, including advances in the applicability of effective stress, liquid and gas flows, and suction and hydraulic conductivity measurement.

*Unsaturated Soil Mechanics* is an invaluable introduction to this emerging field for students in civil engineering, environmental engineering, soil science, groundwater hydrology, and geoscience, as well as an inclusive reference for professional geotechnical engineers, soil scientists, geologists, and structural engineers.
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About the Authors

NING LU, PhD, is Professor of Engineering at the Colorado School of Mines, where he teaches courses in soil mechanics and geotechnical engineering. He is the author of more than thirty papers published in peer-reviewed journals and serves as an editorial board member for the Journal of Geotechnical and Geoenvironmental Engineering. He is a member of the American Society of Civil Engineers and a lifetime member of the American Geophysical Union.

WILLIAM J. LIKOS, PhD, is Assistant Professor of Civil and Environmental Engineering at the University of Missouri—Columbia, where he teaches courses in soil mechanics and soil behavior. He is a former geotechnical engineer with the U.S. Geological Survey. He is the author of numerous papers regarding unsaturated and expansive soil behavior, an editorial board member for the Geotechnical Testing Journal, and a member of ASCE and the Clay Minerals Society.

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