

Edmund Medley

PhD, PE, PG, CEG, D.GE, F. ASCE

Principal Consultant

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Education

University of British Columbia, B.Appl.Sci,
Geological Engineering, 1978

University of California at Berkeley: M.S.,
Geotechnical Engineering, 1991

University of California at Berkeley: Ph.D.,
Geotechnical Engineering, 1994

Professional History

Terraphase Engineering Inc.
Principal Consultant
2010 – present

Geothermic Solution, LLC
Chief Geologist
2013-2015

Dr. Edmund Medley, PE, CEG
Geological Engineer Consultant
2009-present

Geosyntec Consultants
Senior Consultant, 2005-2009

Exponent, Inc.
Principal Engineer, 1995-2005

Imperial College/Cambridge Univ./Univ.
California, Berkeley - Academic Visitor/Grad
Researcher, 1990-1995

Consulting Geological Engineer
1985-1990

PSC Associates/Dames & Moore
Staff/Project Engineer, 1978-1985

Licenses/Certifications

California Civil Engineer C47602
Hawaii Civil Engineer PE-6405
California Registered Geologist 5091
California Certified Eng. Geologist EG-1604
UK Chartered Civil Engineer, MICE 473050
UK Chartered Geologist, FGS 100281
Brit. Columbia Prof. Eng 12230
Brit. Columbia Prof. Geoscientist 12230
Diplomate, Geotechnical Engineering
NCEES Cert. Record Holder: #24697

Edmund (Ed) Medley, PhD, PE, CEG, D.GE, F. ASCE has over 50 years of varied international experience in geotechnical and geological engineering consulting, mineral exploration prospecting, failure investigation, project management, litigation testimony, academic research, teaching, and lecturing. He is licensed/chartered/registered as both a professional engineer and a geologist in California, the United Kingdom and Canada.

Dr. Medley is an internationally recognized authority on the engineering and geological characterization of bimrocks (block-in-matrix rocks), complex geological mixtures of rock and soil such as melanges, fault rocks, weathered rocks, tills, and colluvium.

Dr. Medley is experienced in evaluating geotechnical/ geological engineering vulnerabilities and the causes of Civil Engineering failures. He has provided testimony for attorneys, insurance companies, contractors, and municipal clients. His litigation support experience includes the investigation of major landslides, rockfall hazards, expansive/collapsing soils, tunnel failures, coastal erosion, sinkholes and other ground movements. He was Chief Geologist for a start up-firm seeking to develop innovative technology to harvest geothermal energy from deep borings.

Dr. Medley's litigation support/insurance claim projects include the investigation of the 1995 Sea Cliff Incident, in which a pit over 240 feet across and 40 feet deep resulted when an old, brick-lined, sewer failed in the most affluent neighborhood of San Francisco. Also, as a Court-Appointed Expert, in 2006 he led the effort to recover the renowned Forbes Collection of Hawaiian artifacts that had been removed from the Bishop Museum and sealed in lava tube burial caves on the Island of Hawaii, Hawaii.

Dr. Medley has authored/co-authored over 50 professional contributions, and presented over 350 professional and academic lectures, Short Courses and MCLE Credit courses. In 2014 and 2015 he taught the undergraduate course CEE70 *Engineering Geology* at the University of California at Berkeley. He was the 2009 *Richard H. Jahns Distinguished Lecturer* in Engineering Geology, awarded by the Geological Society of America and the Association of Environmental and Engineering Geology (AEG) for career achievements as a Geological Engineer and Engineering Geologist.

Dr. Medley is profiled on [LinkedIn](#) and on his web sites: bimrocks.com; geopractitioner.com, and edmedley.com .

REPRESENTATIVE PROJECT EXPERIENCE

Expert Consultant for Millennium Tower litigation, San Francisco. Provided litigation support in geological engineering issues related to subsurface conditions underlying the foundation of the “Leaning Tower of San Francisco” and neighboring structures¹. Also: during construction of the neighboring Transbay Transit Center, provided expert opinions in a construction dispute related to discrimination of Franciscan Complex melange bedrock from overlying alluvial/colluvial deposits.

Principal Investigator for Flood-Related Erosion and Claimed Levee Instabilities following the 2011 Las Conchas Wildfire in New Mexico. Reviewed claims of extensive flood-related erosion to levees, culverts, and roads at the Cochiti Pueblo and Jemez Pueblo reservations. Performed geotechnical and geological engineering analyses, image analyses, preliminary road designs and provided litigation support² and testimony at depositions³.

Principal Investigator of NOA at Rock Aggregates from Quarry near Sonora, California. Investigated alleged causation of mesothelioma due to claimed rock aggregates containing Naturally Occurring Asbestos produced from a serpentinite melange at the Sierra Rocks Quarry at Jamestown, California. Provided geological engineering services and litigation support. Testified at deposition⁴.

Principal Investigator of alleged landslide Movements due to Residential Construction, Boise Idaho. Investigated preliminary aspects of landslide movements at the Terra Nativa hillside development in Boise. Provided expert consultation to attorney client⁵.

Reviewer of Geological and Geotechnical Investigations of Claimed Sinkhole Activity in Florida
Reviewed over 50 geotechnical and geological reports for a Florida confidential client. Prepared a Protocol for geological and geotechnical investigations for potential sinkhole subsidence at single family homes in Florida.

Technical Reviewer Northern California Quarries. Compliance and On-Call Geotechnical Engineering services to Alameda County for SMARA (Surface Mining and Reclamation Act, State of California). Also Technical Review for Santa Clara County with geological and geotechnical engineering review of the expansion plans of the **Lehigh Cement Permanente Quarry**, Sunnyvale, California; Technical Reviewer, Geological and Hydrogeological Investigations, for **Graniterock Co., Aromas Quarry**, near Watsonville, California, an aggregate quarry located in a sheared rock mass, analyzed high pit walls using land-based photogrammetric techniques, and identified factors influencing variable fines contents in feed rock influencing tailings characteristics.

Investigations of Landslides, Ground Movements, Erosion and Flooding for Insurance Claims and Litigations: Over 20 years of experience in investigation of the geological engineering and geotechnical engineering aspects of landslides, sinkholes, ground settlements/heaving, erosion and flooding for legal

¹ Lehman et al vs Transbay Joint Powers Authority et al. San Francisco Superior Court, CA

² State Farm vs Tri-State, Sandoval County Court, Bernalillo, NM

³ State Farm vs Tri-State : August 24 2016 (for Cochiti Pueblo plaintiffs); January 4, 2017 (for Jemez Pueblo plaintiffs)

⁴ Lamb vs Sierra Rock Products, Contra Costa Superior Court; deposition on February 24, 2017

⁵ Sericati vs MTI et al.

and insurance clients in USA, Canada and New Zealand. Provided testimony at depositions and trials on behalf of defendants and plaintiffs.

Geological Engineering Characterizations: of Pu'u Opae, Kealia 2 and Lower Anahola Reservoirs, Kauai, Hawaii: Air photo analysis, geological engineering field reconnaissance for proposed rehabilitation of retired sugar plantation reservoir impounded by earth fill embankments.

Geological/Geotechnical Characterization for Sewer System, Tutuila Is., American Samoa: Performed geological/geotechnical characterization and construction excavatability in coralline/basaltic/fill subsurface conditions for proposed several miles of sewer infrastructure in Pago Pago area, Tutuila Island, American Samoa.

Geological and Geotechnical Investigations, Expansion of Landfills, California: Senior Technical Reviewer and consulting Geological Engineer for site characterization, geological engineering analysis, slope stability and remediation concepts in strong to weak rock masses, for major expansion of the Prima Deshecha landfill, Orange County, California; and for expansions of the Vasco Road and Altamont (Livermore, CA) landfill sites in eastern San Francisco Bay

Geotechnical Engineering Evaluation of Construction Claims Due to Expansive Soils, Oahu, Hawaii
Evaluated geotechnical elements of Differing Site Conditions claim of expansive soils at Dept. of Defense facility in Hawaii⁶.

Geotechnical Evaluation of High Slope in Franciscan Complex Rocks, Point Richmond, California
Consulted for the Owner of an old quarry leased to Dutra Materials at Richmond, California. The pit has a very steep, 350-foot slope of Franciscan Complex rocks. The project required a cooperative collaboration with other Consultants, and consultation with client attorneys. Performed a detailed evaluation of geological and geotechnical conditions, and rockfall hazards; and presented findings at several Public Meetings of the California State Mining and Geology Board (SMGB).

Investigation of Failed Slopes in Franciscan Complex Melange, Millbrae, CA
Principal investigator for the Office of the City Attorney, City of San Francisco, investigating causes of major landslides affecting residential properties in Northern California. One slide was alleged to be caused by the nearby Crystal Springs Reservoir. Case⁷ settled prior to testimony. At another, the slide damaged private property, blocked an arterial road, and threatened a major water supply. Case settled⁸; also assisted Office of the City Attorney in subsequent construction claims.

Investigation of the Sea Cliff Incident, San Francisco, California
Principal Investigator into the causes of the Sea Cliff Incident in San Francisco, in which a failed sewer caused extensive erosion and \$30 million worth of property damages. The case was later litigated and Dr. Medley was the lead consultant for the City of San Francisco. The case settled satisfactorily for the City. The story has been much televised and featured in two papers.⁹

⁶ Metcalfe v United States (Honolulu, Hawaii)

⁷ Esmaili et al v. City and County of San Francisco et al (San Mateo Court)

⁸ Heftner et al vs. City and County San Francisco, (San Mateo County Court)

⁹ see: <https://geopractitioner.com/wp-content/uploads/2020/11/Medley-2000-SEA-CLIFF-INCIDENT-SEWER-FAILURE.pdf>

Geological Reconnaissance of Earthquake Damage, Hawaii

Performed geological engineering reconnaissance of damage resulting from the October 15, 2006 M6.7 and M6.0 earthquakes on the Island of Hawaii, Hawaii.¹⁰

Investigation of Failed Tie-Back Wall, Washington, D.C.

Investigated Differing Site Condition claim for tie-back wall and caisson installation at deep excavation in complex soil/boulder mixture in weathered rock at a University in Washington, DC.

Investigation of Failed Buried HDPE Stormwater Drainage Systems

Investigated ground subsidence and provided testimony in litigations related to collapses of storm water retention systems composed of buried HDPE chambers at sites in the New York area, Southern California and Guam.

Investigation of Failed Tailings Dam, New Zealand

Investigated the geological engineering and geotechnical engineering causes of a major landslide that further threatened a leaking tailings dam at the Golden Cross gold mine near Waihi, North Island of New Zealand. Testified at deposition for plaintiff; case settled prior to trial¹¹.

Investigation of Alleged Erosion at Oil Field, Santa Maria, California

Investigated causes of alleged extensive erosion to rangeland due to several decades of oil well production near Santa Maria, California. Testified for defendants at deposition and at Arbitration¹² Hearing using public projection of stereo air photos. Case found in favor of the defendants on the erosion issues.

Investigation of Cliff-Top Retreat, Esplanade, Pacific, California

Investigated severe cliff-top retreat, undermining of homes and erosion of several neighboring private properties at Esplanade Drive in Pacifica, California due to unusual El Niño-related wave conditions.

Retrieval of Forbes Collection from Forbes and Mummy Caves, Hawaii, Hawaii

As a Court-Appointed Expert¹³ advised on geological engineering aspects of lava tube cave stability. Had the primary role in retrieval of the famous Forbes Collection of 83 priceless Hawaiian cultural artifacts, sealed by rock and concrete barriers within the caves. Success of the project, which had a high public profile, was due to application of Geological Engineering observations and principles, to evaluate and monitor cave wall stability; cultural sensitivity; and willingness to work in arduous, hot and cramped conditions for several days¹⁴.

¹⁰ See: http://casehistories.geoengineer.org/volume/volume1/issue2/IJGCH_1_2_3.html

¹¹ Cyprus Amax vs. Lexington Insurance et al, 2004, (Colorado Supreme Court)

¹² Ontiveros vs. Shell et al., Santa Maria, CA, 1996 (Santa Barbara, CA County Court)

¹³ Na Lei Alii Kawanakoa et al v. Hui Malama et al (Hawaii Superior Court, Honolulu)

¹⁴ See: <https://geopractitioner.com/wp-content/uploads/2010/06/HAWAII-CAVES-GEAG-2007-POSTER-FOR-DISTRIBUTION-11x17.pdf>

Investigation of Micro-Tunneling Construction Claim, Northern California

Investigated construction claims arising from micro-tunneling installation of sewer pipes at bouldery ground in Redding California. Testified at deposition and trial¹⁵.

Investigation of Allegedly Contaminated Real Estate Development, Santa Maria, California

Investigated geotechnical and earthwork construction aspects of imported oil-contaminated fill at a commercial development in Santa Maria, California. Testified for defendant at deposition and trial; case included in a listing of Top 10 Defense Verdicts¹⁶.

Investigation of Las Flores Canyon Landslide, Malibu, California

Investigated causes of flooding following extensive wildfire, in conjunction with effects of slow-moving landslide at Las Flores canyon, near Malibu. Testified at deposition: case settled prior to trial¹⁷.

Investigations of River Captures by Gravel Pits at Russian, Tuolumne and Truckee Rivers, California

For Confidential Insurance projects, Dr. Medley investigated the causes of slope instability and the effects of flood-related damage to operations at gravel pits on the Russian River, Sonoma County; on the Tuolumne River, near Modesto, California; and on the Truckee River, at Truckee, California. Investigated slope stability of failed slopes and discriminated those slopes that failed due to effects of rapid drawdown (following cessation of flooding and lowering of water levels) from slopes that failed for other reasons. Dr. Medley testified at deposition for one case, which was settled prior to trial.

Evaluation of Shear Zone/Borrow Pit Conveyor Capacity, San Roque Dam, Philippines: Investigated major construction claims¹⁸ related to alleged unanticipated grouting conditions in shear zones in the foundation of a high multi-use earth fill dam in Philippines. Also investigated claims related to design deficiencies for the long conveyor system used to transport fill from remote borrow pits to the dam site. Was the sole Technical Expert to testify at Arbitration Hearing; case was mutually withdrawn.

Terrain Hazard Evaluation, Lihir Gold Mine, Lihir, Papua New Guinea

Consulted on overall geologic hazards associated with ongoing and planned pit expansions at one of the world's most unusual gold mining operations, located within a volcanic caldera, with active geothermal conditions. Consulted on an unexpected failure in very weak, severely hydrothermally-altered tropical residual soils in chaotic geology; and based limited ground truthing and an airborne LiDAR survey was flown to generate detailed topography, developed a Terrain Hazard Assessment¹⁹. Also consulted on use of GPS-based systems for monitoring mine wall and ore stockpile stability.

Geotechnical Services, Terrabay Project, South San Francisco, California

¹⁵ Vadnais v. Kenko Inc., July 2004 (California. Supreme Court, Shasta)

¹⁶ B. Richards vs. Texaco et al, 2003 (Santa Barbara County Court)

¹⁷ Teufel vs. City of Malibu, (Las Flores Canyon Landslide), Malibu, CA 1998 (Los Angeles County)

¹⁸ Washington Group International v. Raytheon

¹⁹ See https://geopractitioner.com/wp-content/uploads/2010/06/Haneberget-al-2005-Lihir-LiDARVancouver_Paper_LoRes.pdf

Provided on-site geotechnical and geological services for Terrabay, a large sub-division development on San Bruno Mountain, South San Francisco. The project required construction monitoring of 1.5 million cubic yards of earthwork for roads, mass grading, and buried utilities. Performed geological and geotechnical characterization of landslides; designed deep rockfill embankments; and reviewed construction variance requests.

Comprehensive Geotechnical Services, Ok Tedi Mine, Western Province, Papua New Guinea

Field Project Manager and principal geo-professional of a 70-man crew providing comprehensive geotechnical services for the design-build contractor, Bechtel/Morrison-Knudsen JV. Project was the largest geotechnical services project in Australasia up to that time. Provided comprehensive geological and geotechnical data necessary for design and construction of the Ok Tedi mine and associated infrastructure.

Geological and Geotechnical Engineering Characterizations at Syncrude Open Pit, Fort McMurray, Alberta, Canada

At the open pit Syncrude oil sands mine near Fort McMurray, Alberta, evaluated the geotechnical suitability of fluvial and glacial overburden soils and oil sands for constructing stable working surfaces for draglines, tar sand stockpiles, bucket wheel excavators and conveyor systems. Developed engineering geology maps of overburden soils and simplified maps for earthwork contractors showing usability characteristics of overburden soil, with clear designations of “Good Soil” and Bad Soil”.²⁰

Investigations, Preliminary Design and Construction Observation for Mine Tailings Dams, Canada and Idaho

Performed geotechnical investigations and preliminary geotechnical designs for tailings dam additions at Sullivan Mine, (Kimberley, BC); Hecla Star Mine (Wallace, Idaho); and Hecla Lucky Friday Mine (Mullins, Idaho); investigated suitable borrow sites and monitored the construction of earth fill tailings dams for Hecla Star Mine and Hecla Lucky Friday Mine.

Prospector in Canada – 1969 to 1975

Ground geophysics operator/data recovery and plotting for EM, Turam, VLF, Magnetometer and Induced Polarization surveys in Ontario, Manitoba, Saskatchewan and British Columbia (Canada). Geological prospector in massive sulphide prospects (Stikine River area, BC); Mississippi Valley-type Pb-Zn prospects in carbonates (Selkirk Range and Ogilvie Range, Yukon); and porphyry copper (Vancouver Island, BC). Also experienced as surface blaster, claim-staker, and line-cutter. Experienced in sampling stream sediments and soils for geochemistry analysis; backpack drilling; and rock-chip sampling. For helicopter and fixed wing airborne geophysics: flight path navigation /air photo interpretation for flight path recovery; data recovery/plotting/contouring for EM, Magnetometer and Radiometrics surveys in Ontario, Manitoba, Saskatchewan, Labrador and Northwest Territories (Canada).

²⁰ see <https://edmedley.com/blog/good-soil-bad-dirt/>

SELECTED PUBLICATIONS/PRESENTATIONS

Dr. Medley has contributed to some 50 articles, reviews, technical papers and posters. During his career, he has also presented more than 350 professional lectures, academic lectures, Short Courses, and MCLE Credit courses. A complete list of his professional publications and presentations is available upon request. Some contributions are freely available at the his websites bimrocks.com and geopractitioner.com.

Selected Publications

- “Application of the tortuous surface method to stochastic analysis of bimslope stability; Bulletin of Engineering Geology and the Environment; publ July 2020; <https://doi.org/10.1007/s10064-020-01909-5> (with E. Montoya-Araque, and Suárez-Burgoa)
- “Evaluating the effects of the inclinations of rock blocks on the stability of bimrock slopes”, *Geomechanics and Engineering*, Vol. 17, No. 3 (2019); pp 279-285; (with Emad Khorasani, Mehdi Amini and Mohammad Farouq Hossaini).
- “Statistical analysis of bimslope stability using physical and numerical models”, *Engineering Geology*, No. 254, 2019, pp 13–24; (with Emad Khorasani, Mehdi Amini, and, Mohammad Farouq Hossaini).
- “Of Poison Oak, Mistakes, and Lessons: Tales of Geofailure Investigations”, July/August 2018 edition of *GeoStrata* magazine of the Geo-Institute of ASCE; pp-56-61.
- Field Trip Guidebook: “Field Course #5: San Francisco Melanges and Bimrocks aka: a mélange: chunks of Franciscan geology in a matrix of tourist chatter”; 61st AEG Annual Meeting/13th IAEG Congress, San Francisco, California; 38 pages (with J. Waeber)
- “San Francisco Bay Geologic Engineering Tour with Professor Richard Goodman”, Field Trip Guidebook, Conference of the American Rock Mechanics Association, San Francisco, CA; June 28 2015 (Co-Leader and Co-Author with Prof. Richard Goodman, John Wallace and Dale Marcum).
- “An Approach to Predicting the Overall Strengths of Unwelded Bimrocks and Bimsoils”, in *Journal of Engineering Geology*, no. 183 pp 65–79 October 2014, (with A. Kalender, H. Sonmez, C. Tunusluoglu, K.E. Kasapoglu).
- “Report on the Field Trip of a Lifetime”, *AEGNews* magazine of the Association of Engineering and Environmental Geologists, Vol.56, No. 1, March 2013, pp 17-22.
- Book Review: “Melanges – Processes of Formation and Societal Significance”, *J. Environmental and Engineering Geoscience*, No. 4, Nov. 2012, pp-404-406.
- “A Jahns Jahr - Jottings of a Jahns Lecturer”, *AEGNews* magazine of the Association of Engineering and Environmental Geologists, November/December 2011 edition, pp. 10-11.
- “Damon R. Runyan, 1939-2011 - A Tribute to One Geological Engineer from Another”²¹, detailed professional tribute at “Legendary People” page of the website of the AEG (Association of Environmental and Engineering Geologists)

²¹ See: <https://geopractitioner.com/wp-content/uploads/2020/11/Damon-R-Runyan-1939-2011-A-Tribute-by-Ed-Medley-for-AEG-Website.pdf>

- “Geopractitioner Approaches to Working with Antisocial Melanges”, in Special Publication “*Melanges: Processes of Formation and Societal Significance*”, ed. Wakabayashi and Y. Dilek, Geological Society of America, Boulder CO; pp 263-279 (with D. Zekkos).
- “Commentary: Engineering Geology-A Vital Phase of Geoengineering”, Geo-Strata magazine of the Geo-Institute of the ASCE, March/April 2009 edition.
- “The Motley View: On Geonudity and Some Benefits of Your Geoengineering Graduate Education”
Motley View column, Newsletter of the Berkeley Geoengineering Alumni Association, Issue 5, May 2008²².
- “Engineering the Geological Chaos of Franciscan and Other Bimrocks”, Paper 08-316, Proc. Of the American Rock Mechanics Association Conference, San Francisco, California June 29 – July 2, 2008.
- “Seismic Performance of Rock Block Structures with Observations from the October 2006 Hawaii Earthquake”, Proceedings of the 4th Int. Conf. Earthquake Geotechnical Engineering, Thessaloniki, Greece, June 25, 2007 (with D. Zekkos).
- “Bimrocks – Part 1: Introduction” and “Bimrocks – Part 2: Case Histories and Practical Guidelines”, Newsletter of the Hellenic Society of Soil Mechanics and Geotechnical Engineering, Athens, Greece, February and April 2007.
- “Considerations in Developing an Empirical Strength Criterion for Bimrocks”, Proceedings Session T3-A Rock Properties, 4th Asian Rock Mechanics Symposium and ISRM International Symposium 2006, Nov. 6-10, 2006, Singapore (with H. Sonmez, H. Altinsoy, and C. Gokceoglu).
- “Geological Engineering Reconnaissance of Damage Caused by the October 15, 2006 Hawaii Earthquakes”, Int. Journal of Geoengineering Case Histories, v. 1., No. 2, paper 3: (with expanded Google Earth database of photos).
- “The Engineering Characterization of Melanges and Similar Block-in-Matrix Rocks (Bimrocks)”, Ph.D. Dissertation, University of California, Berkeley, CA, 1994.

Selected Presentations

2009 Jahns Distinguished Lectures

Dr. Medley was the **2009 Richard H. Jahns Distinguished Lecturer in Engineering Geology**²³. The distinction was awarded by the Association of Environmental and Engineering Geologists (AEG) and the Engineering Geology Division of the Geological Society of America (GSA). The intent of the funded Lectureship was to encourage student and professional awareness of Engineering Geology through a series of lectures presented to University students and Geology/Engineering/ Professional Groups across North America during the award year (October 2008 to October 2009). During the award year 85 Lectures were presented²⁴ at about 70 venues. Seven Lecture titles were offered²⁵.

²² For this and other Motley View articles see: <https://edmedley.com/motley-views/>

²³ <https://edmedley.com/jahns-lectures/>

²⁴ Details at <https://edmedley.com/jahns-lectures/jahns-jaunts-venues-and-lectures/>

²⁵ “The Comforts of Ignorance and the Benefits of Arrogance - Lessons of the Failure Kind for the Geopractitioner”; “Of Elephants, Earthquakes, Caves and Hot Rock - Recent Geological Engineering; Adventures”; “Something to Chew on- Rock is More Nutritious than Dirt.”; “An Introduction to the Use of Ground-Based Stereo Photography in Geopractice”; “Forensic Investigation of the Sea Cliff Incident, an Urban Catastrophe”; “Reflections and Snapshots from a 40 year Geo-Odyssey –“Shoot! This Has Been Delightful! Abstracts at: <https://edmedley.com/jahns-lectures/2009-jahns-lectures-abstracts/>

Other Selected Lectures

- “Recent Advances in Stochastic Analyses of Slopes in Bimrocks and Bimsoils”, AEG Virtual Annual Meeting, Technical Session 7: Applied Science Methods for Problem Solving – A Gallery of Practical Examples , September 18, 2020.
- “The Value of Doing Dirty Work - Further Tales of Geopractice Mischaracterizations”; Dinner Lecture, East Bay Section of Northern California Land Surveyors Association, San Leandro, CA; November 13, 2019.
- “No KISSing Allowed: How to Characterize Geological Chaos’, Geological Colloquium, Dept. of Geology, Humboldt State University, Arcata, CA; September 30, 2019.
- “Geomechanical characterization of bimrocks - with Case Histories”, in “International Workshop on Complex Formations: Characterization and Case Studies”, convened by Italian Geotechnical Association, Turin Polytechnic University, Turin, Italy; May 29, 2019.
- “Main features and technical issues of block-in-matrix rocks (bimrocks and bimsoils)”, in “International Workshop on Complex Formations: Characterization and Case Studies”, convened by Italian Geotechnical Association, Turin Polytechnic University, Turin, Italy; May 29, 2019.
- “Keynote Lecture: 25 Years of Progress in Characterizing Melanges, Bimrocks, and Similar Rock-Soil Mixtures”, Technical Sessions 15 and 23A: “Engineering geology of mélanges, bimrocks and soil/rock mixtures”, AEG Annual Meeting 61/IAEG XIII Congress, San Francisco, California; Sept 18 2018.
- Short Course²⁶: “Geotechnical and Geological Engineering with Melanges, Fault Rocks and Other Bimrocks”; Facultad de Minas, Departamento de Ingenieria Civil, Grupo de Investigation en Geotecnica, Universidad Nacional de Colombia, Medellín, Colombia; Sept 18-22, 2017 (4 days of lectures and one day of field trips).
- “CEE 70 Engineering Geology”, Summer Session undergraduate course, Department of Civil and Environmental Engineering Univ. of California at Berkeley, June-August 2014 and 2015²⁷.
- “Simple Concepts about Complex Bimrocks”, Lecture in Short Course: " Practical Engineering Geology with Applications to Dam Design, Construction, and Performance" for FERC (Federal Energy Regulatory Commission), sponsored by The Geological Engineering Foundation, UC Berkeley Richmond Field Station, Richmond, CA, August 4, 2014 and June 3, 2015.
- “WYTYSINWYG – The Least You Should Know About Characterizing Geological Chaos”, CEE 281 Engineering Geology, University of California at Berkeley, Oct. 2, 2014 and Nov. 5, 2015.
- “Upon Encountering Melange (Nostalgia)”, Richard E. Goodman Geological Engineering Colloquium Jenner, California, July 2, 2015.
- “The Comforts of Ignorance and the Benefits of Arrogance: Lessons of the Failure Kind for the Engineer”, CEE290 Structural Performance and Failures, Dept. Civil and Environmental Engineering, Stanford University, CA, June 1, 2015.

²⁶ Course Lectures at: <http://www.geomecanica.org/groupBIM/courseMedley2017.html>

²⁷ Fall Session 16-week Courses taught in 8 weeks during the Summer Sessions of July through August 2014 and 2015. The courses included preparation and presentation of about 50 hours of lectures, supervision of 6 hours of laboratory practice a week; creation and grading of several exams; and leading one-day Field Trips of engineering geological features in the San Francisco area.

- “Misreading Between the Lines – Further* Tales of Geopractice Mischaracterizations”, Dinner Meeting No. California Land Surveyors Assn. – East Bay Section, Oakland, CA, Jan. 14, 2015
- “Of Elephants and Geological Engineers”, Graduate Geotechnical Seminar, University of California at Davis, Nov. 6, 2014.
- “The Bottom-up/Top-Down Jig-Saw Puzzle Landslide, Santa Cruz County, California”, Annual Meeting of Assoc. Environmental and Engineering Geologists, Seattle, WA, September, 2013.
- “Discrimination of Ancient Buried Valleys Deposits from Franciscan Complex Melange; San Francisco, California”, Annual Meeting of Assoc. Environmental and Engineering Geologists, Seattle, WA, September 2013.
- “Development of a Disciplined Protocol for Investigation of Sinkhole Activity”, Annual Meeting of Assoc. Environmental and Engineering Geologists, Salt Lake City, UT, September, 2012 (with J.R. Raines).
- “WYTYSINWYG – Recognizing Certain Uncertainties in the Characterization of Bimrocks”, Annual Meeting of Assoc. Environmental and Engineering Geologists, Salt Lake City, UT, September, 2012.
- “Simple Concepts Useful for Characterizing Complex Bimrocks Underlying Slopes”; in Landslide and Slope Stability 1-Day Short Course for Geologists and Geotechnical Engineers; by AEG-Inland Empire Chapter and the ASCE-GI/San Bernardino/Riverside Geotechnical Committee; U. California at Riverside, Extension Center, Riverside, CA; May 12, 2012.
- “Boring (But True) Tales of Subsurface Mischaracterizations”, Annual Meeting of Assoc. Environmental and Engineering Geologists, Salt Lake City, UT, September, 2012.
- “Recycling Ancient Technology – The Perennial Benefits of Aerial and Ground-Based Stereo Photography in Modern Geopractice”, Annual Meeting of Assoc. Environmental and Engineering Geologists, Salt Lake City, UT, September, 2012.
- “The Importance of Mentor/Protégé Relationships in the Careers of Two Geological Engineers”, Annual Meeting of Assoc. Environmental and Engineering Geologists, Salt Lake City, UT, September, 2012 (with J. Cohen-Waeber).
- “Width, Height and Length: 3 Geopractice Tales with Geometric Dimensions”, Dinner Meeting of the CA Land Surveyors Assn- East Bay Chapter, San Leandro, CA, April 14, 2010.
- “The Engineering Geologist as Artist”, Annual Meeting of the Assoc. of Environmental and Engineering Geologists, South Lake Tahoe, September 2009 (with D. Green).
- “Engineering the Geological Chaos of Franciscan and Other Bimrocks”, Session 12: Melanges, Mixed Materials and Chaotic Rocks; American Rock Mechanics Association Conference, San Francisco, California, July 1, 2008.
- “Evaluation of Simple Claims in a Complex Melange”, Annual Meeting of Assoc. Environmental and Engineering Geologists, New Orleans, Louisiana, Sept 18, 2008 (with C.B. Snell).
- “Melanges – So What? Who Cares? – A Geotechnician’s Perspective”, Paper No. 168-7; Session T168: Mélanges: Processes of Formation and Societal Significance”, 2007 GSA Denver Annual Meeting October 30, 2007.
- Got Curiosity, Humility, and Honesty? - On Being an Effective Investigator of Geo-Failures”; Paper 73-1, Session No. 73: Forensic and Engineering Geology Case Studies: A Tribute to James E. Slosson; 2007 GSA Denver Annual Meeting, October 29, 2007.
- “Internal Structure of the San Andreas Fault Zone at the A.R. Wilson Quarry, Aromas, California, as Inferred from 3-D Digital Outcrop Modeling; Paper 168-8; Session T168: Mélanges: Processes of Formation and Societal Significance”, 2007 GSA Denver Annual Meeting October 30, 2007 (with W. Haneberg).
- “Dining With Melange: Characterization of Bimrocks in Three Easy Courses,” Dinner Meeting, ASCE San Francisco Section. Jan 19, 2006.

“Observations on Chaotic Failure Surface Trajectories in Bimrocks (Block-in-Matrix Rocks),” Annual Meeting of the Ass. Eng. Geologists, Las Vegas, Nevada, Sept. 2005.

“From Moist Through Damp, Wet, Saturated, and Inundated: The Role of Water in Geo-Failures”, MCLE Credit Course for the County of Santa Cruz, September 12, 2005.