Greetings AEG Southern California Chapter Member

We hope you will join us for the first AEG Southern California meeting of 2026. The meeting will be on **Tuesday, February 10th**, the meeting will be held at Victorio's Ristorante, in North Hollywood.

Our speaker will be **Jeff Keaton** on *Engineering Geology: Fundamental Input or Random Variable?*

Abstract: This topic became a personal research focus as LRFD was expanding to include ground conditions. Geologists and engineers view the world in complementary but different ways. Science seeks to explain all observed details, whereas engineering seeks to design with specific objectives and multiple constraints. National guidance in the United States calls for geotechnical site investigations to be performed by geotechnical engineers and engineering geologists. Site characterization should start with Geologic Models which form the basis for Ground Models (Geologic Models with engineering parameters) and Geotechnical Models (Ground Models with predicted performance based on design parameters). Fundamental geologic variability makes some details unforeseeable. Insufficient geotechnical investigations, faulty interpretations, or failure to portray results understandably can contribute to inappropriate designs or failures. If the geologist does not interpret the geology and explain it clearly, then the engineer will be forced to interpret the geology or ignore it. Incomplete or inaccurate geotechnical site characterization can lead to selection of incorrect models, geotechnical properties, and design values. A suggested Geologic Model Complexity Rating System considers two site components (geologic complexity and terrain) and two field components (geologist competency and level-of-effort) in the scoring scheme used for the Geological Strength Index (GSI) which recognizes the gradational nature of component boundaries.

Here is a brief introduction for those who don't know Jeff:

Jeff Keaton is a registered professional engineer and a certified engineering geologist with 50+ years of experience in characterizing sites and alignments for design, construction, and condition assessments for a variety of projects on five continents. He has been employed by large, multinational consulting companies throughout his career, currently WSP. He was the lead engineering geologist for design of San Diego County Water Authority's roller compacted concrete Olivenhain Dam and principal investigator of National Cooperative Highway Research Program Project 24-29 to develop guidelines for evaluating scour at bridge foundations on rock. He received AEG's 2016 Holdredge Award for his 2013 paper "Engineering Geology: Fundamental Input or Random Variable?" He is Honorary Member and past president of AEG, Fellow of ASCE, GSA, and ABET, past chair of

ABET's Engineering Accreditation Commission, and selected as a GeoLegend by GEOSTRATA (2017). He has a BS degree in Geological Engineering from University of Arizona, a MS degree in Engineering (Geotechnical) from UCLA, and a PhD degree in Geology from Texas A&M University.

Meeting date: Tuesday, February 10th.

Location: Victorio's Ristorante, 10901 Victory Boulevard, North Hollywood, CA 91606, 818-762-9000.

Time: 5:45 pm Social Hour, 6:45 pm Dinner, 7:30 pm Program

Cost: $45 per person with reservations in advance for AEG members, $50 without reservations (at the door), FREE for students with a valid student ID and current AEG Student membership, the Student Membership is FREE as well, so join and get a free dinner!!

Reservations: Please email Ken Hudson at: **ken@hudsongeotechnics.com** or reply to this email

Please make reservations prior to 1 p.m., Monday, January 8th.