Geology for Geotechs

Session 3: Structural Geology for Engineers

Tuesday, September 22

11:00 AM - 1:00 PM Pacific | Virtual

REGISTER

Members	$50
Nonmembers	$100
Students	$25

Geologic units, their formation, orientation, alteration, and juxtaposition all affect the engineering performance of ground. In this talk, we will look at how geologic units form and, for rock materials, how they are altered by tectonics, burial, and weathering. Most importantly, we will examine how discontinuities and their properties largely govern rock slope behavior. For non-lithified sedimentary units, we will examine how geologic setting and structure can create conditions that lead to poor geotechnical behavior in soils, leading to unacceptable volumetric and shear deformations under static and dynamic load conditions.

Robert Kayen, PhD, teaches Engineering Geology as part of the faculty of Civil and Environmental Engineering at UC Berkeley. He is President of Geosystems Engineering International Corp, an engineering consulting company in Oakland. He is retired after forty years as a Senior Research Scientist at the USGS. A founding member of the National Science Foundation's GEER, he will focus his talk on the role of geologic structures and units and their important effects on geotechnical engineering decisions.

Robert Kayen, PhD
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