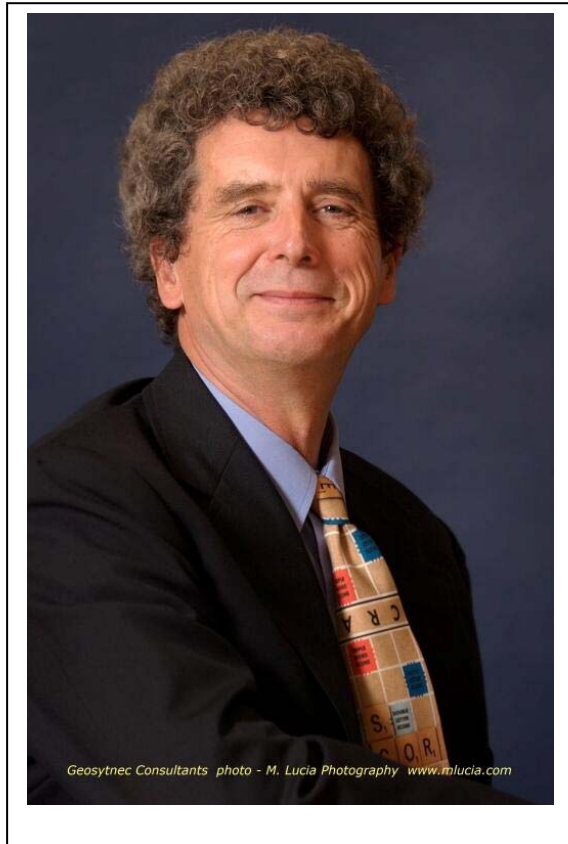


ANNOUNCEMENT FOR AEG/GSA PRESS RELEASE: 2009 JAHNS DISTINGUISHED LECTURER



Edmund Medley, Ph.D, PE, CEG, F.ASCE is the *2009 Richard H. Jahns Distinguished Lecturer in Engineering Geology*. The selection committee for this award is composed of representatives of the Association of Environmental and Engineering Geologists (AEG) and the Engineering Geology Division of the Geological Society of America (GSA). The intent of the partially-funded Lectureship is to encourage student and professional awareness of engineering geology through a series of lectures presented across North America during the award year. The award was established in 1988 to commemorate Professor Richard H. Jahns (1915-1983), who had an influential and diverse career in academia, consulting and government. Details on the life and career of Professor Jahns are presented at edmedley.com (**Jahns Lectures** page).

Lacking math and science pre-requisites, Dr. Medley began his academic life in 1973 as a “mature student”, admitted to the Mining Technology program at the British Columbia Institute of Technology, in Burnaby, British Columbia. Transferred to the University of British Columbia, in Vancouver, British Columbia, he graduated in 1978 with a B. Appl. Science in Geological Engineering (Geotechnical Option), winning the first Aro A. Aho Medal for academic excellence in Geological Engineering. Even more

matured, he earned a mid-career M.S. in 1991 and a Ph.D. in 1994, both in Geotechnical Engineering, from the University of California at Berkeley. He was the AEG Marliave Scholar in 1993, awarded for outstanding scholarship in Engineering Geology and Geological Engineering. For his Ph.D. research he pioneered approaches to the engineering and geological characterization of bimrocks (block-in-matrix rocks), complex geological mixtures of rock and soil such as melanges, fault rocks and weathered rocks. Dr. Medley has authored/co-authored about 50 professional contributions, many on bimrocks. Most of his professional and research contributions are available at bimrocks.geoengineer.org and edmedley.com . He has also presented over 150 professional and academic lectures, Short Courses and MCLE Credit courses.

Dr Medley is a Senior Consultant in the Oakland, California office of Geosyntec Consultants (geosyntec.com). He began his career in the Applied Earth Sciences in 1969, and now has over 30 years of unusually varied international experience in geotechnical and geological engineering consulting, mineral exploration prospecting, failure investigation, litigation testifying and research. He has consulted on major landslides, rockfall hazards, expansive/collapsing soils, tunnel failures, coastal erosion, sinkholes and other ground movements. He is licensed/registered/chartered as an engineer and geologist in the USA, Canada and the United Kingdom.

Affiliated with several international geosciences and engineering organizations. Dr. Medley has been a member of the GSA and AEG for many years. He was the San Francisco AEG Section Membership Committee Chairman between 1991 and 1993 and the San Francisco Section Short Course Chairman between 1995 and 1996. He currently contributes time to several professional committees, Editorial Boards, and as a peer reviewer, to professional journals.

As the 2009 Jahns Distinguished Lecturer, Dr. Medley offers several Lectures, as summarized below and at edmedley.com (**Jahns Lectures** page). Contact Dr. Medley directly to arrange lectures: emedley@geosyntec.com and (510) 285 2722.

The Least You Should Know About Characterizing Geological Chaos: Bimrocks (block-in-matrix rocks) are geologically complex mixtures of rocks and soils, such as melanges, fault rocks, and weathered rocks. Bimrocks present major challenges to geopractitioners because successful and economical characterizations of rock/soil mixtures are frustrated by their geological, spatial and mechanical variability. This Lecture presents broad concepts on characterization, design and construction in bimrocks that have been provocative, yet useful, to geopractitioners around the world.

The Comforts of Ignorance and the Benefits of Arrogance: Lessons of the Failure Kind for the Geopractitioner: Ignorance and arrogance are all too common in the design professions. It is comforting to not know what one does not know. And, there are benefits to being arrogant: why waste time on having a colleague check your work if you know what you are doing? Why go through the pain of further education or professional development? Why should engineering geologists talk to geotechnical engineers (and vice versa)? After all: "I know enough geowhatever to get by." But

ignorance leads to blissful mistakes and arrogance results in occasional spectacular, famous and expensive failures. A few lessons are offered, particularly to the engineering geologist/geotechnical engineer/environmental scientist who thinks he/she knows it all.

Of Elephants, Earthquakes, Caves and Hot Rock - Recent Geological Engineering Adventures: The Lecturer, a Geological Engineer with Civil Engineer/Engineering Geologist qualifications, describes the technical background of a Geological Engineer in the context of elephants. The broad technical skills sets of most Geological Engineers are excellent for the two-way translations of geology and engineering. Three recent case histories provide examples: A summary of the Geological Engineering observations from a reconnaissance commissioned to observe damage resulting from the October 2006 Hawaii earthquake; the very challenging Forbes Cave project in Hawaii, a rare story of a geopractitioner consultant becoming very dirty as a Court-Appointed Expert advising on lava tube cave stability and recovering a buried collection of unique Hawaiian cultural artifacts; and, the Geological Engineering insight required for overall geoenvironmental characterization of terrain hazards at the Lihir gold mine in Papua New Guinea, located in a geothermally active, collapsed volcanic caldera.

Something to Chew on - Rock is More Nutritious than Dirt: A medley of geoenvironmental case histories is scrambled to provide the oft-neglected but essential supplementary nourishment to soils engineers that is afforded by an exposure to rock engineering. Ingredients in the Lecture may include (at the whim of the chef): an analysis of high cut slopes, and characterization of weak rock masses using the Hoek-Brown Failure Criterion, “layered” on the basis of depth varying Geological Strength Indexes; description of the simple Geological Engineering basis for confidence in the rock mass stability of the walls of lava tubes caves during retrieval of a buried collection of unique Hawaiian cultural artifacts; and, why you should care about melanges and other block-in-matrix rocks (bimrocks).

An Introduction to the Use of Ground-Based Stereo Photography in Geopractice: In some situations three-dimensional, stereo (3D) perception is critical to efficient and accurate geological/geotechnical investigation. Taking and exploiting ground-based stereo photographs for personal use and geology and engineering consulting is easy and inexpensive. Stereo photos preserve records of site conditions for use in analysis back at the office, and allow a clear visual depiction of the site to report readers and audiences at presentations. Examples of ground-based stereo images of terrain, landslides, gullies, distressed structures, and other features—as used in project-related analyses and presentations—demonstrate the considerable advantages in collecting and viewing site information as stereo images. **Stereo glasses will be provided.**

Forensic Investigation of the Sea Cliff Incident, an Urban Catastrophe: Shortly after midnight on December 11, 1995, storm water started to leak from a century-old 6-foot brick sewer underlying the prestigious Sea Cliff neighborhood in San Francisco. The leakage eroded vulnerable dune sand soil to create a pit that grew uncontrollably to over 250 feet wide and 40 feet deep. Shortly after dawn, a multi-million dollar home and portions of other properties fell into the pit, events that were broadcast by TV world-wide. Discharge from the sewer continued for several hours, resulting in the undermining of other homes, destruction of part of the Presidio National Park, and eventual overflow of sewage more

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than two miles away, across the Great Highway and Ocean Beach, into the Pacific Ocean. Dr. Medley, the Principal Investigator for the investigation, shares findings and the lessons learned from the failure.

Reflections and Snapshots from a 40 year Geo-Odyssey – “Shoot! This Has Been Delightful!”: Quoting the enthusiastic Professor Richard H. Jahns, Dr. Medley describes the highlights of his own unusual career as a prospector, geological engineer, geotechnical engineer and vagabond - a random walk of major life lurches, with several engaging detours. Pausing en route, Dr Medley offers some observations on the current state of engineering geology education and professional practice with (likely provocative) suggestions for academics, students and young professionals.