



**Association of Environmental &  
Engineering Geologists  
San Francisco Bay Area Chapter  
&  
San Francisco Geo-Institute**



Announcing our **March 8, 2022** Meeting



**Jahns Distinguished Lecturer**

**Edmund Medley, PE, PG, CEG, D.GE,  
F.ASCE**

Principal Consultant at Terraphase Engineering

**“SUGGESTIONS FOR PRUDENT  
GEOPRACTICE WITH FRANCISCAN  
BIMROCKS”**

**MEETING DETAILS**

**Virtual Meeting Place**

Online with Teams  
A link will be sent the day  
before the meeting

**Date and Time**

**TUESDAY, March 8, 2022**  
12:00 pm – 1pm

**Cost:** FREE ([optional donation towards our Student Scholarship](#))

**Reservations:** Spaces are limited, RSVP in advance!  
Please fill out the [online form](#) by **12 PM, MONDAY March 7, 2022.**

**Thank you for your RSVP! See you on Tuesday, March 8, 2022!**

# **SUGGESTIONS FOR PRUDENT GEOPRACTICE WITH FRANCISCAN BIMROCKS**

The Franciscan Complex (“the Franciscan”), underlying the San Francisco Bay Area is a mosaic of coherent-to-disrupted crustal slices separated by bodies of chaotic broken formations, sheared serpentinites, and melanges (mélange, Fr. for “mixture”). These complex geological mixtures of strong blocks of rock embedded in weaker rock matrices are bimrocks (block-in-matrix rocks). (Bimrocks also include weathered rocks, lahars, and fault rocks). Engineering geologists and geotechnical engineers are challenged by bimrocks because their lithological, spatial, and mechanical heterogeneity frustrate dependable characterizations and hinder economic construction.

The Lecture will present bimrock basics mixed with suggestions to encourage prudent geopractice for foundations, tunnels, excavations, and slopes in the Franciscan bimrocks of the Bay Area. Suggestions include: know the significance of Franciscan sub-terrane; beware estimates of block sizes and block proportions; challenge geological cross-sections developed from borings; and, question the results of deterministic slope stability analyses.

## **Speaker Bio:**

**Dr. Edmund (Ed) Medley** is a Principal Consultant at Terraphase Engineering in Oakland, California. His 40+ years of experience include several career lurches into mineral exploration prospecting, vagabonding, geotechnical and geological engineering consulting, failure investigation, litigation support, research, teaching, and lecturing. He specializes in the engineering and geological characterization of bimrocks (block-in-matrix rocks) and bimsoils.

Dr. Medley earned a B. Appl. Sc. in Geological Engineering at the Univ. British Columbia, and MS/PhD degrees in Geotechnical Engineering at UC Berkeley. He is a Senior Emeritus member and past Jahns Lecturer of the AEG; a Fellow and Diplomate, Geotechnical Engineering (D.GE) of the ASCE. He is registered as both a professional geologist and a professional engineer in the US, Canada, and the UK.